# Réponses du Transporteur et du Distributeur à la demande de renseignements numéro 1 de l'Association québécoise des consommateurs industriels d'électricité et du Conseil de l'industrie forestière du Québec («AQCIE-CIFQ») – Partie 2

## Annexes

## Réponses aux questions 1.3, 2.1, 3.1, 3.5, 4.2, 9.4 et 9.7

# Prepared Direct Testimony

**of**

**J. Stephen Gaske**

**<u>On Behalf of Intragaz Limited Partnership</u>**

June 25, 2012

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# I. INTRODUCTION

**Q.1 Please state your name and business address.**

A. My name is J. Stephen Gaske. My business address is 1130 Connecticut Avenue, Suite 850, Washington, DC 20036.

## A. Qualifications

**Q.2 Would you please describe your educational and professional background?**

**A.** I hold a B.A. degree from the University of Virginia and an M.B.A. degree with a major in finance and investments from George Washington University. I also earned a Ph.D. degree from Indiana University where my major field of study was public utilities and my supporting fields were in finance and economics.

From 1977 to 1980, I worked for H. Zinder & Associates ("HZA") as a research assistant and later as supervisor of regulatory research. Subsequently, I spent a year assisting in the preparation of cost of capital studies for presentation in regulatory proceedings.

From 1982 to 1986, I undertook graduate studies in economics and finance at Indiana University where I also taught courses in public utilities, transportation, and physical distribution. During this time I also was employed as an independent consultant on a number of projects involving public utility regulation, rate design, and cost of capital. From 1983-1986, I was coordinator for the Edison Electric Institute Electric Rate Fundamentals course. In 1986, I accepted an appointment as assistant professor at Trinity University in San Antonio, Texas, where I taught courses in financial management, investments, corporate finance, and corporate financial theory.

In 1988, I returned to HZA and was President of the company from 2000 to 2008. In May 2008, HZA merged with Concentric Energy Advisors ("Concentric") and I became a Senior Vice President of Concentric.

**Q.3 Have you presented expert testimony in other proceedings?**

A. Yes. I have filed expert testimony on the cost of capital and capital structure issues for electric, gas distribution and oil and gas pipeline operations in numerous proceedings before: the U.S. Federal Energy Regulatory Commission ("FERC"), eight state regulatory bodies, the Alberta Utilities Commission, the Ontario Energy Board and before the Comisión Reguladora de Energia de México ("CRE").

In addition, I have testified or submitted expert testimony on regulatory principles, economics, and pricing issues before the FERC, the National Energy Board of Canada, 12 state and provincial regulatory Commissions, and the U.S. Postal Rate Commission. Topics addressed before those regulatory bodies have included regulatory principles, utility and energy economics; electric utility and gas pipeline cost allocation, rate design, pricing, and revenue requirements; market power; and, generating plant economics.

During the course of my consulting career, I have conducted many studies on issues related to regulated industries and have served as an advisor to numerous clients on commercial, economic, competitive and financial matters. I also have spoken and lectured before many professional groups including the American Gas Association and the Edison Electric Institute Rate Fundamentals courses. Finally, I am a member of the American Economic Association, the Financial Management Association, and the American Finance Association.

### B. Summary of Testimony

**Q.4 What is your assignment in this proceeding?**

A. I have been asked by Intragaz Limited Partnership ("Intragaz") to recommend a rate of return on common equity and the appropriate capital structure to be used in setting cost-based rates in this filing, and to calculate the overall cost of capital for Intragaz. In this testimony, I (i) discuss the regulatory principles that should be applied in setting Intragaz' regulated rates; (ii) recommend a ratemaking capital structure; and (iii) calculate the cost of common equity capital for Intragaz' natural gas storage operations. My cost of capital determination is based on the results of my Discounted Cash Flow (DCF) analysis of a group of Canadian utility companies and is supported by the DCF results of a proxy group of U.S. natural gas pipeline and storage companies. Both proxy groups are subject to slightly less risk than Intragaz' natural gas storage operations. My results are further corroborated by a risk premium analysis. My selection of proxy companies is based upon a detailed examination of the comparability and risks of each of the operations of a potential proxy company, and an assessment of whether the risks of each of the potential proxy companies are comparable to those of Intragaz. I then consider the differences between Intragaz' risks and those of the proxy companies in arriving at a recommended rate of return on common equity.

**Q.5 What testimony and schedules are you sponsoring?**

A. I am sponsoring the following testimony and schedules, which were prepared by me or under my direction supervision:

Prepared Direct Testimony of J. Stephen Gaske

Schedules to Prepared Direct Testimony:

| | |
|---|---|
| Schedule 1 | Economic Statistics and Bond Yields |
| Schedule 2 | Proxy Company Statistics |
| Schedule 3 | Gas Transmission Pipelines and Storage Owned by Proxy Companies |
| Schedule 4 | Proxy Company Business Segment Data |
| Schedule 5 | Calculations of Dividend Yields |
| Schedule 6 | Growth Rates |
| Schedule 7 | DCF Results |
| Schedule 8 | Flotation Cost |
| Schedule 9 | Capital Structure |
| Schedule 10 | Calculations of Median Results |

**Q.6 Would you summarize the primary conclusions of your testimony in this proceeding?**

A. The primary conclusions of my testimony are:

**1)** Established regulatory principles require that Intragaz be given an opportunity to earn a reasonable return on its invested capital. [Section II. A.]

**2)** In order for regulated rates to be judged reasonable they must, at a minimum, provide the company with a reasonable opportunity to earn a return that meets three standards:

- **a.** Capital Attraction
- **b.** Financial Integrity
- **c.** Comparable Earnings

Each of these standards must be met on a forward-looking basis when setting regulated rates, regardless of the ratemaking method used now, or in the past. [Sections II. A, B and C.]

**3)** Rates based on cost-of-service establish the floor for reasonable rates according to the standards for a reasonable return. [Sections II. E and F.]

**4)** Assuming that it is able to obtain long-term contracts for its services, the storage operations of Intragaz face business risks that are somewhat higher than those of regulated gas transmission or storage companies, but still significantly greater than the business risks that are typical of Canadian utility companies. [Sections III and VII.]

**5)** With long-term contracts and the resulting ability to obtain a 50-50 debt-equity capital structure, Intragaz would have financial risks that are comparable to gas transmission and storage companies, but less than the financial risks of Canadian utility companies. When both business risks and deemed financial risks are considered together, the resulting overall risks of Intragaz would be slightly greater than the risks that are typical of companies in either of the proxy groups. [Sections III and VII.]

**6)** Based on the median result from a discounted cash flow (DCF) analysis applied to a proxy group of Canadian utility companies and supported by the results from a DCF analysis applied to U.S. natural gas pipeline and storage proxy companies, the cost of common equity for Intragaz is 11.75 percent. [Section VI.] The major components of this calculation are as follows:

**Table 1**
**Calculation of Median Results**

| | Discounted Cash Flow (DCF) | |
|---|---|---|
| | Canadian Utility Proxy Group | U.S. Pipeline & Storage Proxy Group |
| Dividend Yield | 4.08% | 6.70% |
| Dividend Growth Adj. Factor | 0.14% | 0.13% |
| Expected Growth Rate | 7.10% | 4.00% |
| Flotation Cost Adj. | 0.45% | 0.43% |
| **Return on Equity - DCF** | **11.78%** | **11.26%** |
| **Recommendation** | **11.75%** | |

**7)** The overall rate of return required for Intragaz' operations is 8.75 percent with a 50-50 deemed debt-equity ratio, a 5.75 percent cost of debt, and a required rate of return on common equity of 11.75 percent.

**Q.7 What is the basis for the overall rate of return that Intragaz is requesting in this proceeding?**

A. As shown in Table 2 below, based on an estimate of the capital structure that Intragaz could reasonably achieve if it obtains long-term contracts with its customer, Intragaz is requesting an overall rate of return of 8.75 percent. Because it is unlikely that a company like Intragaz could borrow debt for a period longer than the term of the contract(s) it has with its customer, the reasonable capital structure for Intragaz depends on the form and length of its contracts with its only customer, Gaz Métro.

**Table 2: Intragaz Cost of Capital**

| **Source** | **Capital Ratio** | **Cost** | **Overall Rate of Return** |
|---|---|---|---|
| Long-Term Debt | 50.00% | 5.75% | 2.88% |
| Common Equity | 50.00% | 11.75% | 5.88% |
| | | | |
| Total | 100.00% | | **8.75%** |

As my testimony discusses, an overall allowed rate of return of 8.75 percent, with an 11.75 percent return on common equity, represents a reasonable estimate of the cost of capital for Intragaz at this time.

## C. Background Information

**Q.8 Please describe the ownership and operations of Intragaz.**

A. Intragaz is a limited partnership between Gaz Métro and GDF Québec Inc. and is principally a developer and operator of underground natural gas storage facilities. Intragaz operates two natural gas underground storage sites in Quebec, at Saint-Flavien and Pointe-du-Lac. The Saint-Flavien reservoir is located in a geological zone that is covered by nonporous carbonate, which serves as cap rock. The Saint-Flavien site principally provides seasonal storage service. The Pointe-du-Lac reservoir is a depleted gas reservoir located approximately 100 km northeast of Montreal. The storage facility is primarily used by Gaz Métro for peak shaving. Both storage facilities are connected to the TQM Pipeline. The capacity statistics for each storage site are depicted in the following table.

**Table 3: Intragaz Storage Capacity**[1]

| | **Saint-Flavien** | | **Pointe-du-Lac** | |
|---|---|---|---|---|
| **Working Capacity** | 120,000 $10^3m^3$ | 4.2 Bcf | 22,700 $10^3m^3$ | 0.8 Bcf |
| **Max. withdrawal rate** | 1,930 $10^3m^3/d$ | 68.2 MMcfd | 1,200 $10^3m^3/d$ | 42.4 MMcfd |
| **Max. injection rate** | 900 $10^3m^3/d$ | 31.9 MMcfd | 2,400 $10^3m^3/d$ | 84.8 MMcfd |
| **Rate Base** | | $93.0 MM | | $15.5 MM |

## II. RELEVANT REGULATORY PRINCIPLES

### A. Criteria for a Fair Rate of Return

**Q.9 Please describe the criteria which should be applied in determining a fair rate of return for a regulated company?**

A. The principles surrounding the concept of a "fair return" were first established by the Supreme Court of Canada in the *Northwestern Utilities v. City of Edmonton* (1929) ("Northwestern") case, where the Supreme court established guidance regarding the level of the allowed rate of return that will meet the legal requirements of a fair return. The Court found:

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[1] Intragaz Limited Partnership (2009). *Our Activities*. Retrieved April 1, 2012, from Intragaz Limited Partnership: http://www.intragaz.com/en/activities_sites.html. The Rate Base numbers come from Intragaz-1, Document 3.

> The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested. By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise.[2]

Further, in the *British Columbia Electric Railway Co. LTD.* decision, the Supreme Court of Canada clarified that the duties of the regulator must balance the interests of the public while ensuring a fair return on rate base for the regulated utility. Specifically, the Court stated:

> The rate to be imposed shall be neither excessive for the service nor insufficient to provide a fair return on the rate base. There must be a balancing of interests. [3]

It is well understood in Canada that though a fair return is unlikely to cause hardship for a consumer, if it were to cause such hardship, the legal remedy should not involve setting a return below the level in which all three criteria of the fair return standard are met. This important distinction was affirmed by the Canadian Federal Court of Appeal in 2004, in *TransCanada PipeLines,*[4] where it confirmed that the fair return need not be modified out of deference to its impact upon customers.

The United States common law regarding fair return for utility cost of capital has evolved similarly. The United States Supreme Court set out guidance in the bellwether cases of *Bluefield Water Works* and *Hope Natural Gas Co.* as to the legal criteria for setting a fair return. In *Bluefield Water Works & Improvement Company v.*

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[2] *Northwestern Utilities Ltd v. Edmonton* [1929] S.C.R. 186.

[3] *British Columbia Electric Railway Co. v. Public Utilities Commission,* [1960] S.C.R. 837, pages 855 and 856

[4] *TransCanada PipeLines v. Canada National Energy Board,* 2004 F.C.A. 149

*Public Service Commission of West Virginia* (262 U.S. 679, 693 (1923)), the Court indicated that:

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

The Court has further elaborated on this requirement in its decision in *Federal Power Commission v. Hope Natural Gas Company* (320 U.S. 591, 603 (1944)). There the Court described the relevant criteria as follows:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock.... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

With passage of time in both Canada and the U.S., the fair return standard has been interpreted many times. The National Energy Board ("NEB") summarized its interpretation of the "fair return standard" in its RH-2-2004 Phase II Decision and more recently reiterated that interpretation in its *Trans Québec & Maritimes Pipelines Inc.* RH-1-2008 Decision.

> The Board is of the view that the fair return standard can be articulated by having reference to three particular requirements. Specifically, a fair or reasonable return on capital should:
>
> - be comparable to the return available from the application of the invested capital to other enterprises of like risk (the comparable investment standard);

> - enable the financial integrity of the regulated enterprise to be maintained (the financial integrity standard); and
>
> - permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (the capital attraction standard).
>
> In the Board's view, the determination of a fair return in accordance with these enunciated standards will, when combined with other aspects for the Mainline's revenue requirement, result in tolls that are just and reasonable.[5]

**Q.10 Does the Régie embrace the same legal standards for the application of the fair return standard as those put forth by the NEB and those that have been established through Canadian and U.S. common law?**

A. Yes. The same standards apply. The Régie recognizes the three primary criteria of the fair return standard (the comparability standard, financial integrity standard, and the capital attraction standard) and has indicated that they should be used as a guide in exercising its role with respect to fixing a reasonable rate of return.[6] In addition, the Régie has indicated that its duty to determine a reasonable rate of return and the method which it uses is at its discretion.[7] The Régie has also recognized that, like operating costs, the return allowed to the shareholder is one of the elements of the regulated company's cost of service. The allowed return must, under the official Act[8] governing utility regulation, ensure that there are sufficient revenues to cover all of the costs.[9] The Régie also notes that the three required criteria make no mention of the user's ability to pay. As such, the Régie holds that "the users' ability to pay does not come into play on the quantum of a reasonable return for the shareholder." Instead, a balance is struck in protecting consumers' interests, by requiring that the

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[5] National Energy Board RH-2-2004 Reasons for Decision, TransCanada PipeLines Ltd, Phase II, April 2005, p. 17.

[6] Régie de l'énergie, D-2009-156, Décision, Gaz Métro, (December 7, 2009), at 189.

[7] Ibid. at 195.

[8] R.S.Q., chapter R-6.01, An Act Respecting The Régie de l'énergie which authorizes the Régie to set rates for regulated energy utilities in Québec.

[9] Régie de l'énergie, D-2009-156, Décision, Gaz Métro, (December 7, 2009), at 192.

rate allowed must not be excessive while being at least sufficient to provide a reasonable return.[10]

**Q.11 What constraints do the fair return standards place on regulated rates?**

A. When a regulator sets rates it must meet these standards. The fundamental principle is that a regulator may employ any method for setting rates, but the result reached must allow the regulated company a reasonable opportunity to recover its costs and meet the three standards required for a reasonable rate of return. The lowest possible rates that meet these three standards are rates based on the cost of service of the regulated firm. Consequently, although regulators often have wide latitude and flexibility in setting rates that are just and reasonable, the cost of service is the floor below which rates set by a regulator are not just and reasonable.

## B. Stand-Alone Principle

**Q.12 What is the stand-alone principle in regulation?**

A. The stand-alone principle is the concept that regulated rates and the allowed rate of return should be set at a level that reflects the risks and investment characteristics of the regulated entity alone, as if it has no affiliates. This principle was described by the Alberta Energy and Utilities Board as follows:

> "This first application of the stand-alone principle is designed to remove the effects of diversification by utilities into non-regulated activities. Using the stand-alone principle in this case, a utility is regulated as if the provision of the regulated service were the only activity in which the company is engaged. This application of the principle ensures that the revenue requirement of regulated utility operations is not influenced up or down by the operations of a parent or sister company. Thus the cost (or revenue requirement) of

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[10] Ibid, at 193.

> providing utility service reflects only the expenses, capital costs, risks and required returns associated with the provision of the regulated service."[11]

This principle is applied widely throughout North America. For example:

> "The [National Energy] Board agrees with TransCanada that the stand-alone principle is a fundamental concept of utility regulation and a concept that it should continue to apply regulating TransCanada's Mainline."[12]

Similarly, the Ontario Energy Board has recognized that:

> "A longstanding regulatory principle espoused by the Ontario Energy Board, and by other regulators in North America, is the standalone principle."[13]

**Q.13 What are the practical effects of the stand-alone principle?**

A. In setting an appropriate capital structure, an allowed rate of return on common equity, and the cost of debt, a regulator should consider only the operations of the regulated company. If a parent company has greater risks, or lesser risks, than the regulated company, that fact should not affect the allowed rate of return. Similarly, the risks and financial positions of the parent, affiliates, or subsidiaries of the regulated company should not be considered in setting rates for a regulated company.

Proper application of the stand-alone principle is essential for meeting the three standards required for a minimum reasonable allowed rate of return. For example, a capital structure with a deemed debt ratio that exceeds the amount that the regulated company can reasonably and prudently borrow on a stand-alone basis would not maintain financial integrity or allow the regulated company to attract capital on reasonable terms.

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[11] EUB Decision 2001-92, December 12, 2001, pp. 24-25

[12] NEB, Reasons for Decision, RH-R-1-2002 (February 2003), p. 26

[13] OEB RP-2002-0158 (January 16, 2004), paragraph 124

Similarly, the standards for a reasonable rate of return and the stand-alone principle would be violated if the regulator were to assume that the owners of a regulated company will provide uncompensated loan guarantees in order to increase the amount of debt, or to reduce the cost of debt, for the regulated company. When owners guarantee a loan for a regulated company the effect on risk is the same as if the regulated company has a higher equity ratio, because the owners who provide the guarantee have more "equity" at risk than the funds that they have invested directly in the company. Moreover, when an owner guarantees the debt of one of its investments or subsidiaries, the loan guarantee reduces the ability of the owner to borrow money for other operations and investments. As a result, debt that carries a loan guarantee has an economic cost that consists of two components: (i) the direct interest cost of the debt, plus (ii) the cost of the loan guarantee. When this second component – the cost of the loan guarantee – is considered, the true cost of guaranteed debt is essentially the same as the cost of common equity that is invested directly in the stand-alone regulated company. Thus, the regulated rates should be sufficient to meet the three standards of a reasonable rate of return without recourse, or reference, to the balance sheet or credit standing of affiliates. Otherwise, rates would not be just and reasonable.

Another common application of the stand-alone principle occurs when the allowed rate of return on common equity is set based on analyses of the returns required by a proxy group of companies with similar risks. Many regulated companies are owned by large, diversified holding companies, but the cost of capital for any particular subsidiary of a holding company generally is determined by estimating the costs of capital of other companies with risks that are as similar as possible to those of the regulated company. Thus, electric companies generally are used to estimate the cost of capital for electric companies, gas distribution companies are used to estimate the cost of capital for gas distribution companies, and gas pipeline and storage companies are used to estimate the cost of capital for gas pipeline and storage companies. The important point is that regulators purposely attempt to find the cost of capital for the stand-alone subsidiary, and not for the diversified holding company.

### C. Prohibition Against Retroactive Ratemaking

**Q.14 What is the prohibition against retroactive ratemaking?**

A. It is a fundamental regulatory principle that rates should be set on a forward-looking basis and that current rates generally should not reflect past under-recovery or over-recovery of cost. There are certain exceptions to this principle such as when a company is allowed to set up deferral accounts and true-up mechanisms, but those mechanisms generally are adopted before rates go into effect and are implemented on a forward-looking basis. However, in the absence of such mechanisms, the general principle is that current customers should not be required to make up for inadequate returns earned by the regulated firm in the past, nor are current customers entitled to refunds of past earnings that may have exceeded the cost of capital. Whereas a formal method of deferred accounts and true-up mechanisms treats customers and regulated companies equally, the same cannot be said of retroactive ratemaking that is applied on an ad hoc basis. There is a good reason for the prohibition against retroactive ratemaking. When a regulator is allowed to apply ad hoc retroactive ratemaking there is the danger that it will apply the retroactive adjustments in an asymmetric way that is unfair and unreasonable because a regulator may decide to favor either customers or the regulated company.

A particularly extreme example of asymmetric retroactive ratemaking would occur if a regulator were to allow less than a reasonable rate of return at this time, specifically because it believes that the company earned more than its bare minimum cost of capital during some period in the past. The earnings in past years are the compensation that investors received for taking risks during those years, and there is no economic justification for setting a less-than-reasonable return for future rates in order to obtain a "refund" of past earnings.

The insurance industry provides a good example of this form of backward-looking determination of the rate of return to be included in future rates. For example, suppose a man pays a $500 premium to insure his car against the risk of an accident for an upcoming year. However, at the end of the year he then asks the insurance company to refund his premium because he did not have a car accident during the year. Of course the insurance company would refuse to pay a refund because the insurance company has already taken the risk that there could be an accident during that year. The fact that an accident did not occur does not mean that the risk did not exist. Nor does it mean that there was no cost associated with the risk.

In the case of a regulated company, a reasonable rate of return must be adequate to attract new capital and compensate for future risks on a forward-looking basis. Thus, if a regulator attempts to obtain a "refund" of past earnings by establishing a rate of return that is less than reasonable, that return will be insufficient to meet the capital attraction or comparable earnings standards, and it may not meet the financial integrity standard. In those circumstances, the resulting prospective rates would not be considered just and reasonable.

### D. Public Policy Reasons to Allow a Reasonable Return

**Q.15 How should a fair rate of return be evaluated from the standpoint of consumers and the public?**

A. The same standards that are used to determine the minimum allowable fair rate of return for investors should apply. When regulation is appropriate, consumers and the public have a long-term interest in seeing that the regulated company maintains its financial integrity and can attract capital so that the regulated services will be available in a quantity and quality that satisfies the needs of consumers and the public. There are countless examples of governments that attempted to protect consumers by setting regulated prices on important products so low that the products became scarce or of unsatisfactory quality. Such policies ultimately cause more harm than benefit for consumers. Effective regulation attempts to set rates and expected returns at a level that attracts capital sufficient to ensure that consumers will not experience service disruptions or poor quality service. Consequently, there are good public policy reasons to set rates and the allowed return at a level sufficient to encourage continued replacement and maintenance, as well as needed expansions and new services. Thus, the consumer and public interest lies in establishing a return that will readily attract capital without being excessive.

**Q.16 Is the Fair Return principle important for the overall well-being of the economy?**

A. Yes. Investors in the economy have an obvious interest in maintaining the value of their investment. If they do not expect a government to allow them a reasonable opportunity to earn a fair return, they will not invest their capital in that jurisdiction. Consequently, there is a very pragmatic reason why successful economies tend to be those that protect the rights of investors against government policies that would unjustifiably diminish the value of their investments. The perception of government fairness affects investment in both regulated and unregulated industries and thereby affects the overall prosperity and economic well-being of the citizens. Thus, in addition to ensuring adequate, reliable service in the regulated industry, there is a broader public interest that is promoted by the Fair Return principle.

### E. Cost of Service Ensures that Alternative Rates Remain Reasonable

**Q.17 Why are cost-based rates considered to be a baseline for determining whether regulated rates are just and reasonable?**

A. Cost-of-service is the baseline standard that is used to determine whether regulated rates are just and reasonable. This principle is discussed in the textbook by Bonbright, Danielsen and Kamerschen:

> "… one standard of reasonable rates can fairly be said to outrank all others in the importance attached to it by experts and public opinion alike – the standard of costs of service …"[14]
>
> * * * *
>
> "In the regulation of private utility companies, and even in the ratemaking practices of publicly owned plants, the determination of general rate levels is likely to take precedence over the determination of specific rate schedules; and there the most directly pertinent costs are the total costs, including the overhead costs. In other words, the cost principle is taken to mean that rates as a whole should cover costs as a whole."[15]

Although regulators may adopt other non-cost-based ratemaking methods for a variety of public policy reasons, cost-of-service represents a legal floor under which regulated

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[14] Bonbright, Danielsen and Kamerschen, *Principles of Public Utility Rates,* Public Utilities Reports, Inc. (Arlington, VA: 1988), p. 109.

[15] *Ibid.*, p. 116.

rates generally are not considered to be just and reasonable. It is not unusual for regulatory commissions to adopt alternative, non-cost-based rates, and at the same time adopt measures to ensure that the cost of service will be used if the alternative rates became insufficient to recover costs. One example of this is the method used in regulating U.S. oil pipelines. Similarly, "re-set" mechanisms are common in performance-based ratemaking schemes to ensure that rates do not deviate too far from costs.

### 1. U.S. Oil Pipeline Regulation

**Q.18 How does the Federal Energy Regulatory Commission set rates for U.S. oil pipelines?**

A. The regulatory structure established by the Energy Policy Act of 1992 and FERC's Order No. 561 provides a good example of the principle that cost-based regulated rates are required when non-cost-based approaches fail to yield just and reasonable rates. Order No. 561 allows a pipeline to change its rates each year according to an index that is based on the general inflation rate in the economy. As long as a pipeline's rate increases remain less than the cumulative changes in the index, the pipeline's rates are deemed to be just and reasonable and FERC will not base the rates on the cost of service.[16]

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[16] "Generally, the initial rate [for a new pipeline] will be established by a cost-of-service showing. However, a pipeline may file an initial rate based upon the agreement of at least one non-affiliated shipper. The Commission will not require a cost-of-service justification for such an agreed-upon rate. An initial rate established by agreement may be protested, in which case the pipeline will be required to justify the rate based on a cost-of-service showing." FERC Order No. 561, October 22, 1993, Docket No. RM93-11-000, p. 30,948

**Q.19 Can an oil pipeline elect to use cost-of-service in setting its rates if the indexed rate is too low to allow it to recover its costs?**

A. Yes. A pipeline is permitted to apply for a cost-of-service rate if its costs are higher than the ceiling established by the indexed rate. In addition, customers may make a complaint if they believe that the indexed rate is too far in excess of costs. FERC Order No. 561-A explained that:

> … the regulations also provide procedures for both pipelines and their customers to show that the applicable ceilings would not ensure just and reasonable rates. As explained in detail in the final rule, and elsewhere in this order, §342.4 provides that the pipeline may rebut the presumption in the regulation that the above-ceiling rate is unjust and unreasonable and that rates above the ceiling are justified. The pipeline has the burden of proof to show that the applicable ceilings are too low to allow recoupment of prudently incurred costs, in respect to both proposed and existing rates, except for those rates deemed just and reasonable under section 1803 of the Act of 1992. Section 343.2(c)(1) provides similar protection for customers, by providing for challenges to proposed and existing rates that are within applicable indexed ceilings, but are nonetheless so substantially in excess of actual costs as to be unjust and unreasonable.[17]

**Q.20 What conclusions can you draw from the U.S. Oil Pipeline ratemaking method?**

A. Although a non-cost-based indexing approach was implemented for setting U.S. oil pipeline rates, the regulatory structure specifically provides an option to use cost-based rates if the indexed rates are too low to allow the pipeline to recover its cost of service. By generally providing the pipeline with the option of using the higher of cost-based or indexed rates the method ensures that the regulated rate will meet the legal standards required for a minimum reasonable rate of return.

### 2. Performance-Based Rates

**Q.21 Is it common for regulators to approve non-traditional performance-based rate programs that allow earnings greater than the cost of capital, but that also**

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[17] FERC Order No. 561-A, July 28, 1994, Docket No. RM93-11-001, p. 31,101

**provide rate adjustments if the company is unable to earn a reasonable rate of return?**

A. Yes. Many regulatory Commissions have approved performance-based rate programs that are designed to provide an additional incentive by allowing the regulated company to earn a higher rate of return if it is able to achieve greater efficiencies. However, it is common for these programs to have a mechanism that re-adjusts the rates when the earned rate of return falls outside of a reasonable range.

### F. Application of Ratemaking Principles to Intragaz

**Q.22 Would you briefly describe the history of Intragaz rate regulation?**

A. Development of the first of the Intragaz storage fields was proposed by Gaz Métro in 1988, but the Régie discouraged that proposal because of the high risk of developing a storage field (Decision G-475 dated June 13, 1988). The Régie was concerned that consumers could be required to pay for a failed facility if Gaz Métro attempted to develop the storage field as part of its regulated distribution system rate base. As ordered by the Régie, a separate company subsequently was used to develop the storage site so that all of the development risk would be borne by investors, and consumers would not bear any of the high development risks.

In its Order D-89-21 dated July 21, 1989, the Régie recognized that "no investor had shown interest in realizing the project based on rates approved by the Régie in Order G-485." Those rates, based on cost of service estimates, even included an explicit risk premium over the then-allowed rate of return for Gaz Métro. The storage-specific risk premium was 5 percent in year 1 and was designed to decline by one percent each year until it was zero in year 6 (Decision G-475, page 20). Ultimately, however, this explicit storage risk premium proved to be insufficient to induce any investors to take on the risks of developing storage.

As an alternative incentive for the promoters to develop the storage facility, the Régie subsequently stated that the Company would be allowed to charge a regulated rate that exceeded its cost of service. It was estimated at the time that this incentive represented approximately $3.8 million per year over the rates previously approved in Order-485 (R-3166-89, transcripts of July 10, 1989, page 109, testimony of Mr. Bernard Otis). The incentive rate was to be set equal to the avoided cost of alternative arrangements that Gaz Métro might require in order to meet the needs of its customers. The "Avoided Cost" rate originally was intended to provide a premium over cost as an incentive, while also providing a regulated rate ceiling to protect consumers from excessive rates, thus ensuring that the rate fell within a zone of reasonableness.

As a result of this incentive rate structure, Intragaz signed a contract to provide storage services to Gaz Métro at a regulated rate and invested $17.5 million to develop the Pointe-du-Lac site prior to beginning operations in 1991. When it came time to develop the Saint-Flavien site in 1993, the same logic was applied by the Régie in again approving Avoided Cost rates (Order D-94-06).

The Avoided Cost method provided two forms of incentives. First, because the Avoided Cost rate was greater than the cost-based rate, it provided an incentive for investors to take the risks to develop the storage fields in Québec. Second, because the Avoided Cost rate was unrelated to costs, Intragaz had an incentive to minimize the operating costs and investments required to provide the level of service it offered.

**Q.23 Is the Avoided Cost rate an unregulated rate?**

A. No. The Avoided Cost rate was established by the Régie and changed from time to time through the years based on evidence concerning Gaz Métro's avoided costs. This form of regulated ratemaking is sometimes used in circumstances when the regulator or government wishes to encourage certain economic activities that are deemed to be in the public interest.

For example, in the U.S. there was a period of time beginning in the late-1970's when electric utilities were required to purchase electricity from industrial facilities that installed cogeneration equipment, and to pay an Avoided Cost rate to the cogenerator. Because the Avoided Cost rate was equal to the marginal cost of the most costly source of generation, the rate paid to the generator was generally considerably above the utility's average cost of generation. This relatively high Avoided Cost rate provided an incentive for the market to install additional cogeneration equipment that improved the efficiency of energy usage.

Rates based on avoided costs also are advocated in some instances as an alternative ratemaking method that provides greater incentives for regulated companies to operate efficiently. Because the Avoided Cost rate is independent of the costs of the regulated company, the regulated company is not required to pass through cost savings or efficiency improvements to ratepayers during the term of the rate.

**Q.24 Is the Avoided Cost rate the same as a market-based rate?**

A. No. Avoided Cost rates are set by the regulator and use the costs of alternatives as a yardstick, or cap, on the allowable rates. When Avoided Cost rates are adopted by the regulator there usually is a determination that such rates are just and reasonable because they promote an explicit public interest goal while also protecting customers from excessive rates. As long as the regulator retains and exercises its authority to set just and reasonable rates, the regulator is required to set rates that are at least sufficient to allow the regulated firm a reasonable opportunity to recover its costs and earn the rate of return required by the market. However the regulator can allow the company to charge more than its cost of service when it is in the public interest to do so. This concept is known as the "zone of reasonableness" of just and reasonable rates.

In contrast, a "market-based" rate does not involve the regulator in the ratemaking process. Instead, an unregulated company – or a regulated firm with market-based rates – may set its rates at the highest level that the market will bear. Regulators sometimes allow regulated companies to charge market-based rates when it is determined that the market is sufficiently competitive that it is reasonable to rely on competition to hold rates down to a reasonable level. This means that the regulator exercises forbearance and refrains from intervening in the agreements negotiated between buyers and sellers.

The obvious distinction between "Avoided-Cost" and "market-based" rates is that when Avoided-Cost rates are adopted the regulator retains, and actively exercises, its power to prescribe rates. The Régie has made it clear that it is actively exercising its power to prescribe rates for Intragaz and that it is not allowing market-based rates:

> "In the absence of effective competition in the gas storage market in Québec, the Régie determines that the non-disclosure of Intragaz' rates is not justified. The Régie believes that it is indeed in the public interest that it continues to set Intragaz' rates rather than rely on market forces and that the review of the rates be done in a public process."[18]

As discussed earlier, there is a well-established principle in Canada and the U.S. that when a regulator prescribes rates, regardless of the method employed, the regulator must afford a regulated company an opportunity to earn a fair and reasonable rate of return on its investment; and the fair and reasonable rate of return is defined by three standards: comparable earnings, financial integrity, and capital attraction. Thus, a regulator generally is not permitted to prescribe rates that prevent a company from having a reasonable opportunity to recover its prudently-incurred costs.

**Q.25 What are the established regulatory principles regarding prudently-incurred costs?**

A. Regulators may deny an opportunity to recover costs that are "imprudent," or costs of facilities that are not "used and useful" in serving the public. Neither of these exceptions is relevant for Intragaz' circumstances.

The test of prudence is applied by examining the circumstances that were known at the time that the investments were made, or the costs were expended. Moreover, there is a well-recognized principle that management is presumed to act prudently. For example, "Unless there is direct evidence of mismanagement, regulatory agencies

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[18] Régie de l'énergie, Decision D-2002-56, March 8, 2002, p. 18 (Translation).

will presume that management has properly performed its duties."[19] More specifically, "a legal presumption that utility management has acted prudently surrounds their investment decisions."[20] Finally, "an allegation of imprudence must be supported by evidence that creates a serious doubt regarding the prudence of the investment."[21] Most of the costs of Intragaz' facilities were expended many years ago and no one has suggested that the cost of these facilities were incurred imprudently. Indeed, Decision D-2011-140 states that "The Régie does not dispute Intragaz' presumption that the investment decisions made in the past were prudent."[22] Consequently, the prudency of Intragaz' investments must be presumed.

Similarly, it is clear that the Intragaz facilities are used and useful in serving the public because Gaz Métro relies on these facilities, in conjunction with its own LNG facility, as its only in-franchise source of supply security. In addition, it is my understanding that Intragaz will be filing as part of this proceeding an independent review of the usefulness of its individual assets in response to the Régie's conclusion in Decision D-2011-140 that "the evidence on record is insufficient to allow the Régie to give an opinion on the useful nature of these investments."[23]

**Q.26 What do these regulatory principles indicate in respect to the use of Avoided Cost to set rates for Intragaz?**

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[19] Leonard Saul Goodman, *The Process of Ratemaking*, p. 840.
[20] Ibid, at p. 860.
[21] Ibid, at p. 861.
[22] Decision D-2011-140, Docket R-3753-2011, September 16, 2011, paragraph 46 (Translation).
[23] Ibid, at paragraph 46 (Translation).

A. The legislature has determined that Intragaz is regulated and the Régie is bound by the Act.[24] As the Régie has observed in its D-2011-140 decision (translation):

> [52] By virtue of the last sub-paragraph in Article 49 of the Act, the Régie may use any other method it deems appropriate when it sets a storage rate. However, the discretion that the Régie has in the choice of methods does not relieve it of its obligation to set rates and other conditions that are just and reasonable from the point of view of the customers, the regulated company and the public interest.

The regulatory principles discussed above indicate that just and reasonable rates require the regulator to set rates that are at least sufficient for Intragaz to recover its costs, including a reasonable rate of return. Thus, although the regulator has latitude to use many alternative ratemaking methods, including Avoided-Cost rates, its latitude is not unlimited and the cost-based rates represent a floor for any just and reasonable rates that are set by the Régie.

## III. NATURAL GAS STORAGE OPERATIONS AND RISKS

**Q.27 What is the function and economic rationale for underground natural gas storage?**

A. Underground natural gas storage facilities serve numerous functions. Natural gas storage located downstream and close to market is valuable as a substitute for additional firm capacity on pipelines and also provides an important element of physical supply security by ensuring reliability during daily demand spikes and potential disruptions of upstream supply networks. Market-area storage also may be integrated with the facilities of a local distribution facility by providing an economical

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[24] R.S.Q., chapter R-6.01, An Act Respecting The Régie de l’énergie which authorizes the Régie to set rates for regulated energy utilities in Québec, section 1.

means of maintaining service pressures and balancing in specific locations on a local distribution company's (LDC's) system.

Upstream natural gas storage is used to manage imbalances between the rates at which gas is produced and consumed. Natural gas storage also can be used as a hedge against seasonal and daily commodity price volatility. The North American natural gas market is a winter-peaking market, generally exhibiting higher prices during winter months due to heating load and lower prices in the summer months. By injecting gas during the summer months for withdrawal in the winter when commodity prices are higher, distribution companies can reduce their commodity costs. With the increased use of natural gas to generate electricity, daily price volatility has also increased during summer months. Storage allows distribution companies to meet these summer demand peaks with less expensive gas that was injected during shoulder and summer months.

**Q.28 Please describe the facility risks associated with underground storage?**

A. Developers of underground storage facilities face a number of construction risks. As the FERC has observed, "There is an inherent uncertainty regarding the performance of an underground reservoir; its actual boundaries depend on characteristics that can generally be confirmed only after the facility has commenced operation".[25] In other words, all underground storage developments face the prospect that the facility will fail to hold gas. In some cases, storage projects progress to an advanced stage where all required infrastructure is in place and virtually all project-related capital has been expended, before it can be determined

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[25] *Williston Basin Interstate Pipeline Company*, 127 FERC ¶ 61,045.

that the reservoir fails to demonstrate structural integrity. An example of this type of facility risk can be seen in the development of the Liberty Gas Storage Project. On December 8th, 2005, FERC authorized Liberty Gas Storage, LLC to construct and operate two salt dome natural gas storage caverns and related facilities in Calcasieu Parish, Louisiana. Liberty developed the two caverns and constructed compressors, pipelines and other infrastructure necessary to operate the storage project. However, just before Liberty was to place the project in service, both caverns failed integrity tests. Despite the company's best efforts to identify and resolve the integrity issues, in December 2009, Liberty filed to abandon the storage project. Upon receiving FERC approval, the project assets were converted to other use, transferred to third parties or abandoned in place.[26] Liberty's ultimate parent company, Sempra Energy, recorded an asset write-off of $64 million USD related to the project's storage assets in 2009.[27]

**Q.29 What other facility risk does an underground storage developer face?**

A. The uncertainty regarding the performance of underground storage developments can also lead to substantial construction cost overruns which may prevent the facility from ever being placed in service. In September 1994, Avoca Natural Gas Storage received Commission approval to construct and operate a 5 Bcf storage facility in salt caverns located near Avoca, New York. Upon commencing construction, however, the Avoca project was fraught with cost overruns and construction delays. Avoca originally intended to inject the brine from the caverns into deep wells for disposal. The disposal wells were drilled, but due to low acceptance rates in these

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[26] *Liberty Gas Storage, LLC*, 133 FERC ¶ 62,033.

[27] Sempra Energy 2009 Form 10-K.

wells, this course had to be abandoned. Avoca filed in February 1997 to alternatively construct a 45-mile brine pipeline from the storage facility to a nearby salt processing plant, but soon concluded that the brine pipeline was also not cost-effective. In July 1997, Avoca filed for Chapter 11 Bankruptcy as the original backers of the project withdrew their support. In its bankruptcy petition, Avoca said it had assets of $1 million to $ 10 million and liabilities of $ 10 million to $ 99 million.[28] Ultimately, Avoca filed to abandon its storage project via the sale of its assets to another party.[29]

**Q.30 Does all facility risk pertain to the construction period of an underground storage project?**

A. No. Once operational, underground storage projects also face the danger of a loss of structural integrity which can lead to gas migration. In some cases, gas migration can be managed, either through the acquisition of expanded property rights or adjustments to compression, but in other cases migration can render the facility economically unviable. An example of gas migration resulting in abandonment can be found in Transcontinental Gas Pipe Line Corporation's ("Transco") Hester Storage Field. The Hester Storage Field was originally a gas producing field that was converted to a gas storage field in 1971. Transco acquired the Hester Storage Field, located in St. James Parish, Louisiana in 1977. In the 1980s, Transco's storage inventory calculations revealed gas losses from the field. An engineering and geologic study completed in 1990 concluded that 3.4 Bcf of gas had been lost between 1982 and 1989. Transco made numerous efforts to identify the cause of the gas migration, including the construction of observation wells and lowering the operating pressure, but the gas losses continued. In 2004, after a second consultant

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[28] Platts Inside FERC, "Brine-Disposal Problems Forced Avoca into Bankruptcy", August 4, 1997.

[29] *Avoca Natural Gas Storage*, 88 FERC ¶ 62,245.

study failed to identify the cause of the migration, Transco ceased operations at the Hester Storage Field. The Commission ultimately approved the abandonment of the Hester Storage Field in October 2008. The total cost to abandon the project was estimated to be $8.95 million.[30] According to Transco's final inventory calculations, cumulative gas losses from the field totaled 7.3 Bcf.[31]

**Q.31 In the past, has the Régie recognized the unusually high facility risks of storage operations?**

A. Yes. With respect to the first proposal to develop the Pointe-du-Lac site, the Régie observed:

> The flow of fluids in two phases in a porous environment with relatively unknown characteristics presents a problem which is entirely different from the flow of a dry gas in a steel pipeline.
>
> Therefore, the Régie considers that this project is distinct from the various extensions of the system that it has authorized to date, due to the higher level of risk associated with such an operation in the first phases of its development.[32]

As a result the Régie recommended that the site be developed by an independent company and be given a large risk premium in its allowed rate of return during the first five years of operation *"… so that shareholders will agree to assume the additional risks associated with this project."*[33]

**Q.32 How does the strategic nature of the Company's storage facilities affect their value?**

A. The Company's two storage facilities are the only underground storage capacity available in the province of Québec and, in conjunction with Gaz Métro's LNG facility, the only in-franchise storage in Gaz Métro's supply portfolio. Consequently,

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[30] Foster Natural Gas Report, "Transco Decides to Close Down One of Its Big Three Storage Service Facilities", Report #2693, May 9, 2008.

[31] *Transcontinental Gas Pipe Line Corp.*, 125 FERC ¶ 62,003.

[32] Decision G-475 (Translation), June 13, 1988, p 18.

[33] *Ibid., p. 20.*

these two Intragaz facilities provide a unique value to Gaz Métro in terms of load balancing and supply security. The value to Gaz Métro of in-franchise storage capacity is augmented by the fact that Gaz Métro's service territory lies at the extreme end of the market zone for TransCanada's Mainline pipeline, exposing the utility to greater risk of supply disruptions. Intragaz' strategic advantages help to mitigate the market risk faced by the Company.

**Q.33 Has the Régie recognized the strategic advantages of Intragaz?**

A. Yes. In approving rates for the Pointe-du-Lac facility, the Régie made the following statement:

> The Régie will later decide on the legal aspect but wishes to indicate immediately that it deems the Pointe-du-Lac project necessary and in the public interest. Moreover, this project not only falls under Québec's current energy policy, but … it also meets a real need which continues to increase.[34]

Similarly, in approving the rate and terms for the Saint-Flavien facility, the Régie stated that:

> … the Régie believes that given its strategic importance for the distributor, the project involving the development and use of the Saint-Flavien reservoir is in the public interest and that there are grounds for encouraging its realization.
>
> The Régie is retaining the avoided costs method submitted by the co-applicants because for the moment, and in this specific case, … it is "the only method that has allowed the emergence of a promoter interested in entering into a contract to realize this project".
>
> The Régie nevertheless believes that approval of a pricing methodology in prior cases does not exempt the parties from the obligation to prove, in subsequent cases, the relevance and advantage of the methodology over other methods.[35]

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[34] Decision D-89-21, July 21, 1989 (Translation), paragraph 21.

[35] Decision D-94-06, March 2, 1994 (Translation).

The Régie acknowledged the continued importance of these facilities earlier this year when it recognized *"(t)he advantage for Gaz Métro resulting from the fact that the Pointe-du-Lac site is located in the heart of the territory it serves.*"[36]

These decisions indicate that Intragaz is an important strategic asset for Gaz Métro, and the purpose of the Avoided Cost method was to encourage the construction of these high risk facilities.

**Q.34 How would the Company's risks be mitigated by its rate and contract proposal?**

A. The 10-year contract with Gaz Métro that Intragaz is proposing in this proceeding, in conjunction with a corresponding 10-year rate horizon, would help to mitigate risks. However, to the extent that its contract(s) with Gaz Métro has a term substantially less than the remaining depreciable life of the Intragaz facilities, Intragaz would retain significant risks.

Moreover, in connection with the 10-year contract proposed in this proceeding, the Company is proposing projected cost-of-service rates that would decline annually according to a fixed schedule for a period of ten years. The proposed rates and 10-year contract would mitigate some of the risks associated with recovering costs adequate to support their operations and allow debt financing. However, Intragaz would still face the risk of unforeseen events such as revenue losses in the event of a force majeure service interruption during the term of the contract.

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[36] Decision D-2012-005, January 26, 2012 (Translation), paragraph 43.

**Q.35 How do the risks of storage operations compare with those of a Local Distribution Company (LDC)?**

A. Storage operations are considerably riskier than LDC operations. The technological and engineering risks of storage discussed earlier are notably higher than similar risks for LDCs. The Régie explicitly noted this higher risk when it denied Gaz Métro's original application to develop storage facilities as part of its regulated LDC rate base.[37]

In addition, LDCs typically operate under exclusive franchise agreements that effectively eliminate all, or most, of the risk of contract renewal or direct competition in their core markets. Unlike franchised LDCs, independent storage operators rely upon contracts with LDCs or marketers that can decide to not renew the contracts. These contrasting circumstances expose storage operations to substantially greater recontracting risk than LDC operations face. Although LDCs with exclusive franchises continue to face competition from alternative fuels such as electricity, oil and propane, storage operators – because they are part of the natural gas supply chain – face the same risks and competition from alternative fuels.

High recontracting and other business risks also make it more difficult for storage operators to access credit markets. A December 2008 report by Standard & Poor's noted that none of the storage projects rated by the agency at that time had an investment-grade rating ('BBB-' and above) and identified the ability to lock-in long-term storage contracts as a criteria to achieve an investment-grade rating.[38] The lower credit ratings issued to storage operations make it more difficult and costly to

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[37] Decision G-475 (Translation), June 13, 1988, p 18.

[38] Standard & Poor's, *U.S. Natural Gas Storage Owners Face Uncertainty As the Sector Copes With Volatile Prices And Demand*, December 23, 2008.

access credit markets. In contrast, LDCs are typically rated as solid investment grade due to their long-term franchise agreements and cost-of-service rates designed to produce reasonable returns.

**Q.36 Does Intragaz face any risks that are high relative to those of other pipeline or storage companies?**

A. Yes. The major risks for Intragaz relative to the proxy group that I describe in more detail later in my testimony include: 1) its reliance on a single customer, Gaz Métro; 2) contracts that are significantly shorter than the depreciable life of its assets; and, 3) its small size relative to the proxy companies. In addition, the technical risk of storage companies is much higher than for pipeline companies because of the uncertainties related to underground reservoirs.

## IV. DETERMINATION OF THE REQUIRED RATE OF RETURN

**Q.37 What sort of examination is necessary to ensure that the three criteria required by the fair return standard are satisfied in evaluating the reasonableness of a proposed return?**

A. As discussed earlier, the three criteria are: (1) comparable earnings, (2) financial integrity, and (3) capital attraction. In my opinion, criterion (1) requires an examination of the returns that are actually earned in the primary financial markets by enterprises with corresponding risks. Legal criteria (2) and (3) generally will be satisfied best by employing the economic concept of the "cost of capital" or "opportunity cost" in establishing the allowed rate of return on common equity. Criterion (2) suggests that the *overall* allowed rate of return, must also be sufficient to maintain a solid investment-grade bond rating. For every investment alternative, investors consider the risks attached to the investment and attempt to evaluate whether the return they expect to earn is adequate for the risks undertaken. Investors also consider whether there might be other investment opportunities that would provide a better return relative to the risk involved. This weighing of alternatives and the highly competitive nature of capital markets causes the prices of stocks and bonds to adjust in such a way that investors can expect to earn a return that is just adequate for the risks involved. Thus, for any given level of risk, there is a corresponding level of return that investors must expect in order to induce them to voluntarily undertake that risk and not invest their money elsewhere. That return is referred to as the "opportunity cost" of capital or "investor required" return.

**Q.38 How is the cost of long-term debt determined?**

A. For purposes of setting regulated rates, the actual, embedded costs of long-term debt generally are used in order to ensure that the company receives a return that is sufficient to pay the interest obligations that are attached to this source of capital. However, because Intragaz currently does not know how much debt it will have outstanding, or the cost of debt, at the time the new rates will go into effect in May 2013, a deemed capital structure consisting of 50 percent debt and 50 percent common equity, and an annual cost of debt of 5.75 percent have been estimated based on the rates quoted to Intragaz in a survey of financial institutions. That survey is described in the testimony of Intragaz witness M. Marois. Because of the uncertainties surrounding its eventual refinancing (the amount as well as the terms and conditions), my understanding is that Intragaz will be seeking permission as part of this proceeding to update its filing to reflect the actual debt cost once the refinancing is completed.

**Q.39 How is the cost of common equity determined?**

A. The practice in setting a fair rate of return on common equity generally is to use the current cost of common equity, as inferred from studies of the secondary financial markets, in order to ensure that the return is adequate to attract common equity capital to the company. However, determining the market cost of common equity is a relatively complicated task that requires analysis of many factors and some degree of judgment by an analyst. The current market cost of capital for securities that pay a fixed level of interest is relatively easy to determine. For example, the current market cost of debt for publicly-traded bonds can be calculated as the yield-to-maturity, adjusted for flotation costs, based on the current market price at which the bonds are selling. In contrast, because common stockholders receive only the residual earnings of the company, there are no fixed contractual payments which can be observed. This uncertainty associated with the dividends that eventually will be paid greatly complicates the task of estimating the cost of common equity capital.

For purposes of this testimony, I have relied on several analytical approaches for estimating the cost of common equity. My primary approach relies on the DCF analysis, based on two sets of proxy companies: one consisting of Canadian regulated utilities and another consisting of U.S. natural gas pipeline and storage companies. Because there are no publicly-traded, pure storage companies with sufficient data to conduct an analysis, the analysis also requires a comparison of the risk characteristics of the proxy companies with the risk of Intragaz in order to establish a reasonable return relative to the return required by the proxies. I have also conducted Risk Premium analyses in order to establish benchmarks for a reasonable rate of return. Each of these approaches is described later in this testimony.

**Q.40 Have any other public utility commissions in Canada given primary weight to the DCF analysis?**

A. Yes, the British Columbia Utilities Commission ("BCUC") has given weight to the DCF method in the past and recently adopted the DCF analysis as its primary method for determining ROE in a case involving Terasen Gas. For example, in 2006, the BCUC gave weight to both the Equity Risk Premium ("ERP") and DCF approaches when determining a fair rate of return.[39] Again in 2009, the BCUC considered DCF, ERP, and CAPM approaches, but found that the DCF and ERP are the most common approaches and determined "that the DCF approach has the more appeal in that it is based on a sound theoretical base, it is forward looking and can be utility specific."[40] Overall, the BCUC decided "that in determining a suitable ROE…it will give most weight to the DCF approach…"[41] For the DCF approach, the BCUC found that U.S. data can act as a proxy for Canadian data and rejected suggestions of analyst bias, noting that no allegations of upward bias have been leveled against utility analysts.

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[39] British Columbia Utilities Commission, In the Matter of Terasen Gas Inc. and Terasen Gas (Vancouver Island) Inc. Application to Determine the Appropriate Return on Equity and Capital Structure and to Review and Revise the Automatic Adjustment Mechanism, March 2, 2006, p. 1.

[40] British Columbia Utilities Commission, In the Matter of Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc., Terasen Gas (Whistler) Inc. and Return on Equity and Capital Structure, December 16, 2009, p. 45.

[41] Ibid.

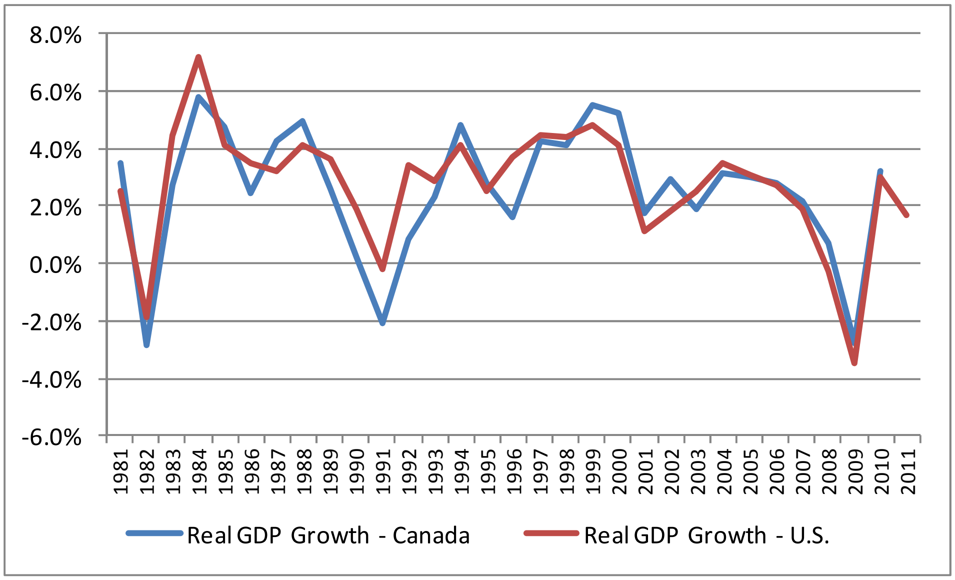
### A. Interest Rates and the Economy

**Q.41 What are the general economic factors that affect the cost of capital?**

A. Companies attempting to attract common equity must compete with a variety of alternative investments. Prevailing interest rates and other measures of economic trends influence investors' perceptions of the economic outlook and its implications on both short- and long-term capital markets. Although the Canadian economy has been somewhat slow to recover from the global recession, domestic demand and personal spending are growing steadily. The U.S. economy has stabilized with renewed appetite for energy to fuel its commercial expansion prompting an increase in Canadian fuel exports and extractive energy production. The continued U.S. economic recovery is an important factor for the Canadian economic recovery and will undoubtedly be the driving influence. Positive signs of U.S. recovery may be observed in a declining unemployment rate, strong rebound of equity prices, narrowing credit spreads and easing concerns about the global economy. Nonetheless, a variety of concerns, such as rising fuel costs, a surge in inventories, and the impact of the Eurozone crisis on exports have dampened the optimism. Generally, the Canadian economy and U.S. economy move in tandem due to the very close trade relationship and more generally to the overall globalization of the world economy. Consensus forecasts indicate modest but steady real GDP growth and inflation for both North American economies.

In both countries, on average, real growth in the Gross Domestic Product ("GDP") has slowed over the last three decades. During the past 30 years, Canadian GDP averaged 2.6 percent annually, 2.4 percent for the past 20 years and 1.9 percent for the past 10 years. This compares with 2.7 percent, 2.5 percent for the past 20 years and 1.6 percent for the past 10 years, for the U.S., respectively. However, more recently, real GDP in Canada increased at an annual rate of 3.2 percent in 2010 and 2.5 percent in 2011, up from a dip in GDP in 2009 of negative 2.8 percent. This corresponds to an increase in real GDP in the U.S. of 3.0 percent in 2010, and 1.7 percent in 2011, up from a dip in GDP in 2009 of negative 3.5 percent. As Figure 1 illustrates, the Canadian and U.S. economy track each other very closely in real terms.

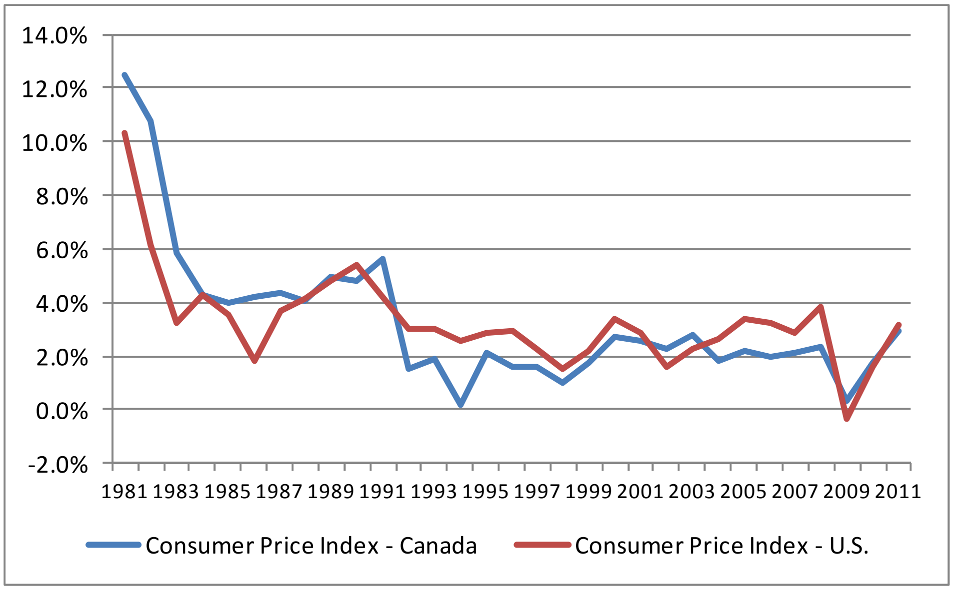
**Figure 1: Real GDP Growth – Canada and the U.S.**



As Pages 4 and 5 of Schedule 1 show, Canadian interest rates on longer-term, intermediate quality corporate bonds have declined since their height in the Fall of 2008 with recent yields on A-rated public utility bonds at approximately 4.08 percent and the yields on BBB-rated public utility bonds at approximately 4.18 percent. In the U.S., interest rates have experienced a similar decline with A-rated public utility bonds at approximately 4.40 percent and the yield on Baa-rated bonds at 5.11 percent. On the other hand, credit spreads in both countries have remained relatively constant in recent years after declining from the high levels experienced during the financial crisis.

Investors also are influenced by the level of inflation, which has been persistent in the past. During the past decade, the Consumer Price Index in Canada has increased at an average annual rate of 2.1 percent and the GDP Implicit Price Deflator, a measure of price changes for all goods produced in Canada, has increased at an average rate of 2.4 percent. This corresponds to increases in the U.S. of 2.5 percent and 2.3 percent, respectively.

**Figure 2: CPI – Canada and the U.S.**



According to *Consensus Economics* the Consumer Price Index year-over-year increase is forecasted to decline slightly in Canada to 1.8 percent in the 3rd quarter of 2012 before gradually climbing to 2.1 percent towards the end of 2013.[42] Individually, certain economic indicators show some improvement, yet the overall economy is only slowly showing signs of recovery.

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[42] Consensus Forecasts, Consensus Economics, April 10, 2012 Survey, at 16.

### B. Capital Structure

**Q.42 What capital structure are you recommending for Intragaz?**

A. Based on its discussions with lenders, Intragaz has found that it would be unable to issue any significant amount of debt without long-term contracts with its customer. However, it is anticipated that Intragaz would be able to issue debt that is paid down over 10 years if the proposed 10-year cost-based rate is approved and Intragaz is able to contract with Gaz Métro for that time period. Based on preliminary discussions with lenders, Intragaz is filing a deemed capital structure consisting of 50 percent common equity, and 50 percent long-term debt. This common equity ratio is consistent with the median of the equity ratios for gas transmission and storage companies shown on page 2 of Schedule 9.

**Q.43 Has the Régie recognized Intragaz' need for long-term contracts in order to issue debt?**

A. Yes. In its decision last year, the Régie made the following observation:

> The Régie is aware that Intragaz is a company whose operations are based on long-term assets and that, therefore, must support significant and sustained fixed expenses. It takes note of Intragaz's comments mentioning that it is the revenues generated by its contracts that can be given in guarantee to its lender. Ideally, this revenue flow would result from a long-term contract that ensures stability and predictability and thus an adequate capital structure. **It also takes note that the stability and predictability of revenues, as well as the length of the contract that will prevail with Gaz Métro will be key elements in reaching and maintaining an appropriate capital structure.**[43]

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[43] Régie de l'énergie, Decision D-2011-140, Intragaz, September 16, 2011 (Translation), paragraph 60, emphasis added.

**Q.44 How is the "Stand-Alone" principle relevant for setting a deemed capital structure for Intragaz?**

A. In its decision D-2011-140, the Régie stated that:

> [61] However, the Régie is of the opinion that it is the responsibility of Intragaz' shareholders to find adequate financing and capital structure, according to the constraints and opportunities that the capital markets offer as well according to the company's earnings prospects. It is also the responsibility of Intragaz' shareholders to give certain guarantees if the lender's conditions do not satisfy its expectations regarding the amount of the loan, interest rate or capital reimbursement clauses.

If a regulator were to deem a debt ratio that the company could not achieve unless shareholders provided uncompensated loan guarantees to lenders, the resulting return allowance would be insufficient to attract capital on reasonable terms and would violate both the fair return standard and the Stand-Alone principle.

## C. Cost of Debt

**Q.45 What debt cost rate have you used for Intragaz?**

A. Although Intragaz currently is in the process of refunding its outstanding long-term debt,[44] it plans to issue long-term debt based on the assumption that the Régie will approve cost based rates and that it will be able to obtain a contract of at least 10 years with its customer, Gaz Métro. Consequently, for purposes of this rate filing, Intragaz is filing a deemed cost of debt of 5.75 percent. This debt cost is based on the rates quoted to Intragaz in a survey of financial institutions. This rate is approximately 100 basis points higher than the average yield on Canadian Corporate bonds in recent months as shown on page 4 of Schedule 1. Consequently, it would be consistent with

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[44] Intragaz must refund most of its current debt prior to the expiry of its contracts with Gaz Métro in April 2013. Only the portion guaranteed by the cushion gas can remain outstanding at the expiry of its contracts with Gaz Métro.

the higher risks that Intragaz faces. However, Intragaz plans to update its rate filing when it knows the actual debt costs.

## D. Overview of ROE Cost of Equity Estimation

### 1. Discounted Cash Flow Model

**Q.46 Please describe the DCF method of estimating the cost of common equity capital.**

A. The DCF method reflects the assumption that the market price of a share of stock represents the discounted present value of the stream of all future dividends that investors expect the firm to pay. The DCF method suggests that investors in common stocks expect to realize returns from two sources: a current dividend yield, plus expected growth in the value of their shares as a result of future dividend increases. Estimating the cost of capital using the DCF method, therefore, is a matter of calculating the current dividend yield and estimating the long-term, future growth rate in dividends that investors reasonably expect from a company.

The dividend yield portion of the constant growth DCF formula generally consists of the dividend per share of that company divided by the price per share, and utilizes readily available information regarding stock prices and dividends. The market price of a firm's stock reflects investors' assessments of risks and potential earnings as well as their assessments of alternative opportunities in the competitive financial markets. By using the market price to calculate the dividend yield, the DCF method implicitly recognizes investors' market assessments and alternatives. However, the other component of the DCF formula, investors' expectations regarding the future long-run growth rate of dividends, is not readily apparent from stock market data and must be estimated using informed judgment.

**Q.47 What DCF formula do you use in this proceeding?**

A. In this study I will use the following general form of the DCF model:

$$K = \frac{D\,(1 + .5g)}{P} + g \qquad (1)$$

where:

K = the cost of capital, or total return that investors expect to receive;

P = the current market price of the stock;

D = the current annual dividend rate; and

g = the future annual growth rate that investors expect.

I also have adjusted my calculated cost of capital for a required flotation cost adjustment.

### 2. CAPM Model

**Q.48 Please describe the CAPM method of estimating the cost of common equity capital.**

A. CAPM is an extension of the simple Equity Risk Premium model, where common equity investors are deemed to measure their required return based on a risk free rate of return plus compensation for the relative risk of a specific stock in relation to the broader market. This model may be expressed as:

$$Re = Rf + \beta\,(Rm - Rf)$$

where:

Re = the required return on common equity for a specific stock

Rf = the risk-free rate of return

Rm = the return required for the market as a whole

β = Beta, a measure of the covariance between the returns (dividends plus capital gains) of the market average and those of a specific stock.

In order to calculate the CAPM, one must make assumptions about the risk-free rate of return, the market risk premium and the Beta. Since the cost of capital is forward looking, it is appropriate to use forward-looking estimate for the variables, if possible.

### a. Fundamental Problems with the Capital Asset Pricing Model

**Q.49 What are some of the limitations of the CAPM Model?**

A. The intuitive basis of the CAPM is that investors will seek to be compensated for the relative systematic (or non-diversifiable) risk of a given stock in relation to a risk free investment and the broader market for equities. Many academics and practitioners question whether Beta, in the best of circumstances, can plausibly measure the true risk characteristics of a firm and advise that there are other risks that may influence investors' decisions. The CAPM assumes that any risk that can be diversified in an investors' portfolio, is diversified, and therefore irrelevant to the cost of capital. However, this assumption may not represent actual investor behavior; and it is likely that diversification reduces a firm's relevant risks less than the CAPM theory assumes. For example, a comprehensive study of Canadian stock returns concluded that:

> The empirical study on the Canadian equity market demonstrates the existence of size premia based on data from 1993 to 2007. Results also indicate that beta, the CAPM's risk measure, was a weak measure

> to explain expected returns for smaller firms as smaller firms have a high unsystematic risk component.[45]

To the extent that variables other than Beta are able to explain variations in return that are not explained by Beta, diversification does not eliminate all unsystematic risks and the CAPM cannot be considered to be an adequate measure of the cost of capital.

Though the CAPM has a plausible theoretical basis, its application also is often the source of controversy and exhaustive debate among practitioners. For example, the expected future market equity risk premium is difficult to quantify, and involves debates concerning the preference for ex-ante or ex-post methodologies, averaging conventions, time period covered, etc. The second most contested factor is the controversy surrounding Beta which has no theoretically correct method of quantification and has been shown to be a poor indicator of actual stock returns. Moreover, there is debate on whether Beta should be adjusted towards the market mean or the utility-sector mean, or whether it is appropriate to use a raw Beta without adjustment. All of these factors lead to questions on whether the CAPM method may reliably track the capital costs of a regulated utility.

**Q.50 Would you elaborate on why the CAPM is an unreliable method for estimating the cost of common equity capital?**

A. Application of the CAPM – and more specifically, estimation of investors' expectation of a forward-looking "Beta" – is based on the concept that the value of each individual stock (or other investment) has a reasonably fixed, known and measureable sensitivity to changes in the value of a market portfolio consisting of all other investments in the

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[45] Wilhelm, K., "Size Premia in the Canadian Equity Market," *Journal of Business Valuation*, May 2009, p. 19.

economy. However, there are several fundamental problems with the CAPM that have been established in the finance literature.

First, there are no theoretically correct time intervals for measuring the returns and risks that are relevant for investors, but the calculated level of Beta can be very different when different measurement intervals are used. Therefore, the selection of time intervals for measuring Beta – and by extension the level of Beta – is an arbitrary decision that cannot be defended on either theoretical or empirical grounds.

Second, the Beta and risk-premium inputs to the CAPM model generally are based on historical rather than forecasted information. However, there is no theoretically correct *historical* time period (e.g., two years, five years, 10 years, etc.) over which to measure the *future* Beta that investors currently expect, and there is significant evidence that Beta does not remain constant from one period to the next. Thus, a Beta measured using historical data cannot provide an accurate estimate of the level of risk investors currently expect on a forward-looking basis.

Third, although several early studies conducted approximately 40 years ago were thought to have validated the accuracy of the CAPM, more complete empirical studies since that time have shown that the CAPM is not accurate and that the results of early studies may have been a statistical anomaly. In general, Beta estimates do not have a strong correlation with the returns earned on investments and therefore Beta estimates would not be expected to provide valid estimates of the relative cost of common equity.

**Q.51 Why is there a fundamental problem with selecting the time intervals used in calculating Beta?**

A. Although Beta is supposed to be the measure of how sensitive the return on a particular stock is relative to the return on a diversified market portfolio, there are no theoretically correct time intervals for measuring that sensitivity. For example, one could measure Beta using an annual interval that calculates the relationship between the return on a stock and the return on the market portfolio from one year to the next. However, it would be equally "correct" to measure Beta by calculating the relationship between the returns that occur each month. Similarly, the theory allows Beta to be measured using the rates of return that occur weekly, or daily, or any other time period the analyst chooses. Because there are no theoretically correct time intervals for measuring the returns, it is an arbitrary choice as to which time intervals to use. Many studies, including Levhari and Levy[46] and Hawawini[47], have shown that the level of Beta can be very different depending on the time interval selected for measuring returns. For example, Hawawini cites Eastman Kodak as one example where the Beta was 1.25 based on daily returns, but it was 0.93 based on monthly returns.[48] Discrepancies of this magnitude are not unusual when different return intervals are used to estimate the value of Beta. Because the level of Beta is sensitive to the time intervals of the returns used in its calculation, and the time intervals used are selected arbitrarily, the level of Beta used in a CAPM analysis ultimately is an arbitrarily selected number. An arbitrarily selected Beta cannot be considered to be a reasonable or accurate method for estimating the cost of common equity.

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[46] Levhari, D. and Levy, H., "The Capital Asset Pricing Model and the Investment Horizon," *Review of Economics and Statistics* (February 1977), 92-104.

[47] Hawawini, G., "Why Beta Shifts as the Return Interval Changes," *Financial Analysts Journal* (May-June 1983), 73-77.

[48] Ibid., p. 73.

**Q.52 In regard to the second problem, why is it unreliable to simply use historical data to calculate the current forward-looking cost of common equity?**

A. Investors' current requirements and expectations for the future are not necessarily the same as the past. Thus, even if we ignore the problem that there is no theoretically accurate or reliable way to measure what "Beta" has been in the past, there is no reason to believe that investors currently perceive the same risks and require the same premiums for risk that were experienced in the past. Instead, investors' current expectations for "Beta" are forward-looking and not historical. Moreover, it is not unusual for calculated Betas to shift from one period to the next in ways that appear to be unrelated to any changes in risk.

In addition to the proven inaccuracy and unreliability of Beta, the market risk premium is another important component of the CAPM equation that changes over time. Historical market risk premia are less reliable than reasonable forecasts because the historical average relationships between equity returns and bond yields may not reflect the current circumstances. When Canadian regulators rely on an equity risk premium formula to make annual generic adjustments to the allowed rate of return, they generally have relied on an assumption that the level of the risk premium should vary inversely with the level of interest rates. In contrast analysts who use the CAPM approach often ignore the current level of interest rates in estimating a risk premium.

**Q.53 In regard to your third point, what evidence is there that the CAPM does not provide valid estimates of the cost of capital?**

A. Although the early academic literature appeared to validate the CAPM, subsequent research casts serious doubt on its empirical validity. In a 1992 article, "The Cross Section of Expected Stock Returns," *Journal of Finance*, 47:427-465 (June 1992), Eugene Fama and Kenneth French examined the relationship between Beta and the returns earned by companies. This article essentially re-visited the research from the late 1960's and early 1970's that appeared to verify Beta as a reasonable measure of risk and required return. That earlier research primarily relied on data from the 1960's and found a significant correlation between actual stock returns and certain measures of Beta. In other words, stocks with high Betas tended to experience higher returns, and stocks with low Betas tended to experience lower returns. It was therefore assumed that "Beta" is an accurate measure of the risk that is relevant for determining the cost of capital.

The 1992 Fama and French article recognized that there are numerous ways to calculate "Beta" and the authors tested thousands of different Beta calculations over hundreds of different holding periods between 1963 and 1990. Their 1992 article found that there was no statistically significant relationship between Betas and stock returns in the vast majority of different time periods. In other words, Beta could not explain the level of returns on stocks and, therefore, one could not assume that Beta can accurately measure the risks that are relevant for determining the cost of capital. The notable exception to that finding occurred for some Betas generally measured during the 1960's. The ultimate conclusion of this comprehensive analysis was that Beta was not significantly related to stock returns, and that the supposed verification of Beta during the early 1970's was a statistical anomaly. Although they found that the level of Beta does not correlate well with the returns on common stocks, Fama and French found that firm size (with smaller companies requiring higher returns) and market-to-book ratio are the two variables that best explain the returns for common stocks.[49] With regard to these findings Value Line commented as follows:

> "Indeed, Professor Fama concluded, 'The fact is that Beta, as the sole variable explaining returns on stocks, is dead.' These findings support previous studies that have called into question the real-world applicability of the CAPM Beta, including papers by Keim (Financial Analysts Journal, 1986), and Roll (Journal of Financial Economics, 1977). Never before, however, has the lack of a statistically significant relationship between beta and return been so rigorously and dramatically established."[50]

**Q.54 What do you conclude with respect to the use of the CAPM for estimating the cost of common equity?**

A. From a conceptual perspective, the CAPM has many weaknesses that make it an unreliable method for estimating the cost of common equity capital. In a 2004 article that reviewed the history of attempts to test the validity of the CAPM, Fama and French concluded that:

> "Unfortunately, the empirical record of the model is poor – poor enough to invalidate the way it is used in applications. The CAPM's empirical problems may reflect theoretical failings, the result of many simplifying assumptions. But they may also be caused by difficulties in implementing valid tests of the model."[51]

Similarly, the BCUC acknowledged the limitations of the CAPM in a 2009 decision, noting that the *"CAPM is based on a theory that can neither be proved nor disproved, relies on a market risk premium which looks back over nine decades and depends on a relative risk factor or beta."*[52] As a consequence, the BCUC gave little weight to the CAPM analyses and

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[49] Fama and French, "The Cross-Section of Expected Stock Returns," *Journal of Finance*, Vol. XLVII, No. 2, June 1992, 427-465.

[50] Value Line Industry Review, March 13, 1992, p. 1-8.

[51] Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives*, Volume 18, Number 3, Summer 2004, at 25.

[52] British Columbia Utilities Commission, In the Matter of Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc., Terasen Gas (Whistler) Inc. and Return on Equity and Capital Structure, December 16, 2009, p. 45.

set an allowed rate of return that was above the top of the range for the CAPM results.[53]

For all of the reasons discussed above, the CAPM should not be considered to be a valid or reliable method for estimating the cost of common equity capital for a regulated company.

### 3. Flotation Cost Adjustment to Cost of Capital

**Q.55 What are flotation costs?**

A. Flotation costs are the costs associated with the sale of new issues of common equity. These costs include out-of-pocket expenditures for the preparation, filing, underwriting, and other costs of issuance of common equity.

**Q.56 Does the investor return requirement that is estimated by a DCF analysis need to be adjusted for flotation costs in order to estimate the cost of capital?**

A. Yes. Because the purpose of the allowed rate of return in a regulatory proceeding is to estimate the cost of capital the regulated company would incur to raise money in the "primary" markets, an estimate of the returns required by investors in the "secondary" markets must be adjusted for flotation costs in order to provide an estimate of the cost-of-capital that the regulated company requires in order to raise capital on reasonable terms in the "primary" markets.

**Q.57 Please describe the difference between "primary" and "secondary" markets for common equity.**

A. When a company issues new common equity in order to raise cash for investment in plant, or, to otherwise run its operations, it does so in the "primary" market. The

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[53] Ibid., at page 66.

"primary" market is defined very simply as the market in which the stock is first sold in order to raise cash funds to be used by the issuer. In this "primary" market, the company generally hires an investment banker, or a syndicate of bankers and brokers, to float its stock issue to the public. Associated with a company raising cash funds through a "primary" market sale of common equity there are significant costs of preparing and filing documents with regulatory agencies, and issuing prospectuses. In addition, in the "primary" market the issuing company generally must pay a significant percentage of the proceeds from the stock issuance to the investment banker, or the syndicate of bankers and brokers, who finds the investors who will provide cash to the issuing company.

Once stock has been issued to investors in the "primary market", those investors who initially provided cash to the issuing company may re-sell or "trade" the stock with other investors in the "secondary" market. Much of the trading in the "secondary" market occurs on stock exchanges and buyers and sellers are not required to file prospectuses with a stock exchange commission. The crucial difference between stock issued in the "primary" market and stock traded in the "secondary" market is that the issuing company does not receive any additional funds when its stock trades in the "secondary" market. Instead, the ownership of the stock merely changes hands between various investors. In addition, the brokerage fees associated with buying and selling stock in the "secondary" market generally are incurred by both the buyer and the seller, and are a small fraction of the level of the flotation costs incurred by a company that attempts to raise cash by issuing stock in the "primary" market.

**Q.58 Have you quantified the cost of raising capital by issuing stock in the "primary" market?**

A. Yes. There are significant costs associated with issuing new common equity capital and these costs must be considered in determining the cost of capital to a company. Schedule 8 shows a representative sample of flotation costs incurred with 173 new common stock or partnership unit issues by natural gas transmission and distribution companies between 2000 and 2011. Flotation costs associated with these new issues averaged 3.96 percent. This indicates that in order to be able to issue new common equity on reasonable terms, without diluting the value of the existing stockholders' investment, Intragaz must have an expected return that places a value on its equity that is approximately 4.00 percent above book value. The cost of common equity capital is therefore the investor return requirement multiplied by 1.040. This "primary" market return on equity is presented in Table 4 of my testimony with the results of the secondary market returns discussed previously.

One purpose of a flotation cost adjustment is to compensate common equity investors for past flotation costs by recognizing that their real investment in the company exceeds the equity portion of the rate base by the amount of past flotation costs. For example, the proxy companies generally have incurred flotation costs in the past and, thus, the cost of capital invested in these companies is the investor return requirement plus an adjustment for flotation costs. A more important purpose of a flotation cost adjustment is to establish a return that is sufficient to enable a company to attract capital on reasonable terms. This fundamental requirement of a fair rate of return is analogous to the well-understood basic principle that a firm, or an individual, should maintain a good credit rating even when they do not expect to be borrowing money in the near future. Regardless of whether a company can confidently predict its need to issue new common equity several years in advance, it should be in a position to do so on reasonable terms at all times without dilution of the book value of the existing investors' common equity. This requires that the flotation cost adjustment be applied to the entire common equity investment and not just a portion of it.

In summary, when an ROE analysis is based on stock prices, dividend yields, Betas, and market risk premiums derived in the "secondary" market to estimate the required rate of return, a flotation cost adjustment is essential in order to account for the difference between (i) the market value of stocks traded between investors in the secondary markets and (ii) the net proceeds expected from stock issued in the primary market to raise capital for plant construction and utility operations.

## V. SELECTION OF NATURAL GAS STORAGE PROXY COMPANIES

**Q.59 Would you please describe the overall approach used in your ROE analyses of Intragaz' cost of common equity?**

A. Because Intragaz must compete for capital with many other potential projects and investments, it is essential that it have an allowed return that matches returns potentially available from other investments of a similar risk. In order to perform a DCF analysis, it is necessary to ascertain the market derived price of the company's stock. Since nearly all gas pipelines and storage companies, including Intragaz, are owned by larger, diversified companies, the operating companies for which the Régie sets rates often do not have publicly-traded common equity that would produce a market price that is required for ROE analysis. A direct, market-based cost of capital analysis of Intragaz as a stand-alone company is not possible since it is privately organized as a limited partnership between two diversified energy companies. As an alternative, I have used two proxy groups, a Canadian utility group and a U.S. natural gas pipeline and storage group that are most nearly similar in risk to Intragaz.

**Q.60 Please describe why it was necessary to use two proxy groups?**

A. I have used two proxy groups to bring an added perspective and information into the evaluation of a fair return for Intragaz, a pure-play Canadian gas storage company. Because there are no publicly-traded pure-play gas storage companies with sufficient information to conduct the analysis, I have selected a sample of Canadian utilities to provide a benchmark for the risks and resulting cost of capital of Canadian utilities in general. Then, to provide a check against the results of my primary proxy group and to add an additional perspective on the risks specific to a gas pipeline and storage entity, I have developed a sample of U.S. companies whose operations are primarily attributed to natural gas transmission and storage. With the information that I have collected from these two samples, I have assessed where Intragaz' risk lies relative to these two groups.

**Q.61 Please describe how you selected your Canadian Utility proxy group?**

A. I began with a list of companies that comprise the S&P/TSX Utilities Index in Canada. I eliminated companies whose primary business is power generation, on the basis of a substantially different risk profile than that of Intragaz. I also eliminated income funds or companies where there was inadequate data to perform the analyses. I arrived at a group of the following five companies.

- Canadian Utilities
- Enbridge, Inc.
- TransCanada Corp.
- Emera, Inc.
- Fortis, Inc.

**Q.62 How did you establish the group of U.S. natural gas transmission and storage proxy companies that are risk appropriate for Intragaz?**

A. I relied on a list of screening criteria to narrow the list of potential proxy companies. As Intragaz' business operations are 100 percent natural gas storage, it is difficult to develop a proxy group in which the members will have exactly the same risk. Therefore, after I identified a "short list" of potential companies, I conducted an extensive review of the potential proxy companies' business units, both pipeline assets and other business segments, to identify a group of companies that are of comparable risk to Intragaz. From this analysis, I concluded that five of the potential proxy companies were most comparable to Intragaz. The following screens were applied to establish my "short list" of potential proxy companies:

1. All of the companies have publicly-traded common stock or partnership units;
2. All companies must be covered by an investment information service, like Value Line.
3. All of the companies have at least 50% of the their assets or operating income derived from its natural gas storage or transmission operations;
4. All of the companies are currently paying cash dividends or distributions;
5. None of the companies has a credit rating below investment grade as established by either Moody's or Standard and Poor's;
6. None of the companies is engaged in significant transactions involving mergers, acquisitions or divestitures; and

7. All of the companies must have at least three years of historical data available and have paid a distribution during that time period.

Based on the application of these criteria, I have developed a group of potential proxy companies with risks reasonably comparable to those of Intragaz.

**Q.63 What companies met these screening criteria?**

A. The following five companies and MLPs met these criteria:

- Boardwalk Pipeline Partners, L.P ("Boardwalk");
- Spectra Energy Corp ("Spectra Energy");
- Spectra Energy Partners, L.P. ("Spectra LP");
- TC Pipelines, L.P. ("TC Pipelines");
- Williams Partners L.P ("Williams Partners").

**Q.64 Why have you selected natural gas transmission pipeline companies as proxy companies for a pure-play storage entity?**

A. Natural gas transmission companies share largely the same competitive and market risks of a pure-play storage entity. Both are widely exposed to contract attrition if more economic alternatives become available.

**Q.65 How did you conduct your comparability analysis of each of the potential proxy companies?**

A. In order to determine whether the proxy group developed to calculate Intragaz's cost of equity provides an appropriate comparison to the risks for Intragaz, it is necessary to examine the individual companies that comprise the potential proxy group.

In Schedule 3, I have provided a list of gas transmission pipelines and storage facilities owned by the companies that I included in my group of potential natural gas transmission and storage proxy companies. My determination as to whether each of these companies is sufficiently similar in risk to Intragaz was based on the relative financial and operating risk of the potential proxy companies. This included an assessment of the risk of other businesses that each company is engaged in, as well as the risk of the natural gas pipelines and storage facilities that are operated by the company.

**Q.66 How do the overall risks of the U.S. natural gas pipeline proxy companies compare with the risks faced by Intragaz?**

A. The proxy companies I have selected are the most reasonable companies to use to reflect the business operations and associated risks of Intragaz. As shown on Schedules 3 and 4, all of the natural gas pipeline proxy companies are significantly more diversified than Intragaz both in terms of geographic markets and lines of business. In addition, each of the proxy group companies has a portfolio of assets that source gas from more than one producing region and that reach multiple market areas, which serves to reduce their overall risk. However, most of their pipeline assets face various degrees of competition.

Intragaz is a small natural gas storage company that serves one single gas market and customer. Moreover, as discussed in Section III earlier in this testimony, storage operations face greater technological risks that a facility will fail to work properly. Although Intragaz faces no immediate competition compared to the pipelines and storage facilities owned by the proxy group, it lacks certainty that it will continue to be fully subscribed by Gaz Métro and lacks the benefit of diversification if Gaz Métro were to not renew its agreement with Intragaz. These risks related to technology, lack of diversification, and its small size, when offset by a generally lower level of direct competition, place Intragaz' operating risks somewhat above those of the typical company in the pipeline and storage company proxy group.

**Q.67 Why have you placed primary reliance on the Canadian utility company proxy group?**

A. While I consider the U.S. Pipeline and Storage company proxy group to be risk appropriate for Intragaz, I recognize the preference of the Régie for a proxy group of Canadian utility companies. As a result, my cost of equity recommendation is based primarily on the results of the Canadian Utility proxy group and is supported by the results of the U.S. Pipeline and Storage company proxy group.

## VI. RESULTS OF ROE ANALYSES

### A. DCF Analysis

### 1. Dividend Yield

**Q.68 How did you calculate the dividend yields for the companies in your comparison groups?**

A. The dividend yields were calculated for each company by dividing the current annualized dividend by the average of the stock prices for each company. For the price component of the calculation, I calculated the high and low price for each month during the six-month period from November 2011 through April 2012. The dividend yield was then calculated for each month using the most recent dividend for that period. The six dividend yields over this time period were then averaged to derive the dividend yield that was used in the DCF analysis. These calculations are shown on Schedule 5. These dividend yields are multiplied by the DCF model factor

(1 + .5 g) to reflect expected future dividend increases, to arrive at the dividend yield component of the DCF model.

### 2. Growth Rate Analysis

**Q.69 Please describe the methods you used in estimating the future growth rate that investors expect from these companies?**

A. There are many methods that reasonably can be employed in formulating a growth rate estimate, but an analyst must attempt to ensure that the end result is an estimate that fairly reflects the forward-looking growth rate that investors expect.

**Q.70 In your opinion, what are some of the underlying factors that will affect future growth rates for the companies in both proxy groups?**

A. One important factor will be growth in the overall economy. Schedule 1, pages 1 and 2, shows that the Canadian Gross Domestic Product has grown at an average annual rate of 5.4 percent during the past 30 years, and at a rate of approximately 4.4 percent during the past decade. The U.S. nominal GDP has also grown at an average annual rate of 5.4 percent over the past 30 years and at a rate of approximately 3.9 percent over the last decade. It is reasonable to expect that long-term future growth in the economy generally will be comparable to past growth rates in the 3.9 – 5.4 percent range.

Another factor will be demand for natural gas. Natural gas usage generally has been increasing in recent years and many analysts are expecting demand to increase steadily during the next decade and beyond. For example, the Energy Information Administration of the U.S. Department of Energy ("EIA") forecasts that gas consumption in the United States will grow from its current level of approximately

24 Tcf per year to approximately 26.5 Tcf per year in 2035.[54] This forecast is largely dependent on the demand for natural gas from the industrial and electric power sector. Steady increases in demand for gas transportation should be fueled by the availability of domestic and imported supplies, rapid growth in new areas of production, and the superior environmental characteristics of natural gas that should allow it to achieve a greater market share relative to other fuels.

**Q.71 What are some of the other factors that will affect the growth rates of the proxy companies in the foreseeable future?**

A. Natural gas resources will increasingly be required to serve new or growing markets. Many of the major new electric generation projects proposed or constructed in recent years have been for this purpose. Dramatic improvements in the efficiency of combined-cycle plants during the past two decades, along with the regulatory policies that require open access to the electric transmission grid, have created a very large demand for new gas-fired electric generating plants and pipeline capacity to supply these plants. Air quality and plant siting requirements, combined with increasingly stringent environmental regulations on coal-fired plants, have created an expectation of increases in demand for natural gas-fired generation in the future.

Pipelines also must add facilities to attach new gas supplies as the sources of existing supplies are depleted and new areas are developed. Many of the new pipeline facilities proposed in recent years have been designed to transport growing supplies from the Rocky Mountain and Powder River regions and the rapidly growing shale

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[54] EIA, Annual Energy Outlook 2012 Early Release, Reference Case, Table 13 – Natural Gas Supply, Disposition, and Prices.

gas production areas throughout North America. Technological improvements and discoveries of enormous amounts of shale gas in formations throughout North America will create a need for large amounts of new pipeline construction and storage that may displace existing facilities that serve more distant sources. These various sources of new supplies are likely to contribute to growth in overall gas usage, and also may displace volumes from other supply basins. Consequently, as the natural gas industry becomes increasingly competitive, domestic pipeline and storage capacity and investment is likely to grow more rapidly than overall consumption, and many existing pipelines and storage facilities are becoming riskier. Finally, if growth in the regulated pipeline and storage industry slows, or if regulated returns become inadequate, we would expect to see these proxy companies directing a greater share of their investments toward unregulated investments that offer the opportunity of a reasonable return and that will sustain a relatively high level of growth.

**Q.72 Please describe the growth rates used in your DCF analysis?**

A. My DCF analysis is based on a constant growth model that relies on analysts' forecasts of growth rates. This DCF analysis recognizes that the consensus of analysts' forecasts reflects the most important component of investors' growth rate expectations and it assumes that the analysts' forecasts incorporate all information required to estimate a long-term expected growth rate for a company. Financial research and empirical literature indicate that analyst forecasts are the best available estimates for future growth rates. I selected available earnings growth estimates from SNL Financial for each of the proxy companies. My growth rates may be found on Schedule 6.

**Q.73 How did you calculate the cost of capital using the DCF analysis?**

A. These calculations are shown on Pages 1 and 2 of Schedule 7. In the DCF analysis, the annual dividend yield is multiplied times the quarterly dividend adjustment factor (1 + .5g) and this product is added to the growth rate estimate to arrive at the investor-required return. As shown on Schedule 7 and in Table 4 below, the DCF analysis indicates a median secondary market cost of common equity of 11.33 percent and a median primary market cost of common equity of 11.78 percent for the Canadian utility proxy group. For the U.S. pipeline and storage proxy companies, the DCF analysis indicates a median secondary market cost of common equity of 10.83 percent and a median primary market cost of common equity of 11.26 percent. The primary market results are derived by multiplying the secondary market results by 1.040 (the estimated flotation cost).

**Table 4: DCF Results for Proxy Companies**

| | **Canadian Utility Proxy Group** | | **U.S. Pipeline and Storage Proxy Group** | |
|---|---|---|---|---|
| | **Secondary Market** | **Primary Market** | **Secondary Market** | **Primary Market** |
| High | 12.95% | 13.47% | 12.28% | 12.78% |
| 3rd Quartile | 11.53% | 12.01% | 11.72% | 12.18% |
| **2nd Quartile (MEDIAN)** | **11.33%** | **11.78%** | **10.83%** | **11.26%** |
| 1st Quartile | 8.95% | 9.31% | 9.85% | 10.25% |
| Low | 8.27% | 8.60% | 9.61% | 10.00% |

### B. Risk Premium Analyses

**Q.74 Have you conducted additional analyses in determining the cost of capital to Intragaz?**

A. Yes. The risk premium approach provides a general guideline for determining the level of returns that investors expect from an investment in common stocks. Investments in the common stocks of companies carry considerably greater risk than investments in bonds of those companies since common stockholders receive only the residual income that is left after the bondholders have been paid. In addition, in the event of bankruptcy or liquidation of the company, the stockholders' claims on the assets of a company are subordinated to the claims of bondholders. This superior standing provides bondholders with greater assurances that they will receive the return on investment that they expect and that they will receive a return of their investment when the bonds mature. Accompanying the greater risk associated with common stocks is a requirement by investors that they can expect to earn, on average, a return that is greater than the return they could earn by investing in less risky bonds. Thus, the risk premium approach estimates the return investors require from common stocks by utilizing current market information that is readily available in bond yields and adds to those yields a premium for the greater risk of investing in common stocks.

**Q.75 What does your analysis of Canadian risk premium data indicate?**

A. An estimate of the historical average size-adjusted risk premium for a company in Intragaz' size range can be calculated using data from a 2009 study by Klemens Wilhelm on "Size Premia in the Canadian Equity Market." In this study he analyzed the returns on all Canadian equities traded on the Toronto Stock Exchange ("TSX") throughout the period 1993 to 2007. With a deemed equity ratio of 50 percent Intragaz would have an equity value that falls in the 8th decile of the TSX companies (i.e., $36-$59 million). Canadian companies in this size range achieved a 10.60 percent premium over the yield on Canadian government bonds with a 10-year maturity.[55] The yield on 10-year Canadian government bonds was approximately 2.0 percent in April. When this yield is added to the 10.6 percent average risk premium experienced by companies in Intragaz's size range, the result is benchmark return requirement of 12.6 percent.

It should be noted that this benchmark estimate is based on the average historical risk premium, and that it is added to a bond yield that is currently far below the historical average. There is a general presumption that the expected risk premium should be inversely related to the level of the risk-free rate. Consequently, these risk premium benchmark measures likely understate the return required on common stocks at this time.

**Q.76 What does your analysis of U.S. risk premium data indicate?**

Ibbotson Associates annually publishes extensive data regarding the returns that have been earned on stocks, bonds and U.S. Treasury bills since 1926. Historically, the annual returns on large company common stocks have exceeded the returns on long-term corporate bonds by a premium of 540 basis points (5.4 percent) annually over a long period of time.[56] When this premium is added to the 4.76 percent yield on Moody's corporate bonds that has prevailed in recent months, the result is an

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[55] Wilhelm, K., "Size Premia in the Canadian Equity Market," *Journal of Business Valuation*, May 2009, Figure 4, p. 13.

[56] 2012 Ibbotson SBBI Valuation Yearbook, pg 23.

investor return requirement for large company stocks of 10.16 percent. However, over the long term companies in Intragaz's size range have had a premium of 880 basis points (8.8 percent) over the average returns on long-term corporate bonds. When added to the recent average corporate bond yields, this size-related premium suggests an expected return of 13.56 percent.[57]

## VII. SUMMARY AND CONCLUSIONS

**Q.77 Would you please summarize the results of your cost of capital study of proxy companies?**

A. Yes. I conducted DCF analyses on two proxy groups, a group of Canadian regulated energy utilities and secondly a group of U.S. natural gas pipeline and storage companies, that have a range of risks that includes risks roughly comparable to those of Intragaz. The results of my analyses are summarized in Table 5, below:

**Table 5: Summary of Proxy Company DCF Analysis Results**

| | **Canadian Regulated Energy Utilities** | **U.S. Pipeline & Storage Companies** |
|---|---|---|
| High | 13.47% | 12.78% |
| 3rd Quartile | 12.01% | 12.18% |
| **2nd Quartile (MEDIAN)** | **11.78%** | **11.26%** |
| 1st Quartile | 9.31% | 10.25% |
| Low | 8.60% | 10.00% |

The DCF analysis yields a median cost of capital for the Canadian regulated utility proxy group and the U.S. pipeline and storage company proxy group of 11.78 percent and 11.26 percent, respectively.

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[57] 2012 Ibbotson SBBI Valuation Yearbook, pgs: 23, 87 and 92.

My analysis indicates that Intragaz has greater overall risk than is typical of companies in either of the proxy groups. Even with a service contract of 10 or more years, Intragaz's storage operations would still have considerably greater business risks than the Canadian utility proxy companies. However, much of this greater business risk would be offset by lower financial risk because Intragaz's deemed common equity ratio of 50 percent is significantly higher than the 37 percent median for the Canadian utilities. Under the circumstances assumed in my analysis, the overall risks for Intragaz would be slightly greater than those of the Canadian utilities.

Assuming that Intragaz obtains a service contract of at least 10 years, its business risks would be reasonably comparable to those of the U.S. Pipeline and Storage proxy companies. In addition, its 50 percent deemed common equity ratio would be nearly identical to the 50 percent median common equity ratio of these proxy companies. In my opinion, this combination suggests that Intragaz would have overall risks slightly greater than the U.S. pipeline and storage proxy group.

Although my analyses indicate that Intragaz would have slightly greater risks than is typical for the proxy groups, I have not added an additional risk premium to my estimates of the cost of capital. Consequently, my estimated cost of common equity capital for Intragaz is the minimum return actually required to enable Intragaz to attract common equity capital on reasonable terms.

**Q.78 What are the components of your median return on equity estimates for Intragaz based on each proxy group?**

A. Schedule 10 shows the primary components for the rate of return estimates for Intragaz based on each proxy group. The median Canadian utility company had an adjusted dividend yield of 4.23 percent and an expected growth rate of 7.10 percent. The total secondary cost of equity for the median proxy company is 11.33 percent, which becomes 11.78 percent after the adjustment for flotation costs. Using the same method on the U.S. pipeline and storage proxy group, the median company had an adjusted dividend yield of 6.83 percent and an estimated growth rate of 4.00 percent. When added together, the indicated secondary market cost of equity is 10.83 percent. When multiplied times 1.04 to provide a 4 percent flotation cost adjustment, the required return on equity is 11.26 percent.

**Q.79 Please summarize your conclusions as to the appropriate return on equity for Intragaz.**

A. If it obtains a contract of 10 or more years with Gaz Métro, Intragaz would have considerably greater business risk than the Canadian Utility proxy group because of its small size and the fact that its earnings are dependent on a single customer and market. In regard to financial risk, a deemed capital structure of 50 percent common equity for Intragaz would contain less leverage and financial risk than the Canadian Utility proxy companies. In comparison with the U.S. pipeline and storage proxy companies, under the same assumptions, Intragaz would have slightly greater business risk but approximately the same leverage as the U.S. Pipeline and Storage proxy companies. This combination of business and financial risk suggests that the overall risk implied for Intragaz common equity is generally comparable to, but slightly greater than, that of the companies in both of the proxy groups.

In my opinion, 11.75 percent – a return very close to the median result for the Canadian utility company proxy group – is the cost of common equity capital for Intragaz.

**Q.80 Is your recommended rate of return reasonable in comparison with your benchmark measures?**

A. Yes. Although they are likely understated due to unusually low bond yields at this time, the benchmark analyses, as shown in Table 6, indicate the following:

**Table 6: Benchmark Analyses**

| Risk Premium Return Based On: | |
|---|---|
| - Canadian Government Bonds: | |
| v. Small Companies | 12.6% |
| - U.S. Corporate Bonds: | |
| v. Large Companies (Large Cap) | 10.16% |
| v. Small Companies (Low Cap) | 13.56% |

The risk premium analyses indicate that the 11.75 percent estimated cost of common equity for Intragaz implies a current risk premium that is well below the average long-run premium over bond yields historically experienced by either Canadian or U.S. common stocks in Intragaz's size range.

**Q.81 Does this conclude your Prepared Direct Testimony?**

A. Yes

# Intragaz Limited Partnership

## General Economic Statistics - Canada

*1981-2011*

| | | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|---|
| | | Percentage Price Changes | | | | |
| Line No. | Year | Consumer Price Index - Canada | GDP Implicit Price Deflator - Canada | Real GDP Growth - Canada | Nominal GDP - Canada ($Billions) | Nominal GDP Growth - Canada |
| 1 | 1981 | 12,5% | 10,7% | 3,5% | 1 441,9 | |
| 2 | 1982 | 10,8% | 8,5% | -2,9% | 1 519,4 | 5,4% |
| 3 | 1983 | 5,9% | 5,5% | 2,7% | 1 645,5 | 8,3% |
| 4 | 1984 | 4,3% | 3,1% | 5,8% | 1 798,3 | 9,3% |
| 5 | 1985 | 4,0% | 3,2% | 4,8% | 1 942,9 | 8,0% |
| 6 | 1986 | 4,2% | 3,1% | 2,4% | 2 050,2 | 5,5% |
| 7 | 1987 | 4,4% | 4,6% | 4,3% | 2 235,8 | 9,1% |
| 8 | 1988 | 4,0% | 4,5% | 5,0% | 2 452,4 | 9,7% |
| 9 | 1989 | 5,0% | 4,5% | 2,6% | 2 630,9 | 7,3% |
| 10 | 1990 | 4,8% | 3,3% | 0,2% | 2 719,7 | 3,4% |
| 11 | 1991 | 5,6% | 2,9% | -2,1% | 2 741,5 | 0,8% |
| 12 | 1992 | 1,5% | 1,3% | 0,9% | 2 801,9 | 2,2% |
| 13 | 1993 | 1,9% | 1,4% | 2,3% | 2 908,7 | 3,8% |
| 14 | 1994 | 0,2% | 1,1% | 4,8% | 3 083,5 | 6,0% |
| 15 | 1995 | 2,1% | 2,2% | 2,8% | 3 241,7 | 5,1% |
| 16 | 1996 | 1,6% | 1,6% | 1,6% | 3 347,5 | 3,3% |
| 17 | 1997 | 1,6% | 1,3% | 4,2% | 3 530,9 | 5,5% |
| 18 | 1998 | 1,0% | -0,5% | 4,1% | 3 659,9 | 3,7% |
| 19 | 1999 | 1,7% | 1,7% | 5,5% | 3 929,8 | 7,4% |
| 20 | 2000 | 2,7% | 4,1% | 5,2% | 4 306,3 | 9,6% |
| 21 | 2001 | 2,5% | 1,1% | 1,8% | 4 432,2 | 2,9% |
| 22 | 2002 | 2,3% | 1,1% | 2,9% | 4 611,6 | 4,0% |
| 23 | 2003 | 2,8% | 3,3% | 1,9% | 4 852,7 | 5,2% |
| 24 | 2004 | 1,9% | 3,2% | 3,1% | 5 163,6 | 6,4% |
| 25 | 2005 | 2,2% | 3,3% | 3,0% | 5 495,4 | 6,4% |
| 26 | 2006 | 2,0% | 2,7% | 2,8% | 5 801,6 | 5,6% |
| 27 | 2007 | 2,1% | 3,2% | 2,2% | 6 118,4 | 5,5% |
| 28 | 2008 | 2,4% | 4,1% | 0,7% | 6 413,7 | 4,8% |
| 29 | 2009 | 0,3% | -1,9% | -2,8% | 6 115,9 | -4,6% |
| 30 | 2010 | 1,8% | 3,0% | 3,2% | 6 498,4 | 6,3% |
| 31 | 2011 | 2,9% | 3,2% | 2,5% | 6 874,7 | 5,8% |
| | Average Rate of Change: [1] | | | | | |
| 32 | 1981-2011 | 3,3% | 3,0% | 2,6% | 5,3% | 5,4% |
| 33 | 1991-2011 | 2,0% | 2,1% | 2,4% | 4,7% | 4,6% |
| 34 | 2001-2011 | 2,1% | 2,4% | 1,9% | 4,5% | 4,4% |

[1] Nominal GDP growth rates are based on the geometric average rate of change in nominal GDP.

Sources: Statistics Canada, Databases & Tables,
website (http://www5.statcan.gc.ca/cansim)
OECD (2010), "Main Economic Indicators - complete database", Main Economic Indicators (database),http://dx.doi.org/10.1787/data-00052-en (Accessed on date)

# Intragaz Limited Partnership

## General Economic Statistics - United States

*1981-2011*

| | | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|---|
| | | Percentage Price Changes | | | | |
| Line No. | Year | Consumer Price Index - U.S. | GDP Implicit Price Deflator - U.S. | Real GDP Growth - U.S. | Nominal GDP - U.S. ($Billions) | Nominal GDP Growth - U.S. |
| 1 | 1981 | 10,3% | 9,4% | 2,5% | 3 126,8 | |
| 2 | 1982 | 6,2% | 6,1% | -1,9% | 3 253,2 | 4,0% |
| 3 | 1983 | 3,2% | 4,0% | 4,5% | 3 534,6 | 8,6% |
| 4 | 1984 | 4,3% | 3,8% | 7,2% | 3 930,9 | 11,2% |
| 5 | 1985 | 3,6% | 3,0% | 4,1% | 4 217,5 | 7,3% |
| 6 | 1986 | 1,9% | 2,2% | 3,5% | 4 460,1 | 5,8% |
| 7 | 1987 | 3,6% | 2,9% | 3,2% | 4 736,4 | 6,2% |
| 8 | 1988 | 4,1% | 3,4% | 4,1% | 5 100,4 | 7,7% |
| 9 | 1989 | 4,8% | 3,8% | 3,6% | 5 482,1 | 7,5% |
| 10 | 1990 | 5,4% | 3,9% | 1,9% | 5 800,5 | 5,8% |
| 11 | 1991 | 4,2% | 3,5% | -0,2% | 5 992,1 | 3,3% |
| 12 | 1992 | 3,0% | 2,4% | 3,4% | 6 342,3 | 5,8% |
| 13 | 1993 | 3,0% | 2,2% | 2,9% | 6 667,4 | 5,1% |
| 14 | 1994 | 2,6% | 2,1% | 4,1% | 7 085,2 | 6,3% |
| 15 | 1995 | 2,8% | 2,1% | 2,5% | 7 414,7 | 4,7% |
| 16 | 1996 | 3,0% | 1,9% | 3,7% | 7 838,5 | 5,7% |
| 17 | 1997 | 2,3% | 1,8% | 4,5% | 8 332,4 | 6,3% |
| 18 | 1998 | 1,6% | 1,1% | 4,4% | 8 793,5 | 5,5% |
| 19 | 1999 | 2,2% | 1,5% | 4,8% | 9 353,5 | 6,4% |
| 20 | 2000 | 3,4% | 2,2% | 4,1% | 9 951,5 | 6,4% |
| 21 | 2001 | 2,8% | 2,3% | 1,1% | 10 286,2 | 3,4% |
| 22 | 2002 | 1,6% | 1,6% | 1,8% | 10 642,3 | 3,5% |
| 23 | 2003 | 2,3% | 2,1% | 2,5% | 11 142,2 | 4,7% |
| 24 | 2004 | 2,7% | 2,8% | 3,5% | 11 853,3 | 6,4% |
| 25 | 2005 | 3,4% | 3,3% | 3,1% | 12 623,0 | 6,5% |
| 26 | 2006 | 3,2% | 3,2% | 2,7% | 13 377,2 | 6,0% |
| 27 | 2007 | 2,8% | 2,9% | 1,9% | 14 028,7 | 4,9% |
| 28 | 2008 | 3,8% | 2,2% | -0,3% | 14 291,5 | 1,9% |
| 29 | 2009 | -0,4% | 1,1% | -3,5% | 13 939,0 | -2,5% |
| 30 | 2010 | 1,6% | 1,2% | 3,0% | 14 526,5 | 4,2% |
| 31 | 2011 | 3,2% | 2,1% | 1,7% | 15 094,4 | 3,9% |
| | Average Rate of Change: [1] | | | | | |
| 32 | 1981-2011 | 3,3% | 2,8% | 2,7% | 5,4% | 5,4% |
| 33 | 1991-2011 | 2,6% | 2,2% | 2,5% | 4,7% | 4,7% |
| 34 | 2001-2011 | 2,5% | 2,3% | 1,6% | 3,9% | 3,9% |

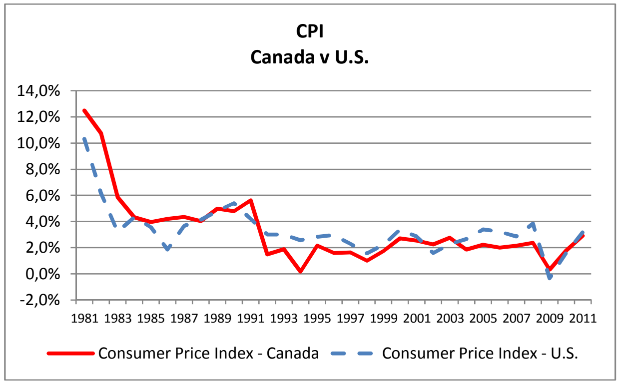
[1] Nominal GDP growth rates are based on the geometric average rate of change in nominal GDP.

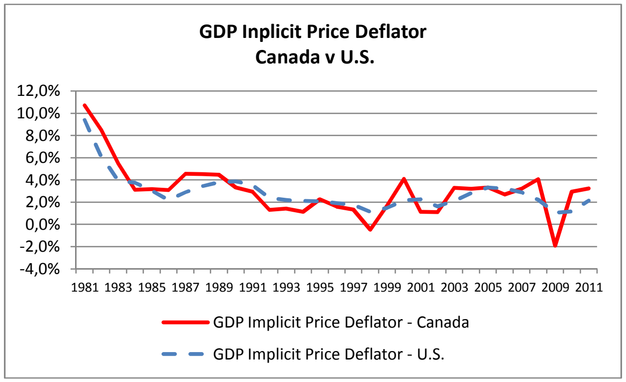
Sources: Department of Labor, Bureau of Labor Statistics, Databases & Tables, website (http://www.bls.gov/data) and Department of Commerce, Bureau of Economic Analysis, National Economic Accounts, website (http://www.bea.gov/national/nipaweb/index.asp)

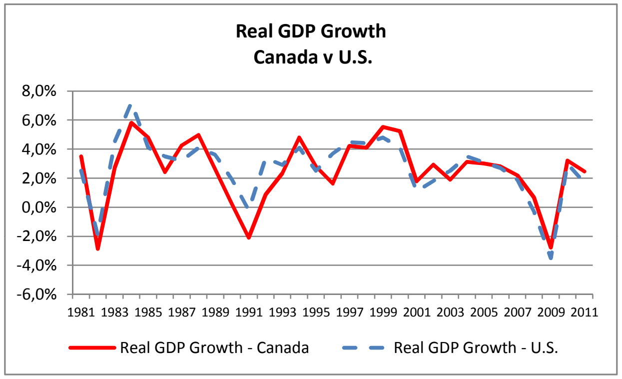
# Intragaz Limited Partnership

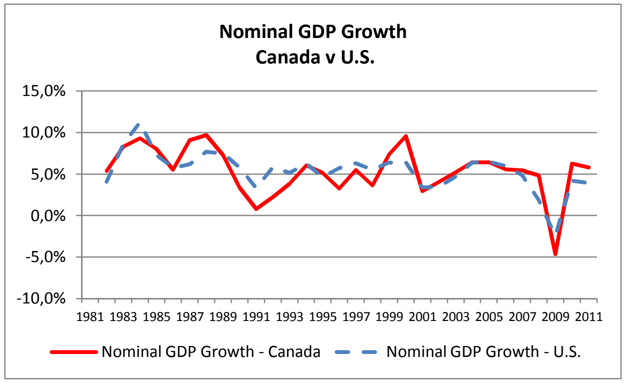
## General Economic Statistics - Canada and the U.S.

*1981-2011*









Sources: Department of Labor, Bureau of Labor Statistics, Databases & Tables,
website (http://www.bls.gov/data) and Department of Commerce, Bureau of Economic Analysis,
National Economic Accounts, website (http://www.bea.gov/national/nipaweb/index.asp)

Statistics Canada, Databases & Tables,
website (http://www.http://www5.statcan.gc.ca/cansim/a21)
OECD (2010), "Main Economic Indicators - complete database", Main Economic Indicators
(database),http://dx.doi.org/10.1787/data-00052-en (Accessed on date)

# Intragaz Limited Partnership

## Canadian Bond Yield Averages

***January 2008 - February 2012***

| | | | [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|---|---|---|
| | | | 30-Year Long Bonds | Average Corporate | Public Utility Bonds | | Credit Spreads | |
| Line No. | | | | | A-Rated | BBB-Rated | A-Rated | BBB-Rated |
| 1 | 2008 | JAN | 4,11 | 6,42 | 5,48 | 5,81 | 1,37 | 1,71 |
| 2 | | FEB | 4,19 | 6,59 | 5,43 | 5,79 | 1,24 | 1,60 |
| 3 | | MAR | 4,01 | 6,62 | 5,34 | 5,69 | 1,33 | 1,68 |
| 4 | | APR | 4,11 | 6,78 | 5,51 | 5,79 | 1,41 | 1,68 |
| 5 | | MAY | 4,09 | 6,80 | 5,55 | 5,81 | 1,46 | 1,72 |
| 6 | | JUN | 4,13 | 6,87 | 5,57 | 5,91 | 1,44 | 1,78 |
| 7 | | JUL | 4,10 | 6,87 | 5,58 | 5,92 | 1,48 | 1,82 |
| 8 | | AUG | 4,04 | 6,88 | 5,67 | 5,86 | 1,63 | 1,82 |
| 9 | | SEP | 4,03 | 7,32 | 6,18 | 6,36 | 2,15 | 2,34 |
| 10 | | OCT | 4,18 | 7,93 | 6,76 | 7,13 | 2,59 | 2,95 |
| 11 | | NOV | 4,13 | 7,84 | 6,75 | 6,95 | 2,61 | 2,82 |
| 12 | | DEC | 3,62 | 7,93 | 6,47 | 6,81 | 2,86 | 3,20 |
| 13 | 2009 | JAN | 3,62 | 8,14 | 6,74 | 7,03 | 3,12 | 3,41 |
| 14 | | FEB | 3,68 | 7,81 | 6,67 | 6,88 | 2,99 | 3,20 |
| 15 | | MAR | 3,63 | 7,56 | 6,43 | 6,68 | 2,80 | 3,05 |
| 16 | | APR | 3,70 | 7,56 | 6,48 | 6,79 | 2,78 | 3,09 |
| 17 | | MAY | 3,93 | 7,22 | 6,16 | 6,53 | 2,22 | 2,60 |
| 18 | | JUN | 3,96 | 6,58 | 5,61 | 5,94 | 1,66 | 1,98 |
| 19 | | JUL | 3,96 | 6,36 | 5,56 | 5,87 | 1,60 | 1,91 |
| 20 | | AUG | 3,95 | 6,05 | 5,31 | 5,59 | 1,36 | 1,64 |
| 21 | | SEP | 3,89 | 6,13 | 5,28 | 5,59 | 1,39 | 1,70 |
| 22 | | OCT | 3,93 | 6,20 | 5,35 | 5,56 | 1,42 | 1,63 |
| 23 | | NOV | 3,94 | 6,06 | 5,31 | 5,59 | 1,37 | 1,65 |
| 24 | | DEC | 4,01 | 6,29 | 5,59 | 5,84 | 1,59 | 1,84 |
| 25 | 2010 | JAN | 4,05 | 5,95 | 5,34 | 5,71 | 1,28 | 1,65 |
| 26 | | FEB | 4,04 | 5,99 | 5,39 | 5,71 | 1,35 | 1,67 |
| 27 | | MAR | 4,06 | 5,91 | 5,37 | 5,62 | 1,30 | 1,56 |
| 28 | | APR | 4,07 | 5,87 | 5,29 | 5,48 | 1,21 | 1,41 |
| 29 | | MAY | 3,83 | 5,86 | 5,36 | 5,50 | 1,52 | 1,66 |
| 30 | | JUN | 3,74 | 5,71 | 5,18 | 5,36 | 1,44 | 1,62 |
| 31 | | JUL | 3,73 | 5,75 | 5,19 | 5,37 | 1,46 | 1,64 |
| 32 | | AUG | 3,57 | 5,52 | 4,98 | 5,07 | 1,41 | 1,50 |
| 33 | | SEP | 3,48 | 5,42 | 4,86 | 4,97 | 1,38 | 1,49 |
| 34 | | OCT | 3,44 | 5,49 | 4,93 | 5,05 | 1,50 | 1,61 |
| 35 | | NOV | 3,58 | 5,57 | 4,95 | 5,08 | 1,37 | 1,50 |
| 36 | | DEC | 3,62 | 5,60 | 4,96 | 5,16 | 1,34 | 1,54 |

# Intragaz Limited Partnership

## Canadian Bond Yield Averages

***January 2008 - February 2012***

| | | | [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|---|---|---|
| | | | 30-Year | Average | Public Utility Bonds | | Credit Spreads | |
| Line No. | | | Long Bonds | Corporate | A-Rated | BBB-Rated | A-Rated | BBB-Rated |
| 37 | 2011 | JAN | 3,68 | 5,71 | 5,13 | 5,28 | 1,44 | 1,60 |
| 38 | | FEB | 3,80 | 5,65 | 5,03 | 5,23 | 1,23 | 1,43 |
| 39 | | MAR | 3,74 | 5,74 | 5,16 | 5,29 | 1,42 | 1,55 |
| 40 | | APR | 3,76 | 5,69 | 5,12 | 5,25 | 1,36 | 1,49 |
| 41 | | MAY | 3,56 | 5,52 | 4,94 | 5,02 | 1,37 | 1,46 |
| 42 | | JUN | 3,46 | 5,60 | 4,99 | 5,09 | 1,53 | 1,63 |
| 43 | | JUL | 3,39 | 5,31 | 4,70 | 4,82 | 1,31 | 1,43 |
| 44 | | AUG | 3,07 | 5,32 | 4,69 | 4,82 | 1,62 | 1,75 |
| 45 | | SEP | 2,84 | 5,13 | 4,41 | 4,50 | 1,58 | 1,66 |
| 46 | | OCT | 2,91 | 5,28 | 4,51 | 4,57 | 1,60 | 1,66 |
| 47 | | NOV | 2,73 | 5,14 | 4,29 | 4,43 | 1,56 | 1,70 |
| 48 | | DEC | 2,55 | 4,91 | 4,05 | 4,12 | 1,50 | 1,58 |
| 49 | 2012 | JAN | 2,56 | 4,74 | 3,94 | 4,02 | 1,38 | 1,46 |
| 50 | | FEB | 2,62 | 4,69 | 3,98 | 4,04 | 1,36 | 1,42 |
| 51 | | MAR | 2,67 | 4,69 | 4,01 | 4,06 | 1,34 | 1,39 |
| 52 | | APR | 2,62 | 4,72 | 4,08 | 4,18 | 1,46 | 1,56 |

Sources:

[A] Bloomberg, Canada Government Generic 30-Year Long Bond
[B] Bloomberg, Canada Corporate Average Bond Index (Averages A and BBB)
[C] Bloomberg, Fair Value A-Rated Utility Bond Index
[D] Bloomberg, Fair Value BBB-Rated Utility Bond Index
[E] Equals [C] − [A]
[F] Equals [D] − [A]

# Intragaz Limited Partnership

## U.S. Bond Yield Averages

### *January 2008 - February 2012*

| | | | [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|---|---|---|
| | | | 30-Year | Average | Public Utility Bonds | | Credit Spreads | |
| Line No. | | | T-Bonds | Corporate | A-Rated | Baa-Rated | A-Rated | Baa-Rated |
| 1 | 2008 | JAN | 4,33 | 6,02 | 6,02 | 6,35 | 1,68 | 2,01 |
| 2 | | FEB | 4,51 | 6,24 | 6,21 | 6,60 | 1,70 | 2,08 |
| 3 | | MAR | 4,38 | 6,23 | 6,21 | 6,68 | 1,83 | 2,30 |
| 4 | | APR | 4,44 | 6,29 | 6,29 | 6,81 | 1,85 | 2,37 |
| 5 | | MAY | 4,60 | 6,31 | 6,28 | 6,79 | 1,68 | 2,20 |
| 6 | | JUN | 4,68 | 6,43 | 6,38 | 6,93 | 1,70 | 2,24 |
| 7 | | JUL | 4,56 | 6,44 | 6,40 | 6,97 | 1,84 | 2,41 |
| 8 | | AUG | 4,50 | 6,42 | 6,37 | 6,98 | 1,87 | 2,48 |
| 9 | | SEP | 4,27 | 6,50 | 6,49 | 7,15 | 2,22 | 2,88 |
| 10 | | OCT | 4,16 | 7,56 | 7,56 | 8,58 | 3,40 | 4,42 |
| 11 | | NOV | 3,98 | 7,65 | 7,60 | 8,98 | 3,62 | 5,00 |
| 12 | | DEC | 2,85 | 6,71 | 6,52 | 8,11 | 3,68 | 5,27 |
| 13 | 2009 | JAN | 3,10 | 6,59 | 6,39 | 7,90 | 3,29 | 4,80 |
| 14 | | FEB | 3,59 | 6,64 | 6,30 | 7,74 | 2,71 | 4,15 |
| 15 | | MAR | 3,64 | 6,84 | 6,42 | 8,00 | 2,79 | 4,36 |
| 16 | | APR | 3,76 | 6,85 | 6,48 | 8,03 | 2,73 | 4,27 |
| 17 | | MAY | 4,24 | 6,79 | 6,49 | 7,76 | 2,25 | 3,52 |
| 18 | | JUN | 4,51 | 6,52 | 6,20 | 7,30 | 1,69 | 2,79 |
| 19 | | JUL | 4,40 | 6,17 | 5,97 | 6,87 | 1,56 | 2,47 |
| 20 | | AUG | 4,37 | 5,83 | 5,71 | 6,36 | 1,34 | 1,99 |
| 21 | | SEP | 4,19 | 5,61 | 5,53 | 6,12 | 1,34 | 1,93 |
| 22 | | OCT | 4,19 | 5,63 | 5,55 | 6,14 | 1,36 | 1,95 |
| 23 | | NOV | 4,31 | 5,68 | 5,63 | 6,17 | 1,32 | 1,86 |
| 24 | | DEC | 4,50 | 5,78 | 5,79 | 6,26 | 1,29 | 1,76 |
| 25 | 2010 | JAN | 4,60 | 5,76 | 5,77 | 6,16 | 1,17 | 1,55 |
| 26 | | FEB | 4,62 | 5,86 | 5,87 | 6,25 | 1,25 | 1,63 |
| 27 | | MAR | 4,65 | 5,81 | 5,84 | 6,22 | 1,20 | 1,58 |
| 28 | | APR | 4,69 | 5,80 | 5,81 | 6,19 | 1,12 | 1,50 |
| 29 | | MAY | 4,28 | 5,52 | 5,50 | 5,97 | 1,22 | 1,69 |
| 30 | | JUN | 4,12 | 5,52 | 5,46 | 6,18 | 1,34 | 2,06 |
| 31 | | JUL | 3,99 | 5,32 | 5,26 | 5,98 | 1,27 | 1,99 |
| 32 | | AUG | 3,80 | 5,05 | 5,01 | 5,55 | 1,21 | 1,75 |
| 33 | | SEP | 3,77 | 5,05 | 5,01 | 5,53 | 1,24 | 1,76 |
| 34 | | OCT | 3,87 | 5,15 | 5,10 | 5,62 | 1,23 | 1,75 |
| 35 | | NOV | 4,19 | 5,37 | 5,37 | 5,85 | 1,18 | 1,66 |
| 36 | | DEC | 4,42 | 5,55 | 5,56 | 6,04 | 1,14 | 1,62 |

# Intragaz Limited Partnership

## U.S. Bond Yield Averages

***January 2008 - February 2012***

| | | | [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|---|---|---|
| | | | 30-Year | Average | Public Utility Bonds | | Credit Spreads | |
| Line No. | | | T-Bonds | Corporate | A-Rated | Baa-Rated | A-Rated | Baa-Rated |
| 37 | 2011 | JAN | 4,52 | 5,56 | 5,57 | 6,06 | 1,05 | 1,54 |
| 38 | | FEB | 4,65 | 5,66 | 5,68 | 6,10 | 1,03 | 1,45 |
| 39 | | MAR | 4,51 | 5,55 | 5,56 | 5,97 | 1,05 | 1,46 |
| 40 | | APR | 4,50 | 5,56 | 5,55 | 5,98 | 1,05 | 1,48 |
| 41 | | MAY | 4,29 | 5,33 | 5,32 | 5,74 | 1,03 | 1,45 |
| 42 | | JUN | 4,23 | 5,30 | 5,26 | 5,67 | 1,03 | 1,44 |
| 43 | | JUL | 4,28 | 5,30 | 5,26 | 5,70 | 0,98 | 1,42 |
| 44 | | AUG | 3,65 | 4,79 | 4,69 | 5,22 | 1,04 | 1,57 |
| 45 | | SEP | 3,18 | 4,60 | 4,48 | 5,11 | 1,30 | 1,93 |
| 46 | | OCT | 3,12 | 4,60 | 4,52 | 5,24 | 1,40 | 2,12 |
| 47 | | NOV | 3,01 | 4,39 | 4,25 | 4,93 | 1,24 | 1,92 |
| 48 | | DEC | 2,99 | 4,47 | 4,33 | 5,07 | 1,34 | 2,08 |
| 49 | 2012 | JAN | 3,01 | 4,45 | 4,34 | 5,06 | 1,33 | 2,05 |
| 50 | | FEB | 3,11 | 4,42 | 4,36 | 5,02 | 1,25 | 1,91 |
| 51 | | MAR | 3,28 | 4,54 | 4,48 | 5,13 | 1,20 | 1,85 |
| 52 | | APR | 3,18 | 4,49 | 4,40 | 5,11 | 1,22 | 1,93 |

Sources:
[A] Bloomberg, U.S. Government Generic 30-Year Treasury Bond
[B] Bloomberg, Moody's Corporate Average Bond Index
[C] Bloomberg, Moody's A-Rated Utility Bond Index
[D] Bloomberg, Moody's Baa-Rated Utility Bond Index
[E] Equals [C] − [A]
[F] Equals [D] − [A]

# Intragaz Limited Partnership

## Canadian Utility Companies
## 2011 Operating Data

| Line No. | Company | [A]<br>Assets ($000,000) | [B]<br>Operating Revenues ($000,000) | [C]<br>Operating Income ($000,000) |
|---|---|---|---|---|
| 1 | Canadian Utilities Limited | $11 696 | $2 999 | $515 |
| 2 | Emera Inc. | $6 924 | $2 040 | $241 |
| 3 | Enbridge Inc. | $34 343 | $19 402 | $1 891 |
| 4 | Fortis Inc. | $13 562 | $3 747 | $766 |
| 5 | TransCanada Corporation | $48 995 | $9 139 | $3 221 |
| 6 | High | $48 995 | $19 402 | $3 221 |
| 7 | Median | **$13 562** | **$3 747** | **$766** |
| 8 | Low | $6 924 | $2 040 | $241 |
| 9 | Intragaz L.P. | **$123,0** | **$22,7** | **$12,7** |
|  | Intragaz L.P. % of: |  |  |  |
| 10 | Proxy Company Median | **0,91%** | **0,61%** | **1,66%** |

Sources: Proxy Group - Annual Reports, SNL

# Intragaz Limited Partnership

## Natural Gas Pipeline & Storage Proxy Companies
## 2011 Operating Data

| Line No. | Company | [A]<br>Assets ($000,000) | [B]<br>Operating Revenues ($000,000) | [C]<br>Operating Income ($000,000) |
|---|---|---|---|---|
| 1 | Boardwalk Pipeline Partners, LP | $6 971 | $1 139 | $393 |
| 2 | Spectra Energy Corp | $28 138 | $5 351 | $2 263 |
| 3 | Spectra Energy Partners, LP | $2 457 | $205 | $196 |
| 4 | TC Pipelines, LP | $2 082 | $224 | $209 |
| 5 | Williams Partners L.P. | $14 380 | $6 729 | $1 754 |
| 6 | High | $28 138 | $6 729 | $2 263 |
| 7 | Median | **$6 971** | **$1 139** | **$393** |
| 8 | Low | $2 082 | $205 | $196 |
| 9 | Intragaz L.P. | **$123,0** | **$22,7** | **$12,7** |
|  | Intragaz L.P. % of: |  |  |  |
| 10 | Proxy Company Median | **1,76%** | **1,99%** | **3,23%** |

Sources: Proxy Group - SEC Form 10-K, SNL

# Intragaz Limited Partnership

## Bond Ratings of Canadian Utility Companies

| Line No. | Company | [A]<br>Ticker | [B]<br>Standard & Poor's [1] | [C]<br>Moody's [1] |
|---|---|---|---|---|
| 1 | Canadian Utilities Limited | CU | A | NR |
| 2 | Emera Inc. | EMA | BBB+ | NR |
| 3 | Enbridge Inc. | ENB | A- | Baa1 |
| 4 | Fortis Inc. | FTS | A- | NR |
| 5 | TransCanada Corporation | TRP | A- | Baa1 |

Source: SNL Financial

[1] The credit rating is the corporate credit rating where available. Otherwise, it is the senior unsecured rating.

# Intragaz Limited Partnership

## Bond Ratings of Natural Gas Pipeline & Storage Proxy Companies

| | | [A] | [B] | [C] |
|---|---|---|---|---|
| Line No. | **Company** | **Ticker** | **Standard & Poor's [1]** | **Moody's [1]** |
| 1 | Boardwalk Pipeline Partners, LP | BWP | BBB | NR |
| 2 | Spectra Energy Corp | SE | BBB+ | NR |
| 3 | Spectra Energy Partners, LP | SEP | BBB | Baa3 |
| 4 | TC Pipelines, LP | TCP | BBB | Baa2 |
| 5 | Williams Partners L.P. | WPZ | BBB | Baa2 |

Source: SNL Financial

[1] The credit rating is the corporate credit rating where available. Otherwise, it is the senior unsecured rating.

# Intragaz Limited Partnership

## Interstate Pipeline and Storage Companies Owned by U.S. Proxy Group

| Parent/Pipeline | Basin(s)/Hub(s) to Which Pipeline is Tied | Major Downstream Markets Served |
|---|---|---|
| **Boardwalk Pipeline Partners, LP** | | |
| Texas Gas Transmission | Gulf Coast, E. TX, N. LA | Southern IN<br>Western/Central KY<br>Western TN<br>Southern OH |
| Gulf South Pipeline | S. TX, E. TX, LA, Gulf Coast | Eastern TX<br>Louisiana<br>Southern MS<br>Southern AL/Western FL |
| Gulf Crossing Pipeline | Barnett Shale, TX<br>Caney/Woodford Shale, OK | Northeast LA |
| Bistineau Storage Facility (77.7 bcf)<br>92% interest | Depleted reservoir facility, LA | |
| **Spectra Energy Corp** | | |
| Texas Eastern Transmission Co. | Gulf Coast, S. TX, E. TX, E. LA, S. LA | New York/New Jersey<br>Philadelphia<br>Central/Southern OH<br>Central KY<br>Southern IN<br>Southern IL<br>Central AR<br>Southeast TX |
| Algonquin Gas Transmission | Gulf Coast (via TETCo) | New England |
| Maritimes and Northeast Pipeline<br>(78% interest) | Offshore Nova Scotia | New England |
| Southeast Supply Header<br>(50% interest) | Perryville Hub | Mobile Bay/Gulfstream |
| Bobcat (14 bcf) | Salt cavern, St. Landry Parish, LA | |
| Market Hub Partners - Egan (29 bcf)<br>50% interest | Salt cavern, Acadia Parish, LA | |
| Market Hub Partners - Moss Bluff (22 bcf)<br>(50% interest) | Salt cavern, Liberty County, TX | |
| Steckman Ridge (12 bcf)<br>(50% interest) | Depleted reservoir, Beford County, PA | |
| Dawn Facility (155 bcf)<br>Operated by subsidiary Union Gas | Depleted reservoirs, Ontario, Canada | |

# Intragaz Limited Partnership

## Interstate Pipeline and Storage Companies Owned by U.S. Proxy Group

| Parent/Pipeline | Basin(s)/Hub(s) to Which Pipeline is Tied | Major Downstream Markets Served |
|---|---|---|
| **Spectra Energy Partners, LP** | | |
| East Tennessee System | Gulf Coast (via TETCo, CGLF, TGP) | Central/Eastern TN<br>Western VA |
| Ozark Gas System | Arkoma Basin, OK<br>Fayetteville Shale | Southeastern MO/Northern AR<br>TETCo, TXG, NGPL, CEGT |
| Gulfstream Natural Gas System<br>(49% interest) | Mobile Bay, AL | Southern FL |
| Saltville (5.5 bcf) | Salt cavern, Saltville, VA | |
| Market Hub Partners - Egan (29 bcf)<br>(50% interest) | Salt cavern, Acadia Parish, LA | |
| Market Hub Partners - Moss Bluff (22 bcf)<br>(50% interest) | Salt cavern, Liberty County, TX | |
| **TC PipeLines, LP** | | |
| Northern Border Pipeline Company<br>(50% interest) | Canadian Border<br>Williston Basin, MT/ND | North Hayden, IA<br>Mid-West |
| North Baja | Mexican Border<br>Costa Azul LNG Terminal | Palo Verde Elec. Gen./EPNG |
| Tuscarora Gas Transmission Company | WCSB (via GTNW) | Western NV |
| Great Lakes Gas Transmission L.P.<br>(46.5% interest) | WCSB (via TCPL) | Dawn (MI/Canada Border)<br>Central Michigan<br>Northeastern MN |
| Storage contracted through TransCanada | | |

# Intragaz Limited Partnership

## Interstate Pipeline and Storage Companies Owned by U.S. Proxy Group

| Parent/Pipeline | Basin(s)/Hub(s) to Which Pipeline is Tied | Major Downstream Markets Served |
|---|---|---|
| **Williams Partners L.P.** | | |
| Transcontinental Gas Pipe Line Company | TX/LA/MS<br>Offshore Gulf | Mid-Atlantic<br>Southeast<br>Gulf States |
| Northwest Pipeline | San Juan Basin | CO, UT, WY, ID<br>Pacific Northwest<br>Canadian Border |
| Gulfstream Natural Gas System<br>(24.5% interest) | Mobile Bay, AL | Southern FL |
| Black Marlin Pipeline LLC | Offshore (TX) | Galveston, TX |
| Discovery Gas Transmission LLC<br>(60.0% interest) | Offshore (LA) | Louisiana |
| Jackson Prairie (23 bcf)<br>Operated by subsidiary NW Pipeline<br>(33.3% interest) | Underground reservoir, Lewis County, WA | |

**Notes:**

- Source: Company websites, Pipeline Informational Postings, Platts North American Natural Gas System Map (2008/2009 Edition).

# Intragaz Limited Partnership

## Proxy Group Companies
## 2011 Business Segment Data

**Boardwalk Pipeline Partners, LP**

| | Total | Gas Transportation | Parking and Lending | Gas Storage | Other |
|---|---|---|---|---|---|
| Operating Income | $393 | $393 | $0 | $0 | $0 |
| Percent of Total | 100% | 100% | 0% | 0% | 0% |
| Segment Assets | $6 971 | $6 366 | $0 | 276 | 329 |
| Percent of Total | 100% | 91% | 0% | 4% | 5% |

**Spectra Energy Corp**

| | Total | U.S. Transmission | Distribution | Western Canada Transmission & Processing | Field Service | Other | Eliminations |
|---|---|---|---|---|---|---|---|
| Operating Income | $2 263 | $983 | $425 | $510 | $449 | ($104) | $0 |
| Percent of Total | 100% | 43% | 19% | 23% | 20% | -5% | 0% |
| Segment Assets | $28 138 | $11 783 | $5 551 | $5 649 | $1 157 | $4 535 | ($537) |
| Percent of Total | 100% | 42% | 20% | 20% | 4% | 16% | -2% |

**Spectra Energy Partners, LP**

| | Total | Gas Transportation & Storage |
|---|---|---|
| Operating Income | $196 | $196 |
| Percent of Total | 100% | 100% |
| Segment Assets | $2 457 | $2 457 |
| Percent of Total | 100% | 100% |

# Intragaz Limited Partnership

## Proxy Group Companies
## 2011 Business Segment Data

**TC PipeLines, LP**

| | Total | Pipelines |
|---|---|---|
| Operating Income | $209 | $209 |
| Percent of Total | 100% | 100% |
| Segment Assets | $2 082 | $2 082 |
| Percent of Total | 100% | 100% |

**Williams Partners L.P.**

| | Total | Gas Pipeline | Midstream | Other | Eliminations |
|---|---|---|---|---|---|
| Operating Income | $1 755 | $615 | $1 139 | $0 | $1 |
| Percent of Total | 100% | 35% | 65% | 0% | 0% |
| Segment Assets | $14 380 | $8 348 | $6 591 | $226 | -785 |
| Percent of Total | 100% | 58% | 46% | 2% | -5% |

**Canadian Utilities**

| | Total | Utilities | Energy | ATCO Australia | Corporate & Other | Intersegment Eliminations |
|---|---|---|---|---|---|---|
| Operating Income | $515 | $305 | $165 | ($32) | $72 | $5 |
| Percent of Total | 100% | 59% | 32% | -6% | 14% | 1% |
| Segment Assets | $11 696 | $7 903 | $1 891 | $1 340 | $728 | ($166) |
| Percent of Total | 100% | 68% | 16% | 11% | 6% | -1% |

# Intragaz Limited Partnership

## Proxy Group Companies
## 2011 Business Segment Data

**Fortis, Inc.**

| | Total | FortisBC Energy Companies - Canadian | Regulated Electric Utilities - Canadian | Regulated Electric Utilities - Caribbean | Non-regulated - Fortis Generation | Non-regulated - Fortis Properties | Corporate and Other | Intersegment Eliminations |
|---|---|---|---|---|---|---|---|---|
| Operating Income | $766 | $296 | $363 | $40 | $21 | 56 | 12 | -22 |
| Percent of Total | 100% | 39% | 47% | 5% | 3% | 7% | 2% | -3% |
| Segment Assets | $13 562 | $5 316 | $6 143 | $856 | 546 | 610 | 482 | -391 |
| Percent of Total | 100% | 39% | 45% | 6% | 4% | 4% | 4% | -3% |

**Enbridge, Inc.**

| | Total | Liquids Pipelines | Gas Distribution | Gas Pipelines, Processing and Energy Services | Sponsored Investments | Corporate |
|---|---|---|---|---|---|---|
| Operating Income | $1 891 | $872 | $408 | $514 | $145 | ($48) |
| Percent of Total | 100% | 46% | 22% | 27% | 8% | -3% |
| Segment Assets | $34 343 | $12 366 | $7 713 | $4 968 | 5245 | 4051 |
| Percent of Total | 100% | 36% | 22% | 14% | 15% | 12% |

**Emera**

| | Total | Nova Scotia Power, Inc. | Maine Utility Operations | Caribbean Utility Operations | Brunswick Pipeline | Other and Eliminations |
|---|---|---|---|---|---|---|
| Operating Income | $241 | $124 | $37 | $47 | $20 | $14 |
| Percent of Total | 100% | 51% | 15% | 19% | 8% | 6% |
| Segment Assets | $6 924 | $3 897 | $963 | $849 | 545,8 | 669 |
| Percent of Total | 100% | 56% | 14% | 12% | 8% | 10% |

# Intragaz Limited Partnership

## Proxy Group Companies
## 2011 Business Segment Data

**TransCanada Corporation**

| | Total | Natural Gas Pipelines | Oil Pipelines | Energy | Corporate |
|---|---|---|---|---|---|
| Operating Income | $3 221 | $1 981 | $457 | $883 | ($100) |
| Percent of Total | 100% | 62% | 14% | 27% | -3% |
| Segment Assets | $48 995 | $23 669 | $9 439 | $14 276 | 1611 |
| Percent of Total | 100% | 48% | 19% | 29% | 3% |

Sources: Company 2010 SEC Form 10-Ks, SNL, Annual Reports

# Intragaz Limited Partnership

## Canadian Utility Companies
## Dividend Yields
## November 2011 - April 2012

| | Symbol | Yield |
|---|---|---|
| Canadian Utilities Limited | CU | 2,67% |
| Emera Inc. | EMA | 4,08% |
| Enbridge Inc. | ENB | 2,81% |
| Fortis Inc. | FTS | 3,59% |
| TransCanada Corporation | TRP | 4,00% |

| | |
|---|---|
| Average | 3,43% |
| Median | 3,59% |

| Canadian Utilities Limited | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 69,87 | 64,78 | 67,325 | 1,77 | 2,63% |
| Mar-12 | 68,12 | 64,40 | 66,26 | 1,77 | 2,67% |
| Feb-12 | 65,98 | 60,26 | 63,12 | 1,77 | 2,80% |
| Jan-12 | 62,18 | 59,63 | 60,905 | 1,61 | 2,64% |
| Dec-11 | 62,49 | 59,00 | 60,745 | 1,61 | 2,65% |
| Nov-11 | 62,95 | 59,56 | 61,255 | 1,61 | 2,63% |
| Average | | | | | **2,67%** |

| Emera Inc. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 35,11 | 33,51 | 34,31 | 1,35 | 3,93% |
| Mar-12 | 34,93 | 33,16 | 34,045 | 1,35 | 3,97% |
| Feb-12 | 33,56 | 32,31 | 32,935 | 1,35 | 4,10% |
| Jan-12 | 33,21 | 32,05 | 32,63 | 1,35 | 4,14% |
| Dec-11 | 33,66 | 31,66 | 32,66 | 1,35 | 4,13% |
| Nov-11 | 33,03 | 31,02 | 32,025 | 1,35 | 4,22% |
| Average | | | | | **4,08%** |

# Intragaz Limited Partnership

## Canadian Utility Companies
## Dividend Yields
## November 2011 - April 2012

| Enbridge Inc | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 41,40 | 38,34 | 39,87 | 1,13 | 2,83% |
| Mar-12 | 39,10 | 36,47 | 37,785 | 1,13 | 2,99% |
| Feb-12 | 39,25 | 37,52 | 38,385 | 1,13 | 2,94% |
| Jan-12 | 38,46 | 35,39 | 36,924 | 0,98 | 2,65% |
| Dec-11 | 38,17 | 34,72 | 36,445 | 0,98 | 2,69% |
| Nov-11 | 36,89 | 34,06 | 35,475 | 0,98 | 2,76% |
| Average | | | | | **2,81%** |

| Fortis Inc. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 34,35 | 31,88 | 33,115 | 1,2 | 3,62% |
| Mar-12 | 33,17 | 31,70 | 32,435 | 1,2 | 3,70% |
| Feb-12 | 34,32 | 31,76 | 33,04 | 1,2 | 3,63% |
| Jan-12 | 33,67 | 32,66 | 33,165 | 1,16 | 3,50% |
| Dec-11 | 33,63 | 31,97 | 32,8 | 1,16 | 3,54% |
| Nov-11 | 34,16 | 31,32 | 32,74 | 1,16 | 3,54% |
| Average | | | | | **3,59%** |

| TransCanada Corp. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 43,80 | 42,10 | 42,95 | 1,76 | 4,10% |
| Mar-12 | 44,60 | 42,31 | 43,455 | 1,76 | 4,05% |
| Feb-12 | 43,69 | 41,02 | 42,355 | 1,68 | 3,97% |
| Jan-12 | 44,75 | 40,34 | 42,545 | 1,68 | 3,95% |
| Dec-11 | 44,74 | 42,03 | 43,385 | 1,68 | 3,87% |
| Nov-11 | 42,90 | 39,24 | 41,07 | 1,68 | 4,09% |
| Average | | | | | **4,00%** |

Source: Bloomberg, As of April, 2012

# Intragaz Limited Partnership

## U.S. Natural Gas Pipeline & Storage Proxy Companies
## Dividend Yields
## November 2011 - April 2012

| | Symbol | Yield |
|---|---|---|
| Boardwalk Pipeline Partners, LP | BWP | 7,77% |
| Spectra Energy Corp | SE | 3,67% |
| Spectra Energy Partners, LP | SEP | 6,01% |
| TC Pipelines, LP | TCP | 6,70% |
| Williams Partners L.P. | WPZ | 5,11% |

| | |
|---|---|
| Average | 5,85% |
| Median | 6,01% |

| Boardwalk Pipeline Partners LP | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 27,68 | 26,01 | 26,845 | 2,12 | 7,90% |
| Mar-12 | 27,94 | 26,09 | 27,015 | 2,12 | 7,85% |
| Feb-12 | 27,62 | 26,51 | 27,065 | 2,12 | 7,83% |
| Jan-12 | 29,43 | 27,10 | 28,265 | 2,11 | 7,47% |
| Dec-11 | 28,21 | 25,85 | 27,03 | 2,11 | 7,81% |
| Nov-11 | 28,75 | 25,38 | 27,065 | 2,11 | 7,80% |
| Average | | | | | **7,77%** |

| Spectra Energy | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 31,79 | 29,77 | 30,78 | 1,12 | 3,64% |
| Mar-12 | 32,27 | 30,83 | 31,55 | 1,12 | 3,55% |
| Feb-12 | 31,91 | 30,25 | 31,08 | 1,12 | 3,60% |
| Jan-12 | 31,98 | 30,17 | 31,075 | 1,12 | 3,60% |
| Dec-11 | 31,33 | 28,85 | 30,09 | 1,12 | 3,72% |
| Nov-11 | 29,83 | 27,53 | 28,68 | 1,12 | 3,91% |
| Average | | | | | **3,67%** |

# Intragaz Limited Partnership

## U.S. Natural Gas Pipeline & Storage Proxy Companies
## Dividend Yields
## November 2011 - April 2012

| Spectra Energy Partners, L. P. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 32,50 | 31,00 | 31,75 | 1,9 | 5,98% |
| Mar-12 | 33,13 | 31,00 | 32,065 | 1,9 | 5,93% |
| Feb-12 | 33,26 | 31,10 | 32,18 | 1,9 | 5,90% |
| Jan-12 | 33,27 | 31,20 | 32,235 | 1,9 | 5,89% |
| Dec-11 | 32,00 | 29,82 | 30,91 | 1,88 | 6,08% |
| Nov-11 | 31,01 | 28,98 | 29,995 | 1,88 | 6,27% |
| Average | | | | | **6,01%** |

| TC PipeLines L.P. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 45,43 | 42,60 | 44,01275 | 3,08 | 7,00% |
| Mar-12 | 46,88 | 44,27 | 45,5755 | 3,08 | 6,76% |
| Feb-12 | 47,30 | 45,26 | 46,28 | 3,08 | 6,66% |
| Jan-12 | 47,75 | 45,75 | 46,75 | 3,08 | 6,59% |
| Dec-11 | 48,30 | 46,41 | 47,355 | 3,08 | 6,50% |
| Nov-11 | 47,72 | 44,56 | 46,14 | 3,08 | 6,68% |
| Average | | | | | **6,70%** |

| Williams Partners L.P. | High Price | Low Price | Average Price | Indicated Annualized Dividend | Dividend Yield |
|---|---|---|---|---|---|
| Apr-12 | 57,75 | 53,35 | 55,55 | 3,05 | 5,49% |
| Mar-12 | 62,42 | 55,02 | 58,72 | 3,05 | 5,19% |
| Feb-12 | 62,35 | 60,57 | 61,46 | 3,05 | 4,96% |
| Jan-12 | 65,40 | 60,51 | 62,9525 | 2,99 | 4,75% |
| Dec-11 | 61,22 | 57,45 | 59,335 | 2,99 | 5,04% |
| Nov-11 | 59,28 | 55,75 | 57,515 | 2,99 | 5,20% |
| Average | | | | | **5,11%** |

Source: Bloomberg, As of April 30, 2012

# Intragaz Limited Partnership

## Canadian Utility Proxy Companies
## Growth Rate Forecasts

| Corporations | Ticker | SNL Long-Term Growth |
|---|---|---|
| Canadian Utilities Limited | CU | 6,20% |
| Emera Inc. | EMA | 7,10% |
| Enbridge Inc. | ENB | 10,00% |
| Fortis Inc. | FTS | 4,60% |
| TransCanada Corporation | TRP | 7,40% |
| | | |
| Average | | 7,06% |
| Median | | 7,10% |

Source: SNL Interactive

## Intragaz Limited Partnership

### U.S. Natural Gas Pipeline & Storage Proxy Companies
### Growth Rate Forecasts

| MLPs | Ticker | SNL Long-Term Growth |
|---|---|---|
| Boardwalk Pipeline Partners, LP | BWP | 2,00% |
| Spectra Energy Partners, LP | SEP | 3,50% |
| TC Pipelines, LP | TCP | 4,00% |
| Williams Partners L.P. | WPZ | 7,00% |

| Corporations | Ticker | SNL Long-Term Growth |
|---|---|---|
| Spectra Energy Corp | SE | 7,90% |

| | |
|---|---|
| Average | 4,88% |
| Median | 4,00% |

Source:  SNL Interactive

# Intragaz Limited Partnership
## Canadian Utility Companies
## DCF Results

| | | [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|---|---|
| | | | | | | **Secondary Market[1]:** | | **Primary Market[2]:** |
| Line No. | | **Ticker** | **Dividend Yield** | **Dividend Yield Times (1 + .50g)** | **Expected Growth Rate (g)** | **Investor Required Return** | **Flotation Cost Adjustment** | **Cost of Capital** |
| 1 | Canadian Utilities Limited | CU | 2,67% | 2,75% | 6,20% | 8,95% | 1,040 | 9,31% |
| 2 | Emera Inc. | EMA | 4,08% | 4,23% | 7,10% | 11,33% | 1,040 | 11,78% |
| 3 | Enbridge Inc. | ENB | 2,81% | 2,95% | 10,00% | 12,95% | 1,040 | 13,47% |
| 4 | Fortis Inc. | FTS | 3,59% | 3,67% | 4,60% | 8,27% | 1,040 | 8,60% |
| 5 | TransCanada Corporation | TRP | 4,00% | 4,15% | 7,40% | 11,55% | 1,040 | 12,01% |
| | | | | | | | | |
| 6 | High | | | | | 12,95% | | 13,47% |
| 7 | 3rd Quartile | | | | | 11,55% | | 12,01% |
| 8 | **2nd Quartile (Median)** | | | | | **11,33%** | | **11,78%** |
| 9 | 1st Quartile | | | | | 8,95% | | 9,31% |
| 10 | Low | | | | | 8,27% | | 8,60% |

[1] Return required by investors when they trade stocks in the "secondary" market.
[2] Cost to companies when they raise common equity capital in the "primary" market.

[B] See Schedule 5 p 1 of 2
[C] = Col [B] x (1+ .5 Col [D])
[D] See Schedule 6 p 1 of 2
[E] = Col [C] + Col [D]
[F] See Schedule 8
[G] = Col [E] x Col [F]

# Intragaz Limited Partnership

## U.S. Natural Gas Pipeline & Storage Proxy Companies

## DCF Results

| | | [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|---|---|
| | | | | | | **Secondary Market[1]:** | | **Primary Market[2]:** |
| Line No. | | **Ticker** | **Dividend Yield** | **Dividend Yield Times (1 + .50g)** | **Expected Growth Rate (g)** | **Investor Required Return** | **Flotation Cost Adjustment** | **Cost of Capital** |
| 1 | Boardwalk Pipeline Partners, LP | BWP | 7,77% | 7,85% | 2,00% | 9,85% | 1,040 | 10,25% |
| 2 | Spectra Energy Corp | SE | 3,67% | 3,82% | 7,90% | 11,72% | 1,040 | 12,18% |
| 3 | Spectra Energy Partners, LP | SEP | 6,01% | 6,11% | 3,50% | 9,61% | 1,040 | 10,00% |
| 4 | TC Pipelines, LP | TCP | 6,70% | 6,83% | 4,00% | 10,83% | 1,040 | 11,26% |
| 5 | Williams Partners L.P. | WPZ | 5,11% | 5,28% | 7,00% | 12,28% | 1,040 | 12,78% |
| | | | | | | | | |
| 6 | High | | | | | 12,28% | | 12,78% |
| 7 | 3rd Quartile | | | | | 11,72% | | 12,18% |
| 8 | **2nd Quartile (Median)** | | | | | **10,83%** | | **11,26%** |
| 9 | 1st Quartile | | | | | 9,85% | | 10,25% |
| 10 | Low | | | | | 9,61% | | 10,00% |

[1] Return required by investors when they trade stocks in the "secondary" market.
[2] Cost to companies when they raise common equity capital in the "primary" market.

[B] See Schedule 5 p 2 of 2
[C] = Col [B] x (1+ .5 Col [D])
[D] See Schedule 6 p 2 of 2
[E] = Col [C] + Col [D]
[F] See Schedule 8
[G] = Col [E] x Col [F]

# Intragaz Limited Partnership

## Common Equity Flotation Costs of Natural Gas Distribution/Transmission/Storage Companies

## 2000-2011

| | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|
| Issuer | Date of Offering | Number of Shares | Issue Price | Net Proceeds Per Share | Financing Costs as a Percent of Net Proceeds |
| Semco | 2000-06-12 | 9 000 000 | $10,000 | $9,600 | 4,17% |
| WGL Holdings | 2001-06-26 | 1 790 000 | $26,730 | $25,804 | 3,59% |
| Utilicorp | 2002-01-25 | 11 000 000 | $23,000 | $22,252 | 3,36% |
| Enbridge Energy Partners L.P. | 2002-02-27 | 2 200 000 | $42,750 | $40,933 | 4,44% |
| NUI Corporation | 2002-03-14 | 1 500 000 | $22,500 | $21,430 | 4,99% |
| GulfTerra Energy Partners L.P. | 2002-04-24 | 3 000 000 | $37,860 | $36,251 | 4,44% |
| Markwest Energy Partners L.P. | 2002-05-20 | 2 100 000 | $20,500 | $19,065 | 7,53% |
| ONEOK Partners L.P. | 2002-06-13 | 1 280 000 | $35,970 | $34,610 | 3,93% |
| El Paso Corporation | 2002-06-20 | 45 000 000 | $19,950 | $19,350 | 3,10% |
| ONEOK Partners L.P. | 2002-06-27 | 2 000 000 | $35,500 | $33,990 | 4,44% |
| Kinder Morgan Management LLC | 2002-07-31 | 12 000 000 | $27,500 | $26,540 | 3,62% |
| Enterprise Products Partners | 2002-10-03 | 9 800 000 | $18,990 | $18,180 | 4,46% |
| Enbridge Energy Management L | 2002-10-10 | 9 000 000 | $39,000 | $37,050 | 5,26% |
| NiSource Inc. | 2002-11-06 | 36 000 000 | $18,300 | $17,751 | 3,09% |
| MDU Resources Group | 2002-11-29 | 2 100 000 | $24,000 | $23,188 | 3,50% |
| Enterprise Products Partners | 2003-01-09 | 12 750 000 | $18,010 | $17,245 | 4,44% |
| KeySpan Corporation | 2003-01-14 | 13 900 000 | $34,500 | $34,070 | 1,26% |
| ONEOK Inc. | 2003-01-23 | 12 000 000 | $17,190 | $16,524 | 4,03% |
| AGL Resources Inc. | 2003-02-11 | 5 600 000 | $22,000 | $21,230 | 3,63% |
| GulfTerra Energy Partners L.P. | 2003-04-08 | 3 000 000 | $31,350 | $30,018 | 4,44% |
| Delta Natural Gas Company Inc. | 2003-04-29 | 530 000 | $21,600 | $20,650 | 4,60% |
| Atlas Pipeline Partners L.P. | 2003-05-05 | 950 000 | $25,000 | $23,375 | 6,95% |
| Enbridge Energy Partners L.P. | 2003-05-06 | 3 350 000 | $44,790 | $42,886 | 4,44% |
| Energy Transfer Partners L.P. | 2003-05-13 | 1 400 000 | $29,260 | $27,797 | 5,26% |
| ONEOK Partners L.P. | 2003-05-20 | 2 250 000 | $40,500 | $38,779 | 4,44% |
| Kinder Morgan Energy Partners | 2003-05-28 | 4 000 000 | $39,350 | $37,680 | 4,43% |
| Enterprise Products Partners | 2003-05-29 | 10 400 000 | $22,350 | $21,400 | 4,44% |
| Southern Union Company | 2003-06-05 | 9 500 000 | $16,000 | $15,440 | 3,63% |
| Atmos Energy Corporation | 2003-06-18 | 4 000 000 | $25,310 | $24,298 | 4,16% |
| GulfTerra Energy Partners L.P. | 2003-06-19 | 1 000 000 | $36,500 | $35,222 | 3,63% |
| ONEOK Inc. | 2003-08-05 | 9 500 000 | $19,000 | $18,620 | 2,04% |
| Vectren Corporation | 2003-08-07 | 6 500 000 | $22,810 | $22,012 | 3,63% |
| Sempra Energy | 2003-10-08 | 15 000 000 | $28,000 | $27,160 | 3,09% |
| GulfTerra Energy Partners | 2003-10-15 | 4 800 000 | $40,600 | $38,874 | 4,44% |
| Unitil Corporation | 2003-10-23 | 624 000 | $25,400 | $24,130 | 5,26% |
| El Paso Corporation | 2003-11-19 | 8 790 000 | $5,950 | $5,900 | 0,85% |
| Enbridge Energy Partners L.P. | 2003-12-03 | 5 000 000 | $50,300 | $48,162 | 4,44% |
| El Paso Corporation | 2003-12-23 | 8 790 000 | $7,850 | $7,745 | 1,36% |
| El Paso Corporation | 2004-01-05 | 8 790 000 | $8,350 | $8,250 | 1,21% |
| Markwest Energy Partners L.P. | 2004-01-12 | 1 150 000 | $39,900 | $37,805 | 5,54% |
| Energy Transfer Partners L.P. | 2004-01-13 | 8 000 000 | $38,690 | $36,560 | 5,83% |
| Piedmont Natural Gas Company | 2004-01-20 | 4 250 000 | $42,500 | $41,010 | 3,63% |
| Kinder Morgan Energy Partners | 2004-02-04 | 5 300 000 | $46,800 | $44,869 | 4,30% |
| ONEOK Inc. | 2004-02-05 | 6 900 000 | $22,000 | $21,930 | 0,32% |
| UGI Corporation | 2004-03-18 | 7 500 000 | $32,100 | $30,696 | 4,57% |
| Northwest Natural Gas Company | 2004-03-30 | 1 200 000 | $31,000 | $29,990 | 3,37% |
| Enterprise Products Partners | 2004-04-29 | 15 000 000 | $21,000 | $20,107 | 4,44% |
| The Laclede Group | 2004-05-25 | 1 500 000 | $26,800 | $25,929 | 3,36% |
| Energy Transfer Partners L.P. | 2004-06-24 | 4 500 000 | $39,200 | $37,534 | 4,44% |
| Atmos Energy Corporation | 2004-07-13 | 8 650 000 | $24,750 | $23,760 | 4,17% |
| Southern Union Company | 2004-07-26 | 11 000 000 | $18,750 | $18,094 | 3,63% |
| Enterprise Products Partners | 2004-08-04 | 15 000 000 | $20,200 | $19,341 | 4,44% |

# Intragaz Limited Partnership

## Common Equity Flotation Costs of
## Natural Gas Distribution/Transmission/Storage Companies
## 2000-2011

| | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|
| Issuer | Date of Offering | Number of Shares | Issue Price | Net Proceeds Per Share | Financing Costs as a Percent of Net Proceeds |
| Enbridge Energy Partners L.P. | 2004-09-09 | 3 200 000 | $47,900 | $45,864 | 4,44% |
| Markwest Energy Partners L.P. | 2004-09-15 | 2 160 000 | $43,410 | $41,350 | 4,98% |
| Atmos Energy Corporation | 2004-10-21 | 14 000 000 | $24,750 | $23,760 | 4,17% |
| Kinder Morgan Energy Partners | 2004-11-04 | 5 500 000 | $46,000 | $44,160 | 4,17% |
| AGL Resources Inc. | 2004-11-18 | 9 600 000 | $31,010 | $30,080 | 3,09% |
| Southern Union Company | 2005-02-07 | 14 910 000 | $23,000 | $22,300 | 3,14% |
| Enterprise Products Partners | 2005-02-11 | 15 000 000 | $27,050 | $25,968 | 4,17% |
| TC Pipelines L.P. | 2005-03-17 | 3 500 000 | $37,040 | $35,470 | 4,43% |
| Kinder Morgan Energy Partners | 2005-08-10 | 5 000 000 | $51,250 | $49,330 | 3,89% |
| Semco Energy Inc. | 2005-08-10 | 4 300 000 | $6,320 | $6,067 | 4,17% |
| Williams Partners L.P. | 2005-08-17 | 5 000 000 | $21,500 | $20,130 | 6,81% |
| Enterprise GP Holdings L.P. | 2005-08-23 | 12 600 000 | $28,000 | $26,320 | 6,38% |
| Kinder Morgan Energy Partners | 2005-11-02 | 2 600 000 | $51,750 | $50,051 | 3,39% |
| Boardwalk Pipeline Partners | 2005-11-08 | 15 000 000 | $19,500 | $18,330 | 6,38% |
| Enbridge Energy Partners L.P. | 2005-11-16 | 3 000 000 | $46,000 | $44,160 | 4,17% |
| Enterprise Products Partners | 2005-11-29 | 4 000 000 | $25,030 | $24,520 | 2,08% |
| Kinder Morgan Management | 2005-12-21 | 1 670 000 | $45,000 | $44,430 | 1,28% |
| Regency Energy Partners L.P. | 2006-01-31 | 13 750 000 | $20,000 | $18,787 | 6,46% |
| Energy Transfer Equity L.P. | 2006-02-02 | 21 000 000 | $21,000 | $19,792 | 6,10% |
| Enterprise Products Partners | 2006-03-02 | 16 000 000 | $23,900 | $22,944 | 4,17% |
| El Paso Corporation | 2006-05-23 | 35 700 000 | $14,150 | $14,025 | 0,89% |
| Williams Partners L.P. | 2006-06-14 | 6 600 000 | $31,250 | $29,922 | 4,44% |
| Markwest Energy Partners L.P. | 2006-06-30 | 3 000 000 | $39,750 | $37,961 | 4,71% |
| Kinder Morgan Energy Partners | 2006-08-09 | 5 000 000 | $44,800 | $43,132 | 3,87% |
| Enterprise Products Partners | 2006-09-07 | 11 000 000 | $25,800 | $24,839 | 3,87% |
| Boardwalk Pipeline Partners | 2006-11-16 | 6 000 000 | $29,650 | $28,390 | 4,44% |
| Chesapeake Utilities Corporation | 2006-11-16 | 600 000 | $30,100 | $28,975 | 3,88% |
| Williams Partners L.P. | 2006-12-06 | 7 000 000 | $38,000 | $36,480 | 4,17% |
| Atmos Energy Corporation | 2006-12-07 | 5 500 000 | $31,500 | $30,397 | 3,63% |
| Vectren Corportation | 2007-02-22 | 4 600 000 | $28,330 | $27,338 | 3,63% |
| Boardwalk Pipeline Partners | 2007-03-19 | 8 000 000 | $36,500 | $36,000 | 1,39% |
| Enterprise Products Partners | 2007-04-13 | 13 500 000 | $31,250 | $30,620 | 2,06% |
| Enbridge Energy Partners L.P. | 2007-05-16 | 5 300 000 | $58,000 | $57,040 | 1,68% |
| Spectra Energy Partners L.P. | 2007-06-26 | 10 000 000 | $22,000 | $20,625 | 6,67% |
| Regency Energy Partners L.P. | 2007-07-26 | 10 000 000 | $32,050 | $30,768 | 4,17% |
| Boardwalk Pipeline Partners | 2007-11-02 | 7 500 000 | $30,900 | $30,420 | 1,58% |
| Energy Transfer Equity L.P. | 2007-11-07 | 7 340 000 | $31,700 | $30,432 | 4,17% |
| El Paso Pipeline Partners L.P. | 2007-11-15 | 25 000 000 | $20,000 | $18,800 | 6,38% |
| Kinder Morgan Energy Partners | 2007-11-30 | 6 200 000 | $49,340 | $48,090 | 2,60% |
| Williams Partners L.P. | 2007-12-05 | 9 250 000 | $37,750 | $36,240 | 4,17% |
| Energy Transfer Partners L.P. | 2007-12-13 | 5 000 000 | $48,810 | $46,858 | 4,17% |
| Williams Pipeline Partners L.P. | 2008-01-17 | 16 250 000 | $20,000 | $18,800 | 6,38% |
| Enbridge Energy Partners L.P. | 2008-02-27 | 4 000 000 | $49,000 | $47,285 | 3,63% |
| Kinder Morgan Energy Partners | 2008-02-27 | 5 000 000 | $57,700 | $56,380 | 2,34% |
| ONEOK Partners L.P. | 2008-03-11 | 2 500 000 | $58,100 | $56,150 | 3,47% |
| Markwest Energy Partners L.P. | 2008-04-08 | 5 000 000 | $31,150 | $29,904 | 4,17% |
| EQT Corp | 2008-05-06 | 7 500 000 | $67,750 | $65,040 | 4,17% |
| Western Gas Partners L.P. | 2008-05-08 | 18 750 000 | $16,500 | $15,510 | 6,38% |
| Boardwalk Pipeline Partners | 2008-06-10 | 10 000 000 | $25,300 | $24,352 | 3,89% |
| Energy Transfer Partners L.P. | 2008-07-15 | 7 750 000 | $39,450 | $37,872 | 4,17% |
| Regency Energy Partners L.P. | 2008-09-11 | 7 100 000 | $21,000 | $20,210 | 3,91% |
| Teppco Partners | 2008-09-04 | 8 000 000 | $29,000 | $27,985 | 3,63% |
| Regency Energy Partners | 2008-09-11 | 7 100 000 | $21,000 | $20,210 | 3,91% |

# Intragaz Limited Partnership

## Common Equity Flotation Costs of Natural Gas Distribution/Transmission/Storage Companies
## 2000-2011

| | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|
| Issuer | Date of Offering | Number of Shares | Issue Price | Net Proceeds Per Share | Financing Costs as a Percent of Net Proceeds |
| Unitil Corporation | 2008-12-15 | 2 270 000 | $20,000 | $18,181 | 10,00% |
| Kinder Morgan Energy Partners | 2008-12-17 | 3 900 000 | $46,750 | $45,290 | 3,22% |
| Enterprise Products Partners | 2009-01-07 | 9 600 000 | $22,200 | $21,330 | 4,08% |
| Energy Transfer Partners | 2009-01-22 | 6 000 000 | $34,050 | $32,660 | 4,26% |
| Spectra Energy Partners | 2009-02-10 | 28 000 000 | $14,350 | $13,919 | 3,10% |
| Kinder Morgan Energy Partners | 2009-02-26 | 5 500 000 | $46,950 | $45,530 | 3,12% |
| Energy Transfer Partners | 2009-04-15 | 8 500 000 | $37,550 | $36,048 | 4,17% |
| Spectra Energy Partners | 2009-05-20 | 9 000 000 | $22,000 | $21,120 | 4,17% |
| Unitil Corporation | 2009-05-27 | 2 700 000 | $20,000 | $18,614 | 7,45% |
| Markwest Energy Partners | 2009-06-05 | 2 900 000 | $18,150 | $17,352 | 4,60% |
| El Paso Pipeline Partners | 2009-06-09 | 11 000 000 | $17,500 | $16,800 | 4,17% |
| Kinder Morgan Energy Partners | 2009-06-09 | 5 750 000 | $51,500 | $49,900 | 3,21% |
| Oneok Partners LP | 2009-06-16 | 5 000 000 | $45,810 | $43,980 | 4,16% |
| Boardwalk Pipeline Partners | 2009-08-11 | 7 250 000 | $23,000 | $22,150 | 3,84% |
| Markwest Energy Partners | 2009-08-13 | 5 500 000 | $20,950 | $20,066 | 4,41% |
| Centerppoint Energy Inc | 2009-09-10 | 21 000 000 | $12,000 | $11,580 | 3,63% |
| Energy Transfer Partners | 2009-10-01 | 6 000 000 | $41,270 | $39,997 | 3,18% |
| TC Pipelines | 2009-11-13 | 5 000 000 | $38,000 | $36,420 | 4,34% |
| DCP Midstream Partners | 2009-11-19 | 2 500 000 | $25,400 | $24,340 | 4,35% |
| Kinder Morgan Energy Partners | 2009-12-01 | 4 500 000 | $57,150 | $55,350 | 3,25% |
| Regency Energy Partners | 2009-12-02 | 10 500 000 | $19,120 | $18,270 | 4,65% |
| Western Gas Partners | 2009-12-04 | 6 000 000 | $18,200 | $17,460 | 4,24% |
| Energy Transfer Partners | 2010-01-06 | 8 500 000 | $44,720 | $43,330 | 3,21% |
| Enterprise Products Partners | 2010-01-07 | 9 500 000 | $32,420 | $31,430 | 3,15% |
| El Paso Pipeline Partners | 2010-01-13 | 8 750 000 | $24,480 | $23,460 | 4,35% |
| Oneok Partners LP | 2010-02-02 | 5 250 000 | $60,750 | $58,720 | 3,46% |
| Boardwalk Pipeline Partners | 2010-02-18 | 10 000 000 | $30,020 | $28,930 | 3,77% |
| EQT Corp | 2010-03-10 | 12 500 000 | $44,000 | $42,240 | 4,17% |
| Enterprise Products Partners | 2010-04-13 | 12 000 000 | $35,550 | $34,480 | 3,10% |
| Kinder Morgan Energy Partners LP | 2010-05-04 | 6 500 000 | $66,250 | $64,220 | 3,16% |
| Niska Gas Storage Partners LLC | 2010-05-11 | 17 500 000 | $20,500 | $19,244 | 6,52% |
| Western Gas Partners LP | 2010-05-13 | 4 000 000 | $22,250 | $21,350 | 4,22% |
| CenterPoint Energy Inc | 2010-06-09 | 22 000 000 | $12,900 | $12,448 | 3,63% |
| El Paso Pipeline Partners LP | 2010-06-18 | 10 000 000 | $28,800 | $27,690 | 4,01% |
| Energy Transfer Partners LP | 2010-08-18 | 9 500 000 | $46,220 | $44,798 | 3,17% |
| NiSource Inc | 2010-09-08 | 21 100 000 | $16,500 | $15,964 | 3,36% |
| El Paso Pipeline Partners LP | 2010-09-15 | 11 500 000 | $31,950 | $30,774 | 3,82% |
| Williams Partners LP | 2010-09-23 | 9 250 000 | $42,400 | $41,110 | 3,14% |
| Western Gas Partners LP | 2010-11-09 | 7 500 000 | $29,920 | $28,730 | 4,14% |
| Enbridge Energy Partners LP | 2010-11-10 | 5 200 000 | $60,120 | $58,180 | 3,33% |
| Gas Natural Inc | 2010-11-10 | 2 100 000 | $10,000 | $9,400 | 6,38% |
| El Paso Pipeline Partners LP | 2010-11-16 | 10 500 000 | $33,450 | $32,330 | 3,46% |
| Enterprise Products Partners LP | 2010-12-01 | 11 500 000 | $41,250 | $39,976 | 3,19% |
| Spectra Energy Partners LP | 2010-12-02 | 6 250 000 | $32,870 | $31,550 | 4,18% |
| Williams Partners LP | 2010-12-14 | 8 000 000 | $47,550 | $46,110 | 3,12% |
| MarkWest Energy Partners LP | 2011-01-11 | 3 000 000 | $41,200 | $40,130 | 2,67% |
| Kinder Morgan Inc/Delaware | 2011-02-10 | 95 466 600 | $30,000 | $29,100 | 3,09% |
| Western Gas Partners LP | 2011-03-01 | 3 550 000 | $35,150 | $33,750 | 4,15% |
| DCP Midstream Partners LP | 2011-03-04 | 3 200 000 | $40,550 | $38,920 | 4,19% |
| El Paso Pipeline Partners LP | 2011-03-09 | 12 000 000 | $34,300 | $33,150 | 3,47% |
| Energy Transfer Partners LP | 2011-03-29 | 12 350 000 | $50,520 | $48,980 | 3,14% |
| TC Pipelines LP | 2011-04-28 | 6 300 000 | $47,580 | $45,670 | 4,18% |
| El Paso Pipeline Partners LP | 2011-05-13 | 14 000 000 | $34,510 | $33,350 | 3,48% |

# Intragaz Limited Partnership

## Common Equity Flotation Costs of Natural Gas Distribution/Transmission/Storage Companies

## 2000-2011

| | [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|---|
| Issuer | Date of Offering | Number of Shares | Issue Price | Net Proceeds Per Share | Financing Costs as a Percent of Net Proceeds |
| Boardwalk Pipeline Partners LP | 2011-05-27 | 6 000 000 | $29,330 | $28,370 | 3,38% |
| Spectra Energy Partners LP | 2011-06-08 | 6 250 000 | $30,960 | $29,720 | 4,17% |
| Kinder Morgan Energy Partners LP | 2011-06-14 | 6 700 000 | $71,440 | $69,290 | 3,10% |
| Enbridge Energy Partners LP | 2011-06-28 | 7 000 000 | $30,000 | $29,090 | 3,13% |
| MarkWest Energy Partners LP | 2011-07-08 | 3 500 000 | $48,000 | $46,070 | 4,19% |
| American Midstream Partners LP | 2011-07-26 | 3 750 000 | $21,000 | $19,688 | 6,67% |
| Cheniere Energy Partners LP | 2011-09-14 | 3 000 000 | $15,250 | $14,550 | 4,81% |
| Western Gas Partners LP | 2011-09-20 | 5 000 000 | $35,860 | $34,560 | 3,76% |
| Enbridge Energy Partners LP | 2011-09-22 | 8 000 000 | $28,200 | $27,350 | 3,11% |
| Regency Energy Partners LP | 2011-10-07 | 10 000 000 | $20,920 | $20,200 | 3,56% |
| Energy Transfer Partners LP | 2011-11-08 | 13 250 000 | $44,670 | $43,330 | 3,09% |
| Enbridge Energy Partners LP | 2011-12-02 | 8 500 000 | $30,850 | $29,910 | 3,14% |
| Enterprise Products Partners LP | 2011-12-08 | 9 000 000 | $44,680 | $43,340 | 3,09% |
| MarkWest Energy Partners LP | 2011-12-13 | 10 000 000 | $54,250 | $52,134 | 4,06% |
| Inergy Midstream LP | 2011-12-15 | 16 000 000 | $17,000 | $15,980 | 6,38% |
| Average 2000-2011 | | | | | **3,96%** |
| | Selected Flotation Costs for Cost of Equity | | | | **4,00%** |

Sources: EBASCO, *Analysis of Public Utility Financing* and *Public Utility Financing Tracker, Edgar Online, Bloomberg*

# Intragaz Limited Partnership

## Canadian Utility Companies
## Capital Structures as of December 31, 2011

| | | [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|---|---|
| Line No. | | Debt (Thousands) | % | Preferred Stock (Thousands) | % | Equity (Thousands) | % | Total Capital |
| 1 | Canadian Utilities Limited | $ 4 730 000 | 53,05% | $ 724 000 | 8,12% | $ 3 462 000 | 38,83% | $ 8 916 000 |
| 2 | Emera Inc. | $ 3 519 500 | 65,87% | $ 146 700 | 2,75% | $ 1 677 000 | 31,39% | $ 5 343 200 |
| 3 | Enbridge Inc. | $ 20 153 000 | 65,50% | $ 1 056 000 | 3,43% | $ 9 559 000 | 31,07% | $ 30 768 000 |
| 4 | Fortis Inc. | $ 6 264 000 | 57,25% | $ 592 000 | 5,41% | $ 4 085 000 | 37,34% | $ 10 941 000 |
| 5 | TransCanada Corporation | $ 22 278 000 | 54,25% | $ 1 224 000 | 2,98% | $ 17 565 000 | 42,77% | $ 41 067 000 |
| 6 | Mean | | 59,18% | | 4,54% | | 36,28% | |
| 7 | Median | | 57,25% | | 3,43% | | 37,34% | |

Source: SNL Financial

# Intragaz Limited Partnership

## U.S. Pipeline and Storage Proxy Companies
## Capital Structures as of December 31, 2011

| | | [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|---|---|
| | | | | Preferred | | | | Total |
| | | Debt | % | Stock | % | Equity | % | Capital |
| Line No. | | (Thousands) | | (Thousands) | | (Thousands) | | |
| 1 | Boardwalk Pipeline Partners, LP | $ 3 198 700 | 49,95% | $ - | 0,00% | $ 3 205 200 | 50,05% | $ 6 403 900 |
| 2 | Spectra Energy Corp | $ 11 723 000 | 56,15% | $ 258 000 | 1,24% | $ 8 896 000 | 42,61% | $ 20 877 000 |
| 3 | Spectra Energy Partners, LP | $ 706 900 | 29,40% | $ - | 0,00% | $ 1 697 700 | 70,60% | $ 2 404 600 |
| 4 | TC Pipelines, LP | $ 742 500 | 35,77% | $ - | 0,00% | $ 1 333 000 | 64,23% | $ 2 075 500 |
| 5 | Williams Partners L.P. | $ 7 237 000 | 58,06% | $ - | 0,00% | $ 5 228 000 | 41,94% | $ 12 465 000 |
| 6 | Mean | | 45,87% | | 0,25% | | 53,89% | |
| 7 | Median | | 49,95% | | 0,00% | | 50,05% | |

Source: 2011 10-Ks

# Intragaz Limited Partnership

## CALCULATION OF MEDIAN RESULTS

| | | **Discounted Cash Flow (DCF)** | | **Source** |
|---|---|---|---|---|
| | | Canadian Utility Proxy Group | U.S. Pipeline & Storage Proxy Group | |
| [1] | Dividend Yield | 4,08% | 6,70% | Schedule 7 |
| [2] | x Growth Adj. Factor | 1,036 | 1,020 | Equals 1 + (0.5 x [4]) |
| [3] | Expected Dividend Yield | **4,23%** | **6,83%** | Equals [1] x [2] |
| [4] | + Expected Growth Rate | **7,10%** | **4,00%** | Schedule 7 |
| [5] | Secondary Market ROE | **11,33%** | **10,83%** | Equals [3] + [4] |
| [6] | x Flotation Cost Adj. | 1,04 | 1,04 | Schedule 8 |
| [7] | Primary Market ROE | **11,78%** | **11,26%** | Equals [5] x [6] |

**Presentation to**

Hydro Québec

# OPINION REGARDING HYDRO QUÉBEC'S THEORETICAL BORROWING COSTS IN THE ABSENCE OF A GOVERNMENT GUARANTEE

*August 2000*

Merrill Lynch

Prepared by Brian Keegan
Ratings Advisory Group
Merrill Lynch & Co.

# OPINION REGARDING HYDRO QUÉBEC'S THEORETICAL BORROWING COSTS IN THE ABSENCE OF A GOVERNMENT GUARANTEE

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## Introduction

As requested, Merrill Lynch is pleased to provide certain financial advisory services in the context of a tariff review with the Québec Energy Board.

In particular, you have asked us to opine on HQ's theoretical borrowing cost without the government guarantee.

## Background – Merrill Lynch's Credentials

Merrill Lynch's Ratings Advisory Group has significant experience in advising clients on Rating Agency strategy and issuance of new securities. Moreover, our rating advisory experience for the global energy industry is unsurpassed. Some of our clients include: Enron Corp., TXU Corp., Repsol, Duke Energy Corp., Consolidated Edison Inc., Carolina Power & Light Co., Dominion Resources Inc., Edison International, Reliant Energy, Inc.

Unlike other rating advisory service providers, Merrill Lynch's Ratings Advisory Group is focused exclusively on ratings and strategic corporate, structural, and financial issues related to them. The Group consists of 21 professional analysts, mostly former rating agency employees, based in three regions, Pacific Rim (Tokyo, Melbourne, Hong Kong), Europe, Middle East and Africa (London), and the Americas (New York).

## Summary of Merrill Lynch's Opinion

In order to determine HQ's borrowing cost without the government guarantee, we first need to ascertain what the Company's credit rating would be without this guarantee. It is our opinion that HQ would have a low investment grade rating of approximately BBB (Standard & Poor's)/ Baa3 (Moody's)/ B++(low)(CBRS)/ BBB(low)(DBRS). Under this light, the presence of the government guarantee overrides other considerations such as the specific business lines supporting the credit.

By comparing HQ's trading levels in the Canadian or US markets with levels shown in Moody's Bond Indices "Average Yield of Utility Bonds rated Baa" and CBRS "Canadian Bond Yield Averages for B++ Utilities", we have determined that HQ's long term borrowing cost without the said guarantee would be at least 50 basis points more than what it would otherwise pay with the guarantee. Additionally we doubt that HQ without the government guarantee would have had the access to the Canadian capital markets it enjoyed over the years.

## Overview of Credit Rating Methodology for Power Companies

Although each rating agency has developed its own set of analytical issues and ratios for power companies, the rating methodologies used by the International and Canadian agencies all converge towards the same components and criteria. For purpose of this analysis, Merrill Lynch has predominantly used the Standard & Poor's ratings process as it is more transparent than the process employed by Moody's, DBRS and CBRS.

The rating agencies incorporate two basic components when evaluating credit risk. These components are:
*(i)* a qualitative analysis of the company's business ("business profile"), and
*(ii)* a quantitative analysis of its financial performance both past and perspective.

In short, a utilities business profile is used to determine which financial profile and capital structure is most appropriate for a given rating category. For example, a utility with a strong business profile would be permitted to have weaker financial protection measures (high debt leverage and/or thin fixed-charge coverage measures) than one with a weaker business profile, yet it could still achieve the same rating if the latter has very strong financial measures (low leverage and/or robust coverage measures). In determining a business profile, the rating agencies generally analyze key qualitative attributes such as:

- regulation
- markets
- operations
- competitiveness
- management.

Business profiles are ranked on a "1" to "10" scale by S&P's, with "1" being the strongest. It should be noted that business profile rankings address only the stand-alone creditworthiness of the utility, before factoring in credit enhancements or credit constraints attributable to ownership and/or guarantees (as described under "utility types" in the next paragraph).

S&P's, when accessing a utilities' business profile, places a utility into one of four categories or 'types' that they have identified. These types are determined through the analysis of the influence of government ownership, the degree of financial stability derived from the structure of the industry, and the relative competitiveness of the system.

- Type I utilities receives overwhelming governmental and regulatory support, such as a government guaranteeing debt obligations or directly facilitating a utility's access to capital markets. Type I utilities are usually at-least partly owned by the government. For Type I utilities the ultimate rating determination rest heavily on the credit quality of the entity providing the explicit support. Until recently, most of the provincial utilities in Canada were Type I utilities.

- Type II utilities generally enjoy a high degree of protection from competition and financial variability by the government or regulator. For Type II utilities, the business profile factors of regulation and markets are weighted more heavily than other criteria such as competitiveness and management because of the supportive regulatory safety net. Municipally-owned utilities have traditionally been Type II utilities.
- Type III utilities usually have certain franchise monopoly characteristics and their financial success may hinge on their ability to control cost and provide high quality service, in addition to a rate-setting mechanism. Business profile factor weighting for utilities in this category are more evenly distributed across all five criteria. As an example, many of the U.S. vertically integrated utilities are Type III utilities.
- Type IV utilities are essentially unregulated as to revenue or return. For Type IV utilities, an assessment of operations, competitiveness, operations and markets are assigned greater weights than regulation. Unregulated generators in Argentina and Chile are an example of Type IV utilities.

The weighting or analytical emphasis that each business profile factor (regulation, markets, operations, competitiveness and management) receives will be strongly influenced by the type of utility.

## 1.Business Profile Analysis for Generation Activities

Generation is the riskiest segment of the electric utility industry due to complex operating risks and the increasingly competitive nature of the business. With its unique storage capabilities, advantageous geographic location and predominantly hydro-based generating capabilities, Hydro-Québec is in a good position to mitigate some of those business risks. Key considerations for business attributes relating to Hydro-Québec are as follows:

***Regulation***

- Status of restructuring in the Province of Québec, e.g. Bill 116 and impact of vested contracts on HQ’s financial situation, role of the Régie with respect to regulation of transmission and distribution activities, etc.
- Nature of regulatory scheme such as electricity price establishment for vested contracts and open market, period of the vesting contract, future consideration for a power exchange, etc.
- Uncertainty concerning evolving rules for regional transmission organizations (“RTOs”), independent system operators, and for-profit transcos, including independence and equal access

### *Markets*

- HQ's customer mix and diversity (wholesale and retail)
- Generating capacity vs. domestic market demand
- U.S. exports
- Québec economic growth prospects

### *Operations*

- Composition of HQ's generation portfolio (i.e. baseload, intermediate, peaking)
- Level of physical and financial hedging sophistication
- If significant, impact of power purchase agreements (buy side) on operations, including PPA rates vs. market rates
- Nature of supply contracts (sell side), such as HQ's power purchase agreements with Vermont and other U.S. states
- Technology of plants in operation
- Asset concentration within portfolio of generating units
- Construction risk for new projects
- Possibility of detrimental environmental legislation
- Diversity of fuel sources and types, availability and level of reservoirs
- Marketing prowess
- Access to U.S. transmission

### *Competitiveness*

- Relative costs of production, both total and variable
- Threat from new, low-cost entrants for new production
- Alternatives to electricity, such as natural gas, technological innovations, and remote site applications, including fuel cells and microturbines
- Plant's importance to transmission and voltage support

## 2. Business Profile Analysis for Transmission and Distribution Activities

When evaluating electric transmission and distribution companies, S&P's is most concerned about the predictability and sustainability of financial performance. The regulatory environment is by far the most important consideration affecting the business profile of T&D companies. In Québec, it is expected that the Régie will study and analyze in the near future the cost of service for the Québec transmission network in order to establish transmission and transit rates. Distribution cost of service and rates would likely follow thereafter. Key considerations for business attributes relating to Hydro-Québec are as follows:

### *Regulation*

- Status of restructuring in the Province and the nature of the Régie rate-making structure in the near future, e.g. performance-based vs. cost-of-service
- Authorized return on equity by the Régie
- Consistency of rate treatment over the years (expected)
- Evolving rules for regional transmission organizations, independent system operators, and for-profit transcos
- Incentives to maintain existing delivery assets and invest in new assets

### *Markets*

- Québec economic and demographic characteristics, including size and growth rates, customer mix, industrial concentrations, and cyclical volatility
- HQ's location and interconnections with NEPOOL, NYPP and Ontario

### *Operations*

- T&D operations are typically low risk
- HQ's cost, reliability, and quality of service (usually measured against various benchmarks)
- Capacity utilization
- Projected capital improvements and asset condition
- Nature of diversified business operations, if any
- Transmission constraints

### *Competitiveness*

- Alternative fuel sources, such as gas and self-generation
- Location of new generation
- Potential for bypass
- Rate structure

## 3. Merrill Lynch Assessment of HQ's Business Profile

As mentioned previously, Standard & Poor's assigns an actual business profile assessment to each rated entity, and business profiles are expressed on a scale of 1 (low risk) to 10 (high risk). In the case of HQ, the proforma business profile assessment would be at least a '4' but quite possibly a '3'. Our view reflects the Company's solid competitive position as a low-cost power supplier to residential and industrial consumers in the Province of Québec and an exporter of power to the Northeastern US. We have taken into account that HQ's transmission and distribution functions will remain regulated, and that HQ will continue to enjoy access to low-cost power. The other rating agencies also employ a similar business position scale, but these have not been made available to the public.

Absent the Provincial guarantee, HQ would likely be classified as a Type II utility. Although the regulatory environment for transmission and distribution of electricity in the province of Québec is still unproven, HQ benefits from good relations with other regulatory bodies such as FERC, NPCC, NEB, etc. Moreover, Bill 116 establishes the legal environment for a sound commercial development of HQ's generation activities.

HQ's very favorable business position risk attributes, again absent the provincial guarantee, somewhat reduce concerns over the Company's very poor credit metrics and support the low-investment grade rating. Qualitative factors positively influencing on Hydro-Québec credit rating include:

- low-cost hydro-based generation with considerable hydroelectric storage capacity
- regionally-focused investment strategy to expand customer service across broader energy market and well positioned to benefit from trend in energy convergence
- open access to U.S. electricity markets
- **e**xpected stability of cash-flows and projected cash flow surpluses available for potential debt reduction

### *Low cost hydro-based generation with considerable hydroelectric storage capacity*

HQ's low power costs achieved through primarily hydroelectric generating facilities creates strategic advantages. HQ operates one of the largest systems in North America for the generation, transmission, and distribution of electric power. Generating capacity is almost entirely hydro based, the most cost efficient form of energy generation, and contributes to one of the lowest cost structures in Canada. Hydro-Québec has almost unlimited water storage capacity, which provides for strategic energy trading. This allows HQ to buy low cost power during off peak periods and sell self-generated power at higher rates during peak demand periods to maximize the export revenues. In addition, the storage capacity greatly simplifies its own peak shaving needs, since hydro generation is simple to turn on and off.

## *Regionally-focused investment strategy to expand customer service across broader energy market and well positioned to benefit from trend in energy convergence*

With its indirect investment in Gaz Metropolitain, HQ is in a good position to benefit from the trend towards energy convergence. HQ reorganized its legal structure several years ago to manage its growing number of business initiatives. The primary subsidiaries through which it engages in activities outside its mandated role as primary electricity provider to the province of Québec are described thereafter. Pursuing a moderate to conservative risk profile, HQ has expanded its initiatives outside North America in the past year from asset ownership to predominately fee-based endeavors.

**Hydro-Québec International** engages in the development of energy-related projects in international markets, including the exports of technological knowledge. HQ's international presence includes Asia, Latin America, and Africa.

**Société d'énergie de la Baie James** provides engineering, construction, and rehabilitation services for hydroelectric and thermal projects around the globe.

**Hydro-Québec Capitech**, formerly known as Nouveler, invests as a partner in energy technology companies and their related products. It also manages HQ's non-strategic investments and provides management services for strategic subsidiaries.

**Noverco**, in which HQ has a 41% ownership interest, is a holding company that controls Gaz Métropolitain and other companies involved primarily in the transmission and distribution of natural gas.

HQ has also transferred its transmission grid in 1997 to a separate division, TransEnergie, which is managed independently from its electricity generation assets, making the provincial grid accessible to all energy suppliers on equal terms. This move was essential to gaining a US power marketing license.

## *Open access to U.S. electricity markets*

HQ obtained a FERC power marketing license in 1997, which has enhanced its access to U.S. markets. In return, the Utility had to grant U.S. utilities reciprocal (wholesale) access within the province. However, HQ did not give up very much, since:

- it will be difficult for U.S. electric utilities to compete against its low cost hydro based energy, particularly when one considers that electricity rates in the U.S. Northeast at average US 9¢-US 11¢ per kWh
- the relatively low Canadian dollar gives HQ a competitive advantage over U.S. electric utilities
- only about 4% of electricity in the province is distributed by third parties who can potentially buy from energy marketers.

In 1999, HQ sold 24.7 TWh of electricity to customers outside of Québec, an increase of 32.8% compared to 1998. A large number of these wholesale contracts will expire in 2001-2002, but the potential loss of revenues will be somewhat offset by increasing retail demand within Québec and additional short-term and spot wholesale sales.

### *Expected stability of cash-flows and projected cash flow surpluses available for potential debt reduction*

Arising from its new "business-first" vision, Hydro-Québec is focusing its strategies on growth, the development of new markets and the commercialization of research and development activities, while preserving low and stable rates for Québec customers. These strategies have recently yielded sustained growth in revenues and improvement in profitability and cash flows. This positive cash-flow trend is expected to continue in the near future and beyond as HQ develop further its businesses.

HQ has been able to annually refinance about $2 billion in maturing debt at progressively lower coupons, thereby reducing interest expenses and improving profitability. Earnings should continue to benefit from this trend over the medium term given HQ debt maturity.

## Quantitative Analysis

Credit rating agencies measure financial strength by a utility's ability to generate consistent cash flow to service its debt, finance its operations, and fund its investments. The focus is typically on a utility's financial results for the last five years and on pro forma, five-year projections. The four measures used are:

- profitability
- capital structure
- cash flow
- financial flexibility

Hydro-Québec has weak credit metrics that are somewhat offset by the Company's very favorable business position risk attributes. The weak credit metrics can be summarized as follows:

- low profitability and return on equity over the past decade
- highly leveraged capital structure and low debt service coverage ratios relative to investor-owned utilities
- domestic rate frozen until 2002 (and maybe beyond) and earnings sensitive to water levels
- competition in the North American energy market (natural gas, etc.) and international operations

### *Low profitability and return on equity over the past decade*

HQ has experienced very low profitability over the past decade due to consistently high debt levels, with interest costs currently equal to about 39% of total revenues, down from a peak of 48% in 1991. By comparison, interest costs of the private sector utilities, which have considerably stronger balance sheets, ranged between 10-15% of revenues over the same period.

### *Highly leveraged capital structure and low debt service coverage ratios relative to investor-owned utilities*

With debt levels of about 74% (better than the 85% average typical of government-owned utilities), Hydro-Québec has a weak balance sheet, particularly in comparison to the approximate 60% average typical of investor-owned utilities. This has resulted in consistently weak interest coverage ratios.

### *Domestic rate frozen until 2002 (and maybe beyond) and earnings sensitive to water levels*

HQ has had to maintain very competitive electricity rates in the province in order to retain market share in the province of Québec energy market. Given the hydro-based nature of generating capacity, HQ's earnings are sensitive to water levels. HQ must manage reservoir levels to ensure that earnings are not adversely affected by abnormally low water levels.

### *Competition in the North American energy market (natural gas, etc.) and international operations*

Natural gas, which can be used to generate electricity or as and alternative form of energy, remains a competitive threat that continues to pressure electricity rates in the province. More recently, the development of Sable Island gas reserves, and the construction of the Maritimes and Northeast Pipeline and the Portland Natural Gas Transmission System have extended this competition threat into export markets in the U.S. northeast.

Hence, in summary, HQ percentage of debt in the capital structure is quite high and cash flow-to-interest coverage is very weak. Moreover, the absolute level of cash flow is very small relative to the amount of debt in the capital structure. Debt leverage greater than 60% is viewed to be aggressive for the Baa3/BBB- rating category. This high level of debt is not expected to be aggressively reduced in the near term since internally generated cash flows fund about 61 % of HQ's expected capital expenditure and long-term debt maturities for the period 2000 to 2004.

S&P's provide the following approximate benchmarks for electric utilities:

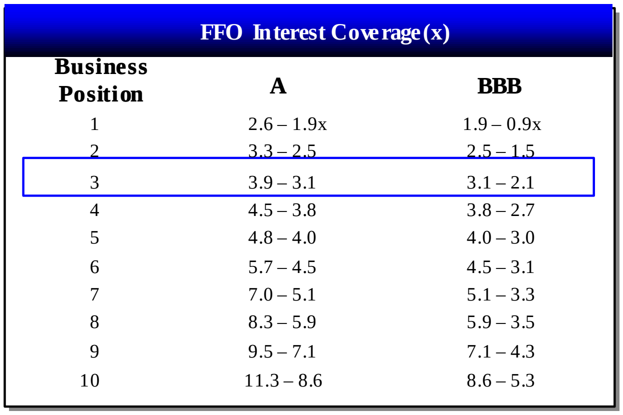
**Financial Ratio Medians**

| | FFO Interest Coverage (x) | | FFO to Total Debt (%) | | Total Debt to Capital (%) | |
|---|---|---|---|---|---|---|
| | **A** | **BBB** | **A** | **BBB** | **A** | **BBB** |
| **Generators** | **7.1** | **4.7** | **48** | **35** | **39** | **47** |
| **T & D Cos** | **3.5** | **2.6** | **23** | **17** | **55** | **62** |
| **Integrated Cos** | **5.1** | **3.8** | **35** | **25** | **43** | **50** |
| **Hydro-Québec** | **1.9** | | **7.4** | | **74.1** | |

HQ's business profile combined with the above financial ratios points us towards a low end of a BBB/Baa rating if the utility was on a stand-alone basis without a provincial guarantee. At a low BBB level, most U.S. integrated companies comparable to Hydro-Québec have debt levels near 60%. In general, the riskier power generation can carry less debt than the stable transmission/distribution.

## Quantitative Analysis – Business Profiles vs. Group Benchmarks

The group benchmarks presented in the following tables relate to an electric utility with a business profile of '3' for a given credit rating of "A" or "BBB". As mentioned before, Hydro-Québec is well below all quantitative benchmarks but compensate by a lower overall risk profile.



**FFO Interest Coverage (x)**

| Business Position | A | BBB |
|---|---|---|
| 1 | 2.6 – 1.9x | 1.9 – 0.9x |
| 2 | 3.3 – 2.5 | 2.5 – 1.5 |
| 3 | 3.9 – 3.1 | 3.1 – 2.1 |
| 4 | 4.5 – 3.8 | 3.8 – 2.7 |
| 5 | 4.8 – 4.0 | 4.0 – 3.0 |
| 6 | 5.7 – 4.5 | 4.5 – 3.1 |
| 7 | 7.0 – 5.1 | 5.1 – 3.3 |
| 8 | 8.3 – 5.9 | 5.9 – 3.5 |
| 9 | 9.5 – 7.1 | 7.1 – 4.3 |
| 10 | 11.3 – 8.6 | 8.6 – 5.3 |

| Total Debt/Total Capital (%) | | |
|---|---|---|
| **Business Position** | **A** | **BBB** |
| 1 | 55.0 – 60.5% | 60.5 – 67.5% |
| 2 | 51.0 – 56.5 | 56.5 – 63.5 |
| 3 | 47.5 – 53.0 | 53.0 – 61.0 |
| 4 | 43.0 – 49.5 | 49.5 – 57.0 |
| 5 | 41.5 – 47.0 | 47.0 – 55.0 |
| 6 | 39.5 – 46.0 | 46.0 – 53.5 |
| 7 | 39.5 – 45.0 | 45.0 – 52.5 |
| 8 | 35.0 – 43.0 | 43.0 – 51.5 |
| 9 | 30.0 – 39.0 | 39.0 – 47.5 |
| 10 | 24.0 – 33.0 | 33.0 – 40.5 |

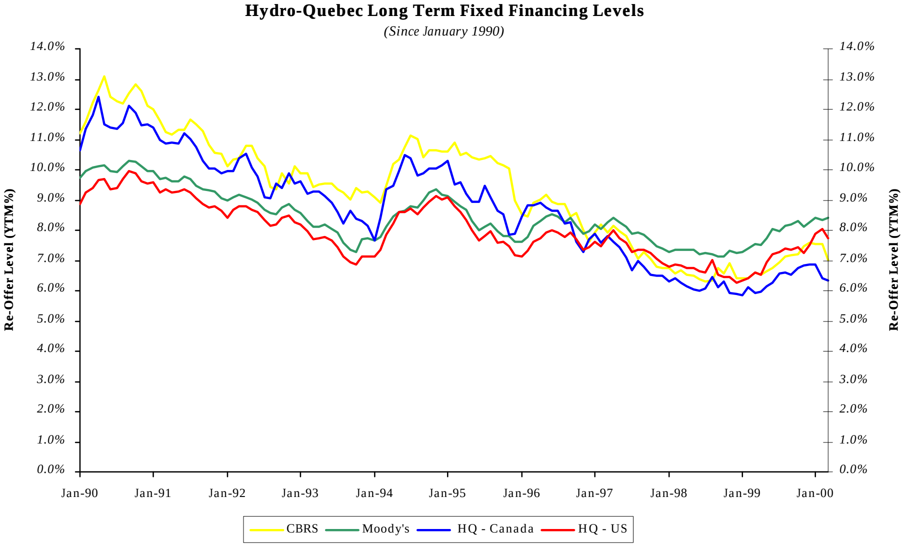
| FFO/Total Debt (%)) | | |
|---|---|---|
| **Business Position** | **A** | **BBB** |
| 1 | 16.5 - 12.5% | 12.5 – 7.0% |
| 2 | 21.0 – 16.0 | 16.0 – 10.5 |
| 3 | 26.0 – 20.0 | 20.0 – 14.0 |
| 4 | 30.5 – 24.5 | 24.5 – 17.5 |
| 5 | 33.0 – 27.0 | 27.0 – 20.5 |
| 6 | 39.0 – 31.0 | 31.0 – 22.0 |
| 7 | 47.0 – 36.5 | 36.5 – 24.5 |
| 8 | 55.0 – 42.5 | 42.5 – 27.5 |
| 9 | 64.5 – 49.5 | 49.5 – 32.0 |
| 10 | 78.0 – 60.5 | 60.5 – 39.0 |

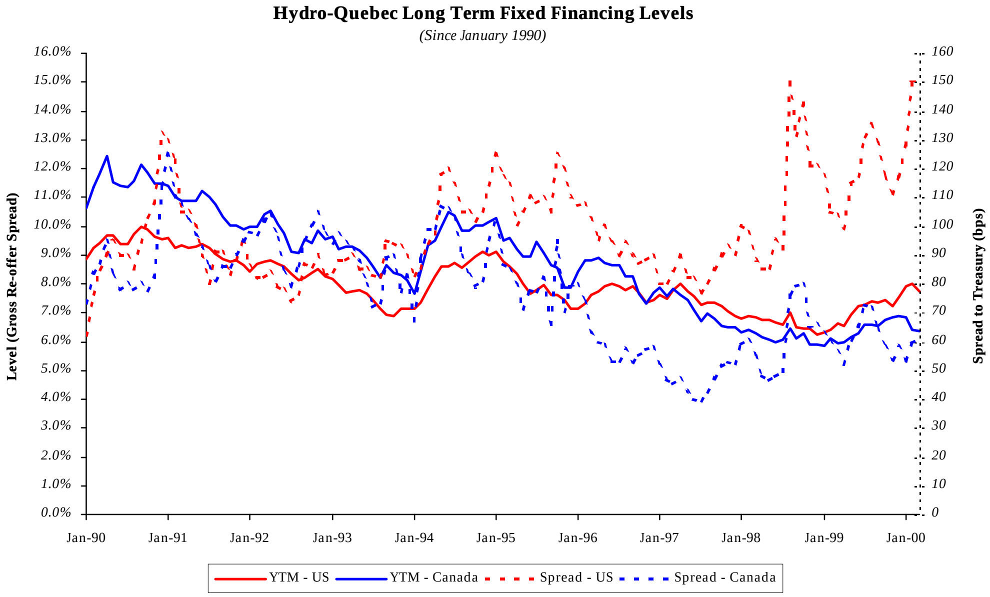
## Hydro Québec's Borrowing Cost Without the Guarantee

In order to opine on Hydro-Québec's theoretical borrowing cost without the government guarantee, Merrill Lynch has analyzed Hydro-Québec bond trading levels in the secondary market for a period of 10 years, i.e. from January 1990 to January 2000 and compared these trading levels to levels shown in Moody's Bond Indices "Average Yield of Utility Bonds rated Baa" and CBRS's "Canadian Bond Yield Averages for B++ Utilities".

We have limited our analysis over a 10 year period because Hydro-Québec's guarantor, the Province of Québec, was better rated in the early 1990's. Therefore, the spread differential between Hydro-Québec bonds (with the guarantee) and BBB utilities would be greater. Ten years is a sufficient period of time to encompass different economic cycles and market conditions.

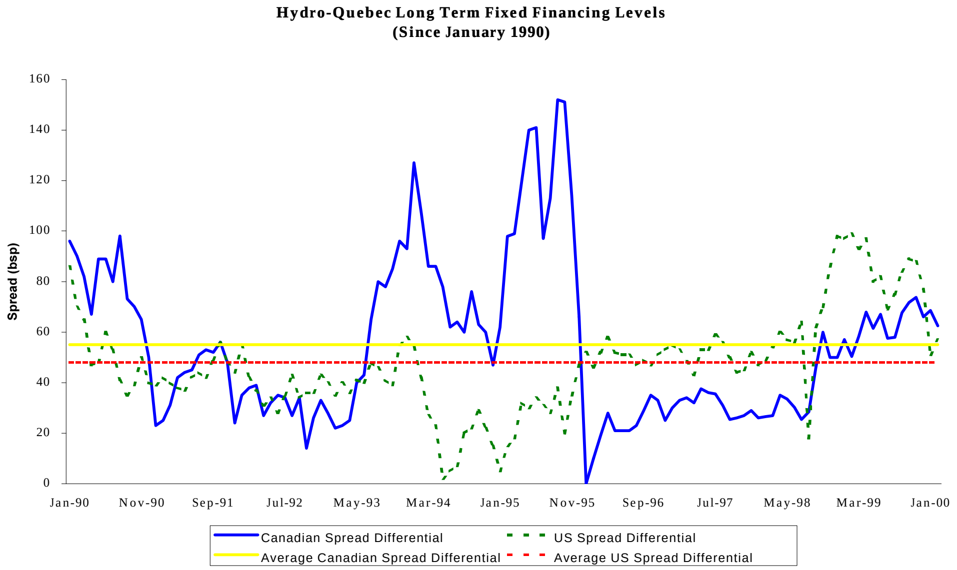
Merrill Lynch has found that from January 1990 to January 2000, Hydro-Québec's long-term borrowing cost in the Canadian or US markets with the guarantee from the Province of Québec (expressed as a spread over the corresponding government benchmark yield) was, on average for this period, of at least 50 bps less than what a Baa (Moody's)/B++ (CBRS) rated utility would have paid.





**Hydro-Quebec Long Term Fixed Financing Levels**

*(Since January 1990)*



**Hydro-Quebec Long Term Fixed Financing Levels**

**(Since January 1990)**

Although we have made a comparison of Hydro-Québec's long term borrowing cost in the Canadian market with what a B++ rated utility would have paid, it doesn't mean that a B++ issuer would have had the same access in terms of volume and frequency of issuance to Canadian capital markets that HQ enjoyed over the year. In fact, we express doubts that Hydro-Québec would have had the same access to Canadian capital markets with a B++ rating.

## Appendix

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# The Fair Return Standard for Return on Investment by Canadian Gas Utilities:

## Meaning, Application, Results, Implications

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**Former Chair of the National Energy Board**

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## Acronyms and Abbreviations

| | |
|---|---|
| AAM | Automatic adjustment mechanism |
| Alberta Board | Alberta Energy and Utilities Board |
| ATWACC | After-tax weighted average cost of capital |
| AUC | Alberta Utilities Commission |
| BC Commission | British Columbia Public Utilities Commission |
| BCUC | British Columbia Utilities Commission |
| California Commission | California Public Utilities Commission |
| CAPM | Capital asset pricing model |
| CE | Comparable earnings |
| CPUC | California Public Utilities Commission |
| DCF | Discounted cash flow |
| ERP | Equity risk premium |
| EUB | (Alberta) Energy and Utilities Board |
| FCA | Federal Court of Appeal |
| FRS | Fair return standard |
| LDC | Local distribution companies |
| Manitoba Commission | Manitoba Public Utilities Commission |
| MPUB | Manitoba Public Utilities Commission |
| MRP | Market risk premium |
| NGTL | NOVA Gas Transmission Ltd. |
| NEB | National Energy Board |
| NERA | National Economic Research Associates |
| Northwestern | *Northwestern Utilities Ltd v. Edmonton* [1929] S.C.R. 186 |
| OEB, Ontario Board | Ontario Energy Board |
| Régie | Régie de l'énergie (du Québec) |
| RfD | Reasons for Decision |
| ROE | Rate of return on equity |
| SCC | Supreme Court of Canada |
| TCPL, TransCanada | TransCanada PipeLines Ltd |
| TQM | Gazoduc TransQuébec & Maritimes |

## Executive Summary

**The meaning of the Fair Return Standard (FRS)** Canadian governments responded to the growth of the gas business and the potential for abuse of dominant position in it by placing utilities under the jurisdiction of administrative tribunals. In theory, the extent of this regulation is unlimited. In practice it is constrained by the Constitution Act and by Common Law.

The Supreme Court in *Northwestern Utilities Ltd v. Edmonton* [1929] S.C.R. 186 (Northwestern) defined the scope of the utilities' right to price their product and their right as a result to a fair return. The Court stated "By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise". This definition remains in full legal effect today.

A fair rate of return to the corporation is paramount and is all that can be considered in arriving at a fair rate. In the unrealistic situation that a fair return worked a hardship on the consumer, the choices before government to provide relief are unlimited but they should not lower the fair rate of return. Indeed the Federal Court of Appeal (FCA) in *TransCanada PipeLines v. Canada National Energy Board* 2004 F.C.A. 149 confirmed that a fair return need not be modified out of deference to its impact upon customers.

As the operations of regulated utilities have become larger and more complicated, the courts have developed the view that a selected board of experts could deal more effectively with the rules of rate making than could the courts on appeal. Therefore, as long as the board in question acted within their jurisdiction, a successful appeal was unlikely. Notwithstanding the breadth of discretion afforded a regulator in establishing just and reasonable rates, the mutuality of interest between utilities and their customers nevertheless requires that a fair return be provided for the services rendered. The legal framework governing the determination of that fair return is the "Comparable Return Standard". It does not mandate any particular approach to that fair return.

**The application of the FRS** The current generic approach by Canadian regulators to gas utility rates of return on equity (ROE) awards pursuant to the FRS evolved after a long period in which regulators applied informed judgment to extensive evidence about a variety of tests. During that period, differing weights were given to the results but, with the exception of one jurisdiction and one test[1], none was ever permanently discarded. Over the years however, greatest reliance came to be placed on the equity risk premium (ERP) model.

With the passage of time, the phenomenon of successive protracted proceedings, eliciting similar evidence, stimulated the search for a generic approach. From the mid-1990's Canadian regulators accreted around the concept of an ROE for a benchmark utility based on an ERP over a risk-free rate, the resulting base-year award then being adjusted annually by a predetermined automatic mechanism. This is the essence of the generic ROE, now adopted for the regulation of that component of all major gas pipeline and distribution utilities' revenue requirements.

**The results of regulators' current application of the FRS** The number and duration of rate proceedings has been significantly reduced and in certain jurisdictions the way has been paved for long-term settlements, some of which have made provision for sharing of efficiency gains between customers and owners.

The Canadian approach to return matters stands in strong contrast to that in the USA, with which Canada shares the long tradition of cost of service utility regulation. There, in accordance with essentially similar jurisprudence, the fairness of return on investment is evaluated against the opportunity cost of capital.

While settlements are also common in the USA, American regulators have not pursued the generic ROE approach but instead maintain case by case reviews, emphasize the important role of informed judgment, entertain a variety of evidence, but tend to the discounted cash flow method (DCF) as the default mechanism for their fair return findings.

In the NEB generic ROE era, no new pipelines have applied for tolls based on that determination of ROE. Instead, new projects such as Alliance, Emera Brunswick, Maritimes and Northeast, and Mackenzie Valley have all come before the Board with negotiated tolls based on significantly higher ROEs. This suggests that the NEB's generic ROE is insufficient to attract capital to greenfield gas pipeline projects.

**The implications of this application of the FRS** The now-universal generic ROE approach by Canadian regulators of major gas utilities has created some regulatory economies. But unfortunately its mechanistic character suspends for lengthy periods the previously-valued application of informed judgment to the results of alternative methods of achieving the FRS required by Canadian jurisprudence in ROE awards.

A wide and unprecedented gap has developed between Canadian gas utility ROEs and those of USA utilities and of North American low risk industrials. This is factual ground for concluding that the FRS, essentially the opportunity cost of capital needed to ensure financial integrity and capital attraction, is no longer being achieved by the generic ROE approach.

Canadian regulatory convergence on the generic ROE may however inhibit its necessary reappraisal because particular regulators may be reluctant to break ranks with the group and because the consensus around an approved generic ROE is widely supported by stakeholders[2], for reasons of regulatory efficiency and short term economic self-interest.

It would be helpful if, at the same time as specific cases occasionally come before individual regulators[3], some further studies of general relevance were to be carried out. For example, examination is recommended of the results, *ex post*, of the generic approach in terms of the comparability of the resulting returns with non-utility and utility comparators and of the fundamentals of the present design including the choice of the risk-free rate; the appropriate measurement of the risk-premium; the adjustment mechanism; and the place of the DCF model which is accepted by the great majority of North American regulators.

## Introduction

The Canadian Gas Association (CGA) Discussion Paper "Return on Equity: Allowed Returns for Canadian Gas Utilities"[4], highlighted the importance of a "fair return" in supporting investments for the long term strength of the nation's natural gas grid. The paper went on to summarize the origins and evolution of Canada's "fair return standard". The paper noted that Canadian gas utilities are not now receiving allowed returns comparable with those of U.S. gas utilities or low-risk unregulated companies. As a result, Canadian utilities, it stated, are treated unfairly and may be inhibited from offering a robust optimal system that would provide the highest quality of service today and would be properly oriented towards a sustainable energy future.

Against that background, the Association asked the present authors, who had provided advice in the drafting of the Discussion Paper, to expand on some of the issues raised in it, particularly the identified need for the policy community and regulators to ensure that allowed returns remain fair and appropriately reflect the significant changes in their foundational elements such as comparable earnings.

In response, the authors provide here an examination of the meaning of the FRS in jurisprudential terms, discuss its application by Canadian regulators over the decades, review the results of the convergence since the mid-1990s on a generic approach to returns on equity and consider the implications of that approach for the future health of Canada's gas utility businesses. As to the application of the FRS, regulators have received thousands of pages of evidence and written hundreds summarizing it, providing their views and setting out their reasons for decision. Our discussion is necessarily a selective and summary one.  However, we hope not to have omitted any point of fundamental significance.

## 1. The Jurisprudential Meaning of the Fair Return Standard

**The inception of utility regulation in Canada** The introduction of utility regulation by governments was grounded in the view that the activity had evolved into a number of sufficiently large corporations operating in a business characterized by natural monopoly and therefore capable of exerting market power to the detriment of consumers.

History demonstrated a number of methods of control available to the authorities. In response to concerns about the monopoly power wielded by Standard Oil, the United States introduced anti-trust legislation which led to its massive restructuring into a number of smaller corporations, forcing increased competition. The result was re-organization of their position from virtual dominance of the sector to competition among the newly formed corporations. Similar experience occurred in diminishing the dominant areas in steel and railroads.

Canada, because of its size in terms of population and domestic product, chose to remove the actual or feared problem of monopolies in the utility field either by use of legislative regulation or by Crown ownership.

In the context of regulation, some economists express the view that a regulator serves as a surrogate for competition in terms of the regulated company's potential dominance of a particular activity. While this may not be a complete explanation of the public purpose, it is a useful analogy. The pertinent and difficult question is what should these regulated companies be entitled to charge their retail, commercial and industrial customers so as to ensure safe and modern service in exchange for a fair return on shareholders' capital?

**Regulatory responsibility conferred on administrative tribunals** The history of the natural gas industry is a relatively short one: it is only in the early part of the 20th century that independent commercial use started to visibly develop.

As privately-owned utilities started to evolve into fewer but larger companies capable of exerting market power, the response of Canadian governments was utility regulation under which administrative tribunals were given the jurisdiction to regulate private utility companies falling under their mandate. By and large, however, Crown-owned utilities were not regulated in the conventional way since their corporate governance was taken to be enlightened by the government's perception of the pubic interest of the day.

The recognition of the value of natural gas as a legitimate alternative to electricity and fuel oils as an energy source, and the need for such control, raised a number of regulatory and constitutional issues.

As a preliminary point, it is obvious that the constitutional division of powers dictated by sections 91 and 92 of the *British North America Act* divided the regulatory responsibility between the Federal and Provincial governments. This is a separate subject, capable of extensive comment, but it is sufficient for this paper to say intra-provincial activity fell to the Provincial Legislatures and extra-provincial activity to the Federal Parliament.

**Constraints on the extent of regulation** In Canada, the extent to which governments choose to regulate is theoretically unlimited. The absence of property rights for corporations makes them vulnerable to draconian legislation, if our governments so choose. However, the courts have recognized Common Law rights that co-exist with the Canadian Charter of Rights and Freedoms. Expropriation without compensation offends the Common Law rights of persons and corporations and is unknown to have occurred in Canada except for some unusual circumstances during war time.

The full reach and restraint by the Constitution Act or Common Law as they affect persons and corporations is beyond the narrower scope of this paper. It is sufficient to state that the rights are real, recognizable and enforceable.

**Jurisprudence concerning utility rates—the fair return standard** The important test of the prices or rates to be paid by consumers of natural gas supplied by a public utility has been established by our highest court, the Supreme Court of Canada (SCC). The Court confirmed the right of the companies to price the product within the confines of a fair rate of return on investments for the shareholder.

The SCC defined the scope of that right in 1929 and it remains in full legal effect today. It is consistently referred to and followed. The right to a fair return, and what it is, was defined by the SCC in *Northwestern Utilities Ltd. V. Edmonton,* [1929] S.C.R. 186 where Mr. Justice Lamont stated:

> “The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested. By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company’s enterprise”.

The importance of maintaining safe and reliable service requires a fair return as defined by Mr. Justice Lamont. The consumer has grown accustomed to a high standard in the delivery of gas services. Humanly, they are used to both the high quality of product and service. Equally human, they balk at rate increases while knowing that to avoid deterioration in service, timely increases are necessary.

**“Fair return” vs. fairness to the consumer** While it has not yet happened, if providing a fair return to utilities as defined by the courts results in hardship for the consumer, how should it be resolved? The greater good is served by the application of Mr. Justice Lamont’s definition. The language found in most legislation refers to words such as rate fair to the corporation and consumer. Fairness to the consumer in that sense is redundant. A fair rate of return to the corporation is paramount and is all that can be considered in arriving at a fair rate. The fair rate by logic alone should be deemed of necessity fair to the consumer.

That a fair rate of return would be a hardship on the consumer is practically unrealistic. It is academic and an unlikely result. An increase in rates is always unwelcome. If the rate rose to a hardship, some government intervention should be expected or the regulator may adjust the rate design while still ensuring the provision of a "fair return" to the utility. The point is that there are choices for relief, such as subsidies or a rate design short of lowering the fair rate of return. If hardship is the consequence of a fair return, nonetheless, the fair return must be set. Failure to do so over time will, as we have collectively seen, lead inevitably to the deterioration of, and in the extreme case, the failure of service and supply.

The Federal Court of Appeal (FCA) recently restated the principles of a fair return in *TransCanada PipeLines v. Canada National Energy Board* 2004 F.C.A. 149, where it confirmed the logic of Mr. Justice Lamont's definition by confirming that the fair return need not be modified out of deference to its impact upon customers. A fair return assures the opportunity to earn a level of profit equal to a comparable return from business of similar risk, although flexibility by which the ultimate tolls are designed may mitigate clear hardship or unfairness to consumers. However, by definition, a fair return should not result in these consequences.

Consumers and those outside the industry frequently forget or never considered that while utilities are by law always entitled to a fair return, it is a limited blessing in that higher earnings in buoyant times are not available to the utilities. There are no windfall profits such as may arise in other parts of the energy sector. It is only logical that the other side of that equation applies and a fair rate of return must also be allowed in less prosperous economic times.

**Judicial review of regulatory awards** The right to a fair return is one foundation of utility jurisprudence. Of concern is the growing development of the law that demonstrates a reluctance of the courts to review regulatory awards.

Until the 1930s, judicial review was more common as the courts viewed it their role to protect the public's interest. However, as Canada's industrial base grew and the operation of regulated utilities became both larger and more complicated, the view developed that a selected board of experts could deal more effectively with the rules of rate-making than the courts so long as the board in question acted within their jurisdiction, a successful appeal was unlikely.

The concept of judicial review was more elaborately defined by the SCC in *Pushpanathan v. Canada (Minister of Citizenship and Immigration),* [1998] 1 S.C.R. 982, where in summary it held that judicial review was identified by three tests. First, was the decision reasonable, second was the decision patently unreasonable and finally was the decision correct in law. It was only the latter, correct in law test, which receives a judicial welcome. It is the present law that a decision by the board must, if a question of law be correct any other finding or decision of the board must be patently unreasonable before judicial review is available.

The human concern by applicants of regulatory boards is the question of bias and fairness. A board that is neither can mouth the established fair return definition but not accept the applicant's facts. It is obvious that a fair return is dependant on the facts accepted by the Board and, except in extreme circumstances, the courts will not interfere. For fairness to occur dictates good faith by all participants.

Notwithstanding the breadth of the discretion afforded a regulator in establishing just and reasonable rates, the mutuality of interest between utilities and their customers nevertheless requires that a fair return be provided for the services rendered. The term just and reasonable does not displace the common law standard, rather it supports it (NWL 1929; TCPL 2004; see also *Ottawa Electric Railway Co. v. Nepean Township* (1920), 605 S.C.R. 216 at QL5, 11-12; *Chastain v. British Columbia Hydro and Power Authority* (1972), 32 D.L.R. (3d) 443 (C.C.S.C.) McIntyre J. at p. 454-456; *Re City of Dartmouth* [1976], N.S.J. No.457, 17 N.S.R. (2d) 425, MacKegan C.J. at QL para 11). As the Federal Court of Appeal most recently expressed it, failure to observe the fair return standard would result in tolls that are not just and reasonable. In some cases, the courts confirmed that the fair return need not be modified out of deference to its impact upon customers.

**Conclusion** Accordingly, it can be seen that the legal framework governing the determination of a fair return is the "Comparable Return Standard". It does not mandate any particular approach to the determination of a fair return. The courts have recognized the regulators' expertise in this area as superior to their own. What pervades the courts' approach to the determination of a fair return, however, is the mutuality of interest as amongst utilities and their customers in tying the availability of a fair return to the long term viability of the utility in providing the essential monopoly services our society requires.

The latitude given boards to set rates includes the ability to rely on a formula. It is unlikely that any one formula can fit all rates. A decision by a board that distorts fair return by the application of a formula that achieves that result poses the obvious risk of being incorrect at law and subject to judicial revision on that ground, a result any board would seek to avoid.

## 2. Application

**The place given to the Lamont decision** In their decisions on ROE[5], Canadian gas utility regulators[6] have seldom made explicit reference to the Lamont decision (Lamont). There have been important exceptions. Thus, in its seminal first decision on TransCanada's rates, the National Energy Board (NEB) in 1971 stated that it had been guided by relevant jurisprudence, as well as by its understanding of the [NEB] Act and then cited the "fair return" portion of the Lamont decision[7], followed by other now familiar cases, Canadian and American. Then, some 30 years later, in dealing with an application for review and variance of its 1995 decision on Cost of Capital[8], the Board noted that the applicant had cited Lamont and it went on to summarize the key elements of that decision, stating that in considering the legal framework associated with the determination of a fair return, the Board had looked at both prior judicial and Board consideration of the issue[9]. That 2002 decision was the subject of an application for review and variance and, in addressing the fair return standard, the Board in 2003 examined its legal obligations and again cited Lamont along with other Canadian and American jurisprudence[10]. Finally, in dealing in 2005 with an application for new tolls, the Board summarized the evidence and provided its views on the legal framework for determining a fair return, giving attention to Lamont and other cases[11]. The Alberta Energy and Utilities Board[12] (EUB, Alberta Board) in its landmark July 2004 decision on the Generic Cost of Capital, as part of its consideration of the legislative and judicial framework, examined relevant decisions, Canadian and American, starting with Lamont[13].

**Lamont is present, whether explicitly so or not** Despite the scarcity of specific references, it is nevertheless reasonable to assume that, while acting in accordance with their respective legislative mandates, all Canadian regulators in making ROE awards to gas utilities have recognized the jurisprudence relating to fair return, and specifically the Lamont decision, whether they have said so or not. In addition to the Lamont test of "comparable investment" or opportunity cost of capital, drawing on American jurisprudence[14], regulators have concluded that, in order for a return to be fair, it must also meet the tests of "capital attraction" and "financial integrity"[15]. In this connection, the Régie de l'Énergie du Québec (Régie) has in several decisions accepted the view that the cost of capital must be evaluated on the basis of the fundamental principle of the market opportunity cost of capital and that the rate of return must allow the regulated entity to assure and maintain its capacity to attract funds under reasonable conditions[16]. In other cases, intervenors have drawn regulators' attention to the Lamont text[17]. In still others, the regulator has referred obliquely to the objectives of fairness and capital attraction[18].

**The traditional approach to ROE determinations** Prior to the mid-1990's, the practice of Canadian gas utilities was to make rate applications, often every one or two years[19], generally requiring re-determination of their ROEs as one component of the total revenue requirement that could be recovered in rates. In these proceedings, as the Ontario Energy Board (OEB) has noted, four main approaches were traditionally used by experts to establish a fair ROE. The Comparable Earnings Test (CE), Discounted Cash Flow (DCF) test, Capital Asset Pricing Model (CAPM) and Equity Risk Premium (ERP) test [20], are all used in varying degrees to formulate an opinion regarding a fair return to investors for the test year. Parties, the OEB observed, have generally relied on a combination of these models to establish a utility's ROE. In a combined approach, the OEB and experts before it have assigned different weights to the results of the various tests in order to give more significance to those models which they consider to be the most relevant[21].

Within the compass of what must be a relatively short paper, it is impossible to trace the outworking of this approach by each of the Canadian gas utility regulators. However, successive NEB Reasons for Decision respecting TransCanada PipeLines' rates illustrate how this approach was followed by one regulator over the quarter century to 1994.

That Board, like others, was careful from the start to point out that "The final conclusion as to what is enough but not too much in the way of return is not precisely supportable on a mathematical basis."[22] "Many tests and techniques for assisting the process of reaching a just decision have been used" the Board said "but no single test is conclusive, nor is any group of them definitive: whatever tests may be used, in the last analysis the adjudicating body can not escape the responsibility of exercising judgment as to what, in a stated set of circumstances, is a just and reasonable return or rate of return, or what is a range of justness and reasonableness of return or rate of return."[23] Such reference to the necessity of the exercise of judgment in making return awards is a recurring theme in Canadian regulatory decisions over the years.[24]

**Diversity of tests applied in the traditional approach** Reverting to the NEB's practice, in the early years of the Board's "active" regulation of TransCanada's tolls, comparable earnings appear to have been at the centre of its attention. Thus: "The Board concludes, based primarily on the comparable earnings analysis of Canadian industrials which are reasonable alternative investment opportunities for the applicant's shareholders, that a return of…is appropriate for the test year…"[25] In an oil pipeline rate case about this time, there was applicant evidence "…that statistics relating to US utilities and industrials deserve perhaps a greater weight in the assessment of the current cost of equity capital than similar Canadian statistics." The Board however disagreed and expressed the belief that "…far greater weight should have been given to Canadian data…Accordingly the Board was particularly interested in the statistics presented relating to Canadian industrials…"[26] and concluded "…that the cost of equity should be equal to or slightly less than the opportunity cost of investment in such companies."[27]

By 1978, the evidence put before the Board included CE and DCF tests, the latter to measure "capital attraction", but additionally the beginnings of the ERP approach appeared. The applicant, TransCanada, was cited to the effect that "…a reasonable ROE could also be inferred from an examination of the yield differentials maintained in the past between long term bonds and those of an equity nature in the regulated industry".[28]

However, in that particular case, the Board again stated that it paid particular consideration to "…the CE of Canadian industrials which it believes to be representative of reasonable alternative investment opportunities for the applicant's shareholders."[29]

**Over time, the ERP becomes the focus** By 1981, intervenor evidence was being filed before the NEB and it related to the DCF method while the applicant relied primarily on the CE test[30]. However, within a couple of years something of a pattern had been established that was to last until the mid-1990s with the applicant and one intervenor filing CE, DCF and ERP evidence while gas-producer intervenors were focussing their efforts on the DCF approach.[31] In assessing this spectrum of evidence, the NEB tended over time to place at first "slightly more" reliance on ERP, to find inherent distortions in the CE data that it received and to be concerned about the results of the DCF test. By the time of the last rate hearing prior to the generic cost of capital proceeding, the Board found that "…in the light of recent and prevailing financial market conditions, neither the DCF test nor the CE test currently yield reliable results…" Accordingly these tests were given little or no weight in the Board's decision" and instead the Board was of the view that "…the ERP was the primary measure of investors' required returns in the circumstances of this case." However, the Board was careful to state its view that these tests (CE, DCF) may prove useful under different economic conditions.[32]

This era during which Canadian regulators determined ROE awards by reviewing evidence from multiple tests and applying their own judgment was summarized for the British Columbia Utilities Commission (BCUC, the BC Commission) in evidence and referred to by the Commission in a 2006 decision[33] as follows:

> "The evidence is that up to the 1960s the principal methodology to determine fair rates of return was CE, as, according to Dr. Booth, the DCF method and the ERP method which was derived from the CAPM, were developed in the 1960s. By the 1980s all three methodologies were in use in Canada. In the early 1990s capital markets in Canada fell into considerable turmoil, causing DCF and CE to give unreliable results, which resulted
> in the ERP becoming the main, if not the sole, methodology used by regulatory bodies in Canada to establish fair rates of return…The DCF and CE methods have never managed to restore themselves to favour in regulatory bodies' eyes...In the United States the DCF and CAPM methods got their start in the 1970s and have survived nearly unchanged as the primary rate of return methods, with the DCF the virtual default method in practically all U.S. regulatory jurisdictions."[34]

**Search for a generic approach to ROE** The context for the search by Canadian regulators for a generic approach to ROE was characterized by: frequent rate applications; repetitive evidence, often provided by the same expert witnesses, on the three principal tests; growing disenchantment with the CE and DCF tests; and increasing reliance on the ERP approach. That search was led by the BC Commission which "…was the first regulatory agency in Canada to examine the applicability of a generic, formula-based approach to setting a natural gas or electric utility ROE as a means of improving the efficiency and effectiveness of the regulatory process."[35]

**British Columbia** In its June 1994 decision resulting from that search,[36] the BC Commission expressed the view that the DCF test was of little use in the present economic climate, that CE raised a circularity problem when it was based on utilities data and that primary reliance should be placed on risk premium tests, with CE and DCF as checks. The Commission's view was that generic hearings produce cost savings and better quality of evidence because a variety of experts are gathered at a single point in time. This view has been borne out by the subsequent experiences of, for example, the Alberta Board and the NEB.

**National Energy Board** When the NEB reported its generic return decision nine months later in March 1995, it found that CE was only useful as a check, that there were practical limitations on the DCF method and that most experts gave primary weight to the ERP, which the Board also did. Annual adjustments in the resulting ROE were to be in a ratio of 0.75 of the forecasted change in the yields of Government of Canada long-term bonds (long Canadas).[37] The NEB later referred to this as "the RH-2-94 formula".

**Manitoba** Two months after that, the Manitoba Board Public Utilities Board (Manitoba Board, MPUB) decided a gas distributor rate case, prior to which the applicant had proposed a mechanical formula to adjust the Board's then-currently allowed ROE. The Board approved a spread, effectively an ERP, between long Canadas and the ROE for the distributor and an adjustment factor of 0.80 of the change in the underlying long Canada bond yields.[38]

**Ontario** The OEB has since 1997 followed its own guidelines on a formula-based return on common equity for utilities under its regulation.[39] The initial setup involved establishing a just and reasonable return applicable to each of the Ontario local distribution companies. This base comprised a forecasted yield on long Canadas for the test year to which was added an appropriate premium. The primary methodological approach to be used in evaluating the appropriate risk premium was the ERP. The annual adjustment factor proposed was 0.75 of the difference between the forecasted long Canadas yield and the corresponding forecasted yield for the immediately preceding year. The OEB gave three reasons for adopting the formula approach to ROE. The first was regulatory efficiency, already mentioned. The second was the weight of experience of other Canadian jurisdictions which had reviewed the issue and adopted a formula-based ERP. The third was that it may provide a first step towards formulaic rate making such as incentive rates.[40]

**Alberta** Alberta was the fifth jurisdiction to adopt a generic approach, which was done by a decision of July 2, 2004. The award for 2004 was based on the CAPM estimate, which the Alberta Energy and Utilities Board (Alberta Board, EUB) found was supported by no less than seven other methods examined in evidence while the Board did not put any weight on four other methods, including DCF and CE.[41] In this connection it is worth noting that the Board took the position that the CE test is not equivalent to the (Lamont) comparable investment test. The Board observed that the CE test measures actual earnings on actual book value of comparable companies, however it does not measure the return "…it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise."[42] This conceptual concern was one of the reasons the Board gave to place no weight on the CE test. Nevertheless, the Board did consider that there may be other measures of comparable investments that should be considered in establishing an appropriate ROE. It went on to examine eight possible ones.[43] [44] As to the adjustment mechanism, the Alberta Board concluded that an adjustment to the generic ROE based on 0.75 of the change in forecasted long-Canada bond yield would be appropriate, beginning in 2005.[45]

**Québec** The Régie has since its decision D-99-11 of 10 February 1999 respecting a rates application by Gas Métropolitain, applied a *de facto* generic ROE based on the CAPM model with an annual adjustment equal to 0.75 of the forecasted change in the risk-free return.[46] This approach was reconsidered in 2007: the ERP was adjusted marginally upwards on the assessment that Gaz Métropolitan's risk had increased compared to that of the benchmark distribution utility. The adjustment mechanism was to be left unchanged through 2009. In the 2007 proceeding, the applicant introduced as an alternative to CAPM, for the first time in Canada, the Fama-French model, which is used in the financial industry, but so far used only once in the United States in the regulatory context and never before in Canada.[47] Even though the two models differ, the objective of both is to estimate the return an investor expects to earn on an investment in securities having a certain risk. The main difference between the two approaches is in the method used to express that risk which, the applicant contended, Fama-French does better than CAPM for utility-type businesses. The Régie however did not retain the Fama-French model for establishing the rate of return in this decision: the Régie considered that the application of that model to regulated enterprises has not been sufficiently examined to date to be used as a basis for fixing the rate of return of a distributor.[48]

**The generic approach reviewed and reconfirmed** Two of the regulators who pioneered the generic ROE with automatic adjustment mechanism (AAM)—the BC Commission[49] and the NEB[50]—subsequently reviewed their decisions of the mid-1990s. After again receiving and reviewing much expert testimony, in the NEB case on two separate occasions (2002, 2005), the established methodology was reconfirmed by both. Indeed, one considered that "It is clear the ERP methodology is the "gold standard" for Canadian regulators..." and stated that "…the Commission Panel will give primary weight to its application and results…"[51]

**A new test rejected** TransCanada recommended in the RH-4-2001 NEB proceeding that the Board adopt an After Tax Weighted Average Cost of Capital (ATWACC) methodology to establish a fair return for its mainline. This was a new methodology as far as the NEB was concerned and it rejected it, just as the Régie was in 2007 to reject the Fama-French test, and it reaffirmed the ERP.[52] [53]

**Legal obligation to apply the FRS?** In its consideration of the application for review of its 2002 decision (RH-R-1-2002), the NEB refuted the assertion of TransCanada that the Board "is required by law to apply the comparable investment, financial integrity and capital attraction standards to determine a fair return for the Mainline" as an overstatement of the law on this issue. The Board went on to note that in its decision which was under review (RH-1-2002), it had agreed that the three components of the FRS, along with the balancing of customer and investor interests should be attributes of a fair return. The Board further noted the statement it had made in RH-1-2002 that these principles are reflected in the various accepted methodologies to establish cost of equity capital, such as the ERP approach, which is the basis of the RH-2-94 Formula and that no one took issue with this statement. In the Board's view, it was implicit that the application of a test that reflects these standards would result in a return that meets these standards. Therefore, the Board did not have to state explicitly that the resulting return would meet the comparable investment, financial integrity and capital attraction standards. The Board stated that an express finding, such as was sought by TransCanada, which discharges the fundamental legal obligation of the regulator is not necessary when the standards that must be met are imbedded in the methodology used to determine the return. The Board also considered that there is no legal obligation to use an FRS, comprised of the comparable investment, financial integrity and capital attraction standards to determine tolls. Rather, in normal circumstances, a fair return established by the Board should meet those three elements. This, the Board stated, was accomplished through the methodology that was used to determine the return.[54] This issue was revisited in depth by the NEB in RH-2-2004, Phase II, which followed the decision of the FCA in TCPL v. NEB. The Board stated that it "…also agrees with TransCanada that the case law establishes that it is the overall return on capital to the company which ought to meet the comparable investment, financial integrity and capital attraction requirements of the fair return standard."[55] The Board went on to say that it is not required to meet the FRS by subscribing to any particular methodology or solely by examining evidence on overall return (TCPL had suggested neither). It concluded that it would ensure that each element going into the traditional methodology is "reasonable", then "…uses its judgment to ensure that the resulting return is a fair return in accordance with the legal requirements." [56] In summary, the NEB in RH-2-2004 Phase II accepted that the law requires application of the FRS, including the comparable investment, capital attraction and financial integrity standards, in determining the overall return, but does not stipulate any particular methodology for doing so.

**Risk-free rate critiqued** The applicant before the BC Commission in 2006 stated, in the words of the Decision, that "the theoretical CAPM assumes that the risk-free rate is uncorrelated with the return on the market. However, the application of the model typically assumes that the return on the market is highly correlated with the risk free rate, that is, that the equity market return and the risk-free rate move in tandem. Similarly, an ROE formula that is predicated on a close tracking between the allowed return and the risk-free rate assumes the risk-free rate and the return on the market are highly correlated. The theoretical CAPM calls for using a risk-free rate, whereas the typical application of the model in the regulatory context employs a long term government bond yield as a proxy for the risk-free rate. Long-term government bond yields may reflect various factors that render them problematic as an estimate of the "true" risk-free rate, including:

> • the yield on long-term government bonds reflects the impact of monetary and fiscal policy;
> • yields on long-term government bonds may reflect shifting degrees of investors' risk aversion; and
> • long-term government bond yields are not risk-free; they are subject to interest rate risk."[57]

This critique of the risk-free rate and the relationship of market returns to that rate, although recorded by the Commission, was not responded to in the Commission's decision.

**Convergence among Canadian gas utility regulators** Recent years have seen a rapid and complete convergence among the five Canadian utility regulators who have major gas distribution and transmission entities under their jurisdictions. All now base their ROE awards essentially on judgments as to an appropriate base year ROE for a benchmark utility. In every case, this base year award uses a risk free rate plus an ERP with, in some cases, an allowance for flotation costs. Subsequent annual adjustments are made mechanically on the basis of 0.75 of the changes in the forecasted long Canadas yields.[58]

**Insofar as incumbent utilities are affected, the generic ROE plus AAM is entrenched in Canadian regulatory practice—**Canadian regulators have in the last dozen years affirmed and reaffirmed the generic ROE based essentially on the ERP methodology as the sole method of awarding and, through the associated AAM, varying the returns on equity for gas utility investors. This position has withstood several review applications and one appeal to the courts. In one important case, as a result of a negotiated settlement, it cannot be reopened before 2012.[59]

**Contrast with American practice** This Canadian situation stands in sharp contrast with that in the USA with which Canada shares the tradition of cost of service utility regulation where the fairness of return on investment is evaluated against the opportunity cost of capital.[60] There, only two commissions undertook what turned out to be lengthy, expensive and ultimately unsuccessful searches for a generic solution. There is a longstanding seeming disinterest on the part of the American regulatory community in pursuing this search. Instead, where rate cases are not settled, U.S. regulators continue to rely on the application of judgment to multiple test results[61] with DCF as the default mechanism[62].

### 3. Results from the mid-1990s

**The number and duration of rate proceedings involving ROE evidence significantly reduced** In the period 1971-1994 inclusive, the NEB in respect of only one company, TransCanada, averaged one rate proceeding every 18 months. It is likely that, with TransCanada having now settled its tolls for the period 1 January 2007 through 31 December 2011, the similar hearings in the period 1995-2011 will turn out to have averaged one per eight years. Similar regulatory efficiencies affecting a large number of utilities, electric as well as gas, are being found by the principal provincial jurisdictions.

**In some jurisdictions, the way paved for long-term settlements of rate matters** The NEB's experience again furnishes an example. The Board's decision on a generic rate of return may have been a factor enabling TransCanada[63] and Westcoast Energy[64] to achieve their first multi-year negotiated settlements of remaining toll and tariff matters. Note that one of the objectives of both settlements was "to maintain ("or improve", in the case of TransCanada) the financial integrity…" of the pipeline company.[65] [66]

Regarding the Alberta Board, on the one hand a month after bringing down its Generic Cost of Capital decision in July 2004 approved NOVA Gas Transmission Ltd's (NGTL) application to commence negotiated settlement discussions. These eventuated in a settlement of all revenue requirement issues, return on equity being treated as a flow-through item, for the three-year maximum period allowed by the Board, commencing 1 January 2005.[67] On the other hand, prior to the implementation of the ROE formula, Northwestern Utilities and ATCO Electric both negotiated settlements. Since the introduction of the formula there have been no long term settlements other than NGTL.

The BC Commission has approved a Settlement Agreement for Terasen Gas for 2004-2007, incorporating a Performance-Based Rate Plan,[68] and subsequently approved its extension for 2008-2009.[69]

As to pipelines under the NEB's jurisdiction, two points are notable. First, settlements of toll issues have been the norm for oil pipelines since the mid-1990's. Second, all new oil and gas pipelines have applied for tolls, based on settlements, where the ROE exceeds that generated by the Board's generic formula, often by a generous amount.

**Transmission utilities' incentive agreements have provided for efficiency gains and sharing of those gains between customers and utility owners** Annual or biennial adversarial proceedings relating to ROE are for transmission businesses now a thing of the past. This may have encouraged and enabled parties to settlement negotiations to build-in to the resulting agreements features that encourage these pipelines to search for efficiencies with the prospect of retaining for the investor a share of those efficiencies. All of the negotiated settlements mentioned in the previous paragraph incorporate such features in one form or another. In a degree, these shared savings mechanisms have cushioned the impact of declining ROEs resulting from the application of the generic ROE decisions in an environment of declining bond yields. For example, in the letter to shareholders accompanying TransCanada's 1996 Annual Report, the management commented that there had been a one per cent decline in the rate of return on common equity allowed by the NEB in 1996. The letter went on to say "That one per cent represented a reduction in 1995 earnings of about $21 million that had to be made up. A substantial part of it came from discretionary revenue earned under an incentive agreement reached late in 1995 between TransCanada and its customers. Incentive regulation allows TransCanada to share in discretionary revenues and cost savings."[70] This cushioning effect may be available to some pipelines on a continuing basis, but in a regulatory context its results must not be seen as an element of a fair return. Fair return relates to the opportunity cost of capital. Earnings from incentive agreements are rewards for extraordinary cost-savings and for entrepreneurship in devising service offerings that create value for which shippers are willing to pay. As the Federal Court of Appeal reminded in the 2004 TransCanada decision,[71] the fair return must be determined independently of its impact upon resulting customer rates.

**But Canadian and U.S. regulators' ROE practices are now widely divergent after decades of essentially parallel approaches** Canadians have converged on the generic approach using essentially anticipated risk-free rates plus ERP and adjusting by a ratio to anticipated changes in risk-free rates. In the U.S., the federal and one state commission attempted to regularize the ROE component of rate cases, but failed to do so. One commentator has stated that "Efforts to make the process objective and mechanical are futile as an administrative and practical matter."[72] Instead, where cases are litigated, commissions continue to refer to the legal standards set by the landmark U.S. Supreme Court decisions in Bluefield and Hope. The regulators receive and access data from quantitative financial models and apply informed judgment in order, as the California Pubic Utilities Commission (CPUC, California Commission) has put it, to arrive at "An ROE set at a level commensurate with market returns on investments having comparable risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility obligations."[73] Moreover, U.S. regulators: have continued to accept evidence that depends in large part on data about other U.S. gas and electric companies' returns; have had at least some regard to short term bond rates; and in some cases have stated a consistent practice to moderate changes in the ROE relative to changes in interest rates in order to increase the stability of ROE over time.[74]

**And Canadian gas utility ROEs have fallen significantly below those of American ones and below those of low risk North American industrials** Historically, the ROEs of Canadian gas local distribution companies (LDCs) have approximately matched those in the U.S. industry. Since the inception of the generic ROE approach by Canadian regulators, the returns enjoyed by Canadians have fallen increasingly and significantly (up to 150 bp) below those of these comparables. This result arises despite the fact that independent analysis shows that business risks faced by LDCs in Canada do not significantly differ from those in the U.S.; that the greatest risk-determinant for utilities, regulatory risk, is comparable in Canada and the U.S.; and that tax differences do not matter to the comparison of Canadian and U.S.[75] [76]

**ROEs for greenfield interprovincial and international pipelines** In the "generic ROE era" it has become the practice for new pipelines subject to NEB jurisdiction to apply for tolls that have been the subject of prior negotiation with shippers. Typically, these tolls reflect ROEs about 300 or more basis points higher than incumbent pipelines, such as Foothills, TCPL, TQM and Westcoast, receive under the generic ROE.[77] Two points arise. First, this practice suggests that the NEB's generic ROE is insufficient to attract capital needed for greenfield projects. Second, one wonders whether this *de facto* vintaging of ROEs in the Canadian interprovincial and international pipeline sector breaches a fundamental principle of fairness.

## 4. Implications

**On the one hand, the generic ROE has created regulatory economies and encouraged the search for other efficiencies in the sector** The frequency of adversarial proceedings leading to ROE awards has been greatly reduced with consequent public and private savings. The generic ROE may have encouraged negotiated settlements of remaining rate issues, which typically incorporate elements of incentive rate-making encouraging efficiencies in investment and operations. Some utilities may have been able in this way to partially compensate for the low ROEs resulting from the application of the generic formula. However where that may have happened, it has been at the expense of greater risks by the utilities. Even with the presence of incentive features, there is no assurance that settlements will result in a “fair return” being earned each year of the settlement and over its lifetime, which could be as much as five years. The scope to achieve efficiencies while ensuring high quality of service may be exhausted and the overall return may fail to meet the fairness standard.

**On the other hand, the generic ROE approach is mechanistic and necessarily suspends the further application of regulatory judgment for extended periods, marking a sharp break with past practice**

- It was not uncommon in the past for regulators to expressly reject mechanistic approaches to ROE awards and stress the importance of judgment.[78] The initial generic decisions and any subsequent reviews, like the annual or biennial rate cases that preceded them, were based on careful assessment of much evidence and the application of informed regulatory judgments.

- However, once decisions are taken on a generic process, including the now universal AAM, the further application of judgment as to whether the FRS is being attained is suspended.[79] In principle, as the Alberta Board has observed, parties are free at any time to petition the regulator to consider a review of the adjustment formula in which, in Alberta, the petitioning party would bear the onus of demonstrating a material change in facts or circumstances from the evidence filed in its generic proceeding to merit a review of the formula.[80] In practice, the party’s freedom to petition can be circumscribed for periods as long as five years as a result, for example, of a settlement agreement, a term which can therefore cover one or more economic cycles.

**It would appear from work done prior to [81] and parallel with [82] this review that the FRS may not have been achieved on an ex-post basis** This important conclusion is suggested by the comparison of Canadian gas LDCs’ ROEs and the ROEs of U.S. gas utilities and North American low risk industrials, already referred to. It seems reasonable as an aspect of the industry oversight expected of regulators that, especially after a change as fundamental as the generic ROE, they would assess that change in terms of whether the results required *ex ante* by the FRS have in fact been achieved *ex post*, with particular regard to the opportunity cost of capital. Such an examination by regulators is particularly warranted because the generic ROE plus AAM effectively prevents regulated entities from routinely presenting evidence and argument as to whether *ex post* the resulting ROEs have indeed reflected opportunity pricing of the cost of capital and achieved other objectives of the FRS which the generic regime is intended prospectively to do.[83]

**Two fundamental features driving ROE changes and arguably driving the "wedge" between Canadian LDC returns and others, namely the risk free rate and the AAM ratio appear to deserve critical examination**

- On the first point, as noted in Section 2 above, while one applicant has critiqued the risk-free rate, the regulator involved (the BC Commission), although summarizing the applicant's concerns, did not respond to them. It is not difficult, for instance by reading the Bank of Canada's periodic comments on factors influencing rates to find reasons to question why LDC ROE's should be directly linked to bond rates.[84]

- On the second point, the AAM ratio of 0.75 (and the 0.80 chosen initially by one regulator) had some empirical support in the proceedings leading to the respective initial generic decisions. Also it received principled support by the applicants in a number of proceedings. However it appears not subsequently to have been critically evaluated in terms of the behaviours of equity returns of comparable unregulated sectors in relation to changing bond yields in the dozen years since the earliest Canadian generic ROE decisions.

- Regarding U.S. LDC returns, the work of Concentric Energy Advisers for the OEB has shown a much lower coefficient of regression (0.46) between U.S. ROEs and long bonds compared to Ontario ROEs (0.86): in other words, that is for every one percentage point change in interest rates, the Ontario ROEs change by 86 basis points while U.S. ROEs change by 46 basis points.[85]

**The generic, mechanistic ROE including the AAM may require some reconsideration, if the FRS is to be achieved on a going forward basis**

The work carried out by Concentric for the OEB and by National Economic Research Associates (NERA) for the CGA identifies concerns that sow a doubt as to the ability of the present design of the generic ROE to continuously meet the fair return standard. It is indisputable that this bold and widely-welcomed initiative of Canadian regulators has entrained and encouraged valuable public and private efficiencies. However, in exchange, the generic ROE has reduced the opportunities, present in previous practice, to periodically exercise oversight of this critical element in the revenue requirement, review the results of a variety of tests, apply informed judgments to them, and recalibrate their ROE awards in conformity with their understanding of the FRS. Even though regulators are willing to entertain applications for review of the generic approach, it remains that there are necessarily fewer examinations of the relevant data to ensure the generic formula plus the AAM continues to produce end results which meet the FRS.

Examination of the results of the generic approach, ex-post, suggests that, in an environment where interest rates have been, first, falling and then stabilizing at low levels, the generic ROE plus an AAM that tracks changes in expected bond yields in a ratio of 0.75 may have pulled ROEs down excessively in relation to the FRS and that, in the judgement of Concentric, "This may require consideration of additional qualitative and financial metrics in making the ROE determination."[86] In other words, what was found to be "fair and reasonable" or "just and reasonable" by careful examination of multiple tests and the appropriate exercise of informed judgment, may no longer be so after successive adjustments by admittedly-simple AAMs taking place in continuously changing economic and business conditions.

### The remarkable convergence among Canadian gas utility regulators may be an obstacle to reappraisal of the ERP plus AAM approach to the generic ROE

The NEB in dealing with TransCanada's Fair Return Application dated 6 June 2001, centred on a novel After Tax Weighted Average Cost of Capital (ATWACC) approach, stated: "In summary, in the Board's view, the lack of regulatory precedent is not a barrier to the adoption of a new approach to regulation. However, in the absence of such precedent and in the absence of any support from stakeholders for the proposed change (meaning to the ATWACC approach—authors), the Board's analysis of the proposal should show a clear benefit to be derived from the new approach when compared with previous acceptable approaches."[87] As already noted, the Régie in 2007 was similarly faced with a novel approach proposed by Gaz Métroplitan, the Fama-French model which, according to the evidence, had never before been used in Canada and only once in the USA. The Régie decided not to retain Fama-French as a method of fixing the ROE because it had not been sufficiently examined to date to be used as a basis for fixing the rate of return of a distributor.[88]

In view of the foregoing, it is reasonable to pose the questions "Is there likely to be regulatory precedent and stakeholder support for initiatives by the gas utility industry for review of and change in the generic ROE?"

As to "regulatory precedent", it may not be easy for any Canadian regulator to "break ranks" with the rest, particularly after several have relatively recently reviewed their generic ROE practices and decided against major changes to them. Having taken place, regulatory convergence may be a powerful disincentive even for needed changes.

As to "stakeholder support", it appears that Canadian gas utility stakeholders are continuing in their virtually unanimous support of the respective regulators' established approaches. In the environment of generally-declining bond yields, the present design of the generic ROE has worked to the short-term economic advantage of industrial users, residential consumers, producers and shippers. This has generated an attitude, common in the regulatory world, of "what we have we hold". As long as the provision of safe and adequate service does not seem to be immediately at risk, this attitude is likely to continue. Broad stakeholder support for major revisions favourable to the utilities seems unlikely to materialize so long as utilities seem able to attract capital and avoid impairing their financial integrity. It appears doubtful, however, that the FRS is satisfied by these considerations alone if the end result is unfair relative to returns available from investments in companies of similar risk.

**Desirable next steps** It would be helpful if, at the same time as specific cases occasionally come before individual regulators,[89] some further studies of general application were to be carried out. It is not the purpose of this paper to propose an alternative framework for ROE determination. However, any reconsideration should clearly take place against the background of an *ex post* examination of the results of the generic approach in terms of the comparability of the resulting returns with non-utility and utility comparators. It must include the fundamentals of the present design, namely the choice of the risk-free rate, the appropriate measurement of the risk premium and the adjustment mechanism. And it cannot exclude consideration of the place of the DCF model, given its acceptability to a majority of North American regulators. Finally, in an era of North American economic and business integration, the question must be asked "Can Canadian gas utilities successfully compete for capital if their regulators continue to award lower returns on generally thinner equity shares than those enjoyed by the American industry?"

Absent such a reconsideration and consequent adjustment, in an environment of continuing very low interest rates and bond yields, the present generic ROE formula alone may not be protecting the public interest in the provision by incumbent utilities of a robust, flexible natural gas delivery structure financially strong to support future sustainability of our energy economy.

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## ENDNOTES

[1] The jurisdiction is Alberta. The test is the traditional comparable earnings one. See under heading 2 "Application", subheading "Alberta" on page 16.

[2] The word "stakeholder" has become an undefined term of art, particularly in NEB decisions on applications reflecting negotiated settlements, where it may be used as a synonym for parties to those settlements. In this paper, by "stakeholders" are meant parties, other than utility managements and shareholders, who have an economic interest in gas utility rates or tolls and who routinely take part in related regulatory proceedings and in settlement discussions. In this definition, depending on the nature of the utility, "stakeholder" can mean gas producer; shipper; exporter; industrial, commercial or residential consumer; or provincial government.

[3] An example may be the application to the NEB by Gazoduc TransQuébec & Maritimes (TQM) for Cost of Capital for 2007 and 2008, revised filing December 18, 2007, the first such application by that company since 1994. However, because of the complexity of the issues involved in this application and because of language considerations, a longer than normal hearing process is required. The hearing is presently scheduled to commence 23 September 2008, which means that a decision on this hearing would not be released until early 2009. See National Energy Board letter to TQM of 22 January 2008, file OF-Tolls-Group1-T201-2007-03 01.

[4] *Return on Equity: Allowed Returns for Canadian Gas Utilities*. A Discussion Paper Developed by the Canadian Gas Association. Summer 2007. 20 pages in bilingual format.

[5] The Lamont decision relates to "…a fair return…on the capital invested in its enterprise…" (S.C.R., 1929, page 193). However, the costs of debt and any preferred shares, assuming they are prudently incurred, are usually taken as a cost to be flowed directly through to rates via the cost of service. The ROE is therefore the salient variable in the fair return on the (total) capital invested in the enterprise. The discussion in this paper relates entirely to regulators' awards for the return on the owners' equity investment. It does not extend to consideration of what those awards mean in terms of return on the total capital invested by the utility in question even though, and the authors acknowledge this, the entire focus of the Lamont decision is on return on the total capital.

[6] By "Canadian gas utility regulators" is meant the relevant regulatory boards and commissions of Alberta, British Columbia, Canada, Manitoba, Ontario and Quebec.

[7] National Energy Board (NEB). Reasons for Decision (RfD). In the Matter of the Application under Part IV of the National Energy Board Act of Trans-Canada Pipelines Limited, RH-1-70, December 1971, pages 6 – 6 to 6 – 9.

[8] NEB, RfD, TransCanada et al. Cost of Capital. RH-2-94, March 1995.

[9] NEB, RfD, TransCanada PipeLines Limited. Cost of Capital (Fair Return Application of 6 June 2001). RH-4-2001, June 2002, pages 8-12.

[10] NEB, RfD, TransCanada PipeLines Limited. Review of RH-4-2001 Cost of Capital Decision. RH-R-1-2002, February 2003, Chapter 3: Fair Return Standard, pages 6-12.

[11] NEB, RfD, TransCanada PipeLines Limited. Cost of Capital. RH-2-2004 Phase II, April 2005, Chapter 2 Legal Framework for Determining a Fair Return, pages 8-20. In this context, the NEB noted the finding of the Federal Court of Appeal in TransCanada's unsuccessful appeal of the Board's 2002 decision. The Court, the Board stated, found that the impact of any resulting toll increases on customers is not a relevant consideration in the determination of the required rate of return on equity.

[12] Since January 1, 2008 the economic regulatory functions of the former EUB in respect of investor-owned and certain municipally-owned utilities are being exercised by the Alberta Utilities Commission (AUC).

[13] Energy and Utilities Board (EUB), Decision 2004-052, Generic Cost of Capital, July 2, 2004, Section 3.2 Relevant Judicial Decisions, pages 12-13.

[14] The principal American Supreme Court decisions are *Bluefield Water Works & Improvement Company vs. Public Service Commission of The State of West Virginia et al 262 U.S. 679 [1923]* (Bluefield) and *Federal Power Commission et al vs. Hope Natural Gas Co., 320 U.S.591* [1944] (Hope). They are cited by the NEB in RH-1-70 (op.cit.) at 6 – 8 and 6 – 9, RH-4-2001 (op.cit.) at page 8 and RH-2-2004 (op.cit.) at pages 14-16.

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[15] This is borne out by the Alberta Board in EUB Decision 2004-052 (op.cit.) where after quoting from Northwestern, Hope and Bluefield, it stated at page 13 that "The Board notes that no party took issue with the general consensus that in order for a return to be fair, it must meet the tests of "comparable investment", "capital attraction" and "financial integrity" described in the above decisions.

[16] « La Régie accepte…que l'évaluation du coût des capitaux propres sur base présumée doit reposer sur le principe fondamental du coût d'opportunité de marché des capitaux propres…La Régie est d'avis que le taux de rendement accordé au Distributeur doit lui permettre d'assurer et de maintenir sa capacité d'attirer les fonds à des conditions raisonnables » Source : Régie de l'Énergie du Québec. Hydro-Québec. D-2003-93. 2 mars 2003, à la page 70. The same principles had earlier been expressed in Régie de l'Énergie du Québec. Hydro-Québec. D-2002-95. 30 avril 2002, à la page 163. These were admittedly electric utility cases, however since the Régie uses essentially the same methodology to determine its ROE awards for Québec gas utilities, it is reasonable to suppose that it does so in pursuit of the same principles of opportunity cost of capital and capital attraction as it applies to the electrical sector.

[17] Manitoba Public Utilities Board Act. Centra Gas Manitoba Inc. General Rate Application. Order No. 99/07, July 27, 2007, page 65.

[18] Ontario Energy Board (OEB) Compendium to Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities (OEB Compendium). Chapter 2: Current OEB Approach, page 2, which reads in part "The Board's objective in setting the rate of return on rate base is to ensure that the utility is provided with a fair return which enables it to meet its obligations and maintain its capability of attracting capital".

[19] By way of example, TransCanada PipeLines averaged one such application to the NEB per 18 months in the period 1971-1994 inclusive.

[20] The NEB in RH-4-2001 (op.cit.) at page ix (Glossary of Terms) characterizes the ERP method as a family of models that includes CAPM and ECAPM (Empirical Capital Assets Pricing Model). See also RH-4-2001 page 48, second paragraph.

[21] OEB, op.cit.

[22] NEB, RH-1-70 op cit, page 6 – 6.

[23] NEB, op cit, pages 6 – 2 and 6 – 3.

[24] The application of informed judgement is similarly a constant in American regulators' decisions in utility rate cases. Consider the following from the California Commission's December 15, 2005 Decision 05-12-043 on the Test Year 2006 Return on Equity for the Major Utilities (Pacific Gas and Electric [PG&E], Southern California Edison [SCE] and San Diego Gas and Electric [SDG&E]). At page 23, the Commission stated "In the final analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate. We affirmed this view in D.89-10-031, which established ROEs for GTE California, Inc. and Pacific Bell, noting that we continue to view the financial models with considerable skepticism." The Commission then uses the term "informed judgment" eight times in respect of its own decision-taking. As a matter of interest the resulting ROE awards for 2006 were, for PG&E 11.35%; for SCE 11.60%; and for SDG&E 10.70%.

[25] NEB, RfD, TransCanada PipeLines Limited, RH-3-76, December 1976 page 4 – 13.

[26] NEB, RfD, Interprovincial Pipeline Limited, RH-2-76, December 1977, page 6 – 23.

[27] NEB, RH-2-76, op cit, page 6 – 26.

[28] NEB, RfD, TransCanada PipeLines Limited, RH-1-78, July 1978, page 5 – 9.

[29] Ibid.

[30] NEB, RfD, TransCanada PipeLines Limited, RH-4-81, Phase I, August 1981, pages 4 – 5 and 4 – 6.

[31] NEB, RfD, TransCanada PipeLines Limited, RH-3-1982, July 1982, pages 3 – 10 to 3 – 12.

[32] NEB, RfD, TransCanada PipeLines Limited RH-4-93, June 1994, page 27.

[33] BC Utilities Commission, Decision in the matter of Terasen et al, March 2, 2006, page 45.

[34] This statement is from an article by Dr. Jeff D. Makholm in Public Utilities Fortnightly, May 15, 2003, pages 12-18, "In Defense of the 'Gold Standard'". The fuller context is as follows: "The fair rate of return became a hotly contested issue in the early 1970s…The DCF and CAPM methods got their start at this time and have survived nearly unchanged as the primary rate of return methods, with the DCF the virtual default method in practically all U.S. regulatory jurisdictions." (Makholm, page 14, column 1).

[35] OEB, op cit, page 8.

[36] BC Utilities Commission, Decision in the matter of Return on Common Equity, BC Gas Utility et al, June 10, 1994, see especially pages 17-18.

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[37] NEB, RfD, RH-2-94, TransCanada et al, Cost of Capital, March 1995.

[38] Manitoba Public Utilities Board Act, Order No.49/95, May 5, 1995 in an application by Centra Gas Manitoba Inc. The Manitoba Board in that decision reserved the right to require a full ROE hearing prior to the 1997 test year as a result of unusual or significant changes in the economy. However such a hearing did not take place. Centra Gas Manitoba was acquired by Manitoba Hydro, a provincial crown corporation, in 1999 and the ROE was subsequently replaced by a provision for a net income as part of Centra's costs, the allowed net income would not exceed the allowed return on equity under the Rate Base/Rate of Return methodology—see Manitoba Public Utilities Board Act, Order No. 103/05, July 12, 2005 in an Application by Centra Gas Manitoba Inc, page 40.

[39] OEB, Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities, March 1997 (not page numbered).

[40] OEB, Compendium, op cit, page 24, Section 5.1 Rationale for Draft Guidelines, Rationale for Adopting Formula ROE.

[41] EUB, Decision 2004-052, op cit, pages 15-31, Section 4.2 ROE Methodology and 2004 ROE.

[42] EUB, op cit, page 23.

[43] EUB, op.cit, Section 4.2.7 Other Measures of Comparable Investment, pages 24-30.

[44] The CE test was not the only one with which the EUB had difficulties. Thus, it is noted that the Alberta Board in Decision 2004-052, concluded "…that the results of the ERP tests other than CAPM would generally support a 2004 ROE above the Board's CAPM estimate, but that for the reasons set out above only limited weight should be placed on the results of the ERP tests other than CAPM." EUB op.cit. page 23.

[45] EUB, op cit, pages 31-32, Section 4.3 Annual Adjustment Mechanism.

[46] The Régie had previously applied the ERP approach but without an automatic adjustment feature, see for example Régie du Gaz Naturel, Décision D-96-31, 9 octobre 1996, Gaz Métropolitain, pages 69-70, La prime de risque du marché.

[47] Régie de l'énergie, Décision D-2007-116, Gaz Métropolitan, page 23.

[48] Ibid, pages 23-24.

[49] BC Utilities Commission, Decision in the matter of Terasen et al, March 2, 2006, op cit.

[50] NEB RfDs in TransCanada PipeLines Limited: Cost of Capital. RH-4-2001, June 2002; RH-R-1-2002, Review of RH-4-2001 February 2003; Cost of Capital. RH-2-2004 Phase II, April 2005. The RH-R-1-2002 decision was unsuccessfully appealed to the Federal Court of Appeal by TransCanada PipeLines (2004 FCA 149).

[51] BC Utilities Commission, op cit, page 52. Note that, while intending to give primary weight to the application and results of the ERP method, the Commission stated that it would need to apply judgment to the evidence before it.

[52] NEB RfD, TransCanada PipeLines Limited, RH-4-2001, pages 45-56.

[53] It may be noted that the EUB in Decision E99099, 1999/2000 Electric Tariff Applications, 25 November 1999 decided to "use both the traditional method and a modified ATWACC as tools to arrive at the fair return for (a number of electric utilities) with primary weight placed on the traditional method." (see page 328). The ATWACC evidence, which was accepted by the EUB with some modifications to its results, was submitted by the same witness (Dr.Vilbert) whose methodology and results were rejected by the NEB in RH-4-2001.

[54] NEB RfD, RH-R-1-2002, op cit, pages 11-12 Legal Obligation to use the FRS.

[55] NEB RfD, RH-2-2004, op.cit., page 19.

[56] Ibid.

[57] BCUC, Decision in Terasen et al, March 2, 2006, page 46.

[58] The degree of convergence as reflected in the annual ROE awards is remarkable. Thus, for year 2008 the range of ROEs is only about 50 basis points (bp) with La Régie at 8.91% (Gaz Métro) and the OEB at 8.39% and the EUB, NEB and the BCUC in the middle of the range with 8.75%, 8.71% and 8.62% respectively. Contrast this with the spread of 65 bp in the awards by one American regulator to three utilities for one year (footnote 25).

[59] The case is TransCanada's Canadian mainline. The negotiated settlement of March 2007 relates to the period 2007-2011 inclusive and provides that, during the Term, TransCanada will not pursue litigation of the NEB RH-2-94 ROE formula on behalf of… its Mainline System—see TransCanada PipeLines,

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Application to the NEB, March 14, 2007: Application for Approval of a Negotiated Mainline Tolls Settlement and 2007 Mainline Tolls. Page 5 of 13, item 19. This Negotiated Settlement was approved by the NEB on 31 May 2007 by Order TG-06-2007.

[60] American regulators routinely cite their legal standard for fair return, essentially the Bluefield and Hope cases which are sometimes referred to also by Canadian regulators (examples: Alberta Board, NEB, see pages 11-12 above). The California Commission does so in the following terms in case D-05-12-043 (Test Year 2006 Return on Equity for the Major Energy Utilities) "The legal standard for setting the fair rate of return has been established by the United States Supreme Court in the Bluefield and Hope cases. The Bluefield decision states that a public utility is entitled to earn a return upon the value of its property employed for the convenience of the public and sets forth parameters to assess a reasonable return. Such return should be equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings attended by corresponding risks and uncertainties. That return should also be reasonably sufficient to assure confidence in the financial soundness of the utility, and adequate, under efficient management, to maintain and support its credit and to enable it to raise the money necessary for the proper discharge of its public duties. The Hope decision reinforces the Bluefield decision and emphasizes that such returns should be sufficient to cover operating expenses and capital costs of the business. The capital cost of business includes debt service and stock dividends. The return should also be commensurate with returns available on alternative investments of comparable risks.

[61] A sampling of relatively recent cases finds that the California Commission received and used DCF, CAPM and MRP evidence in case D-05-12-043 (see footnote 24), the Illinois Commerce Commission accepted DCF and CAPM evidence in a September 2005, once-in-a-decade decision on Northern Illinois Gas Company's rates; the New York Public Service Commission (NYPSC) received CAPM, CE, DCF and ERP evidence, found CE and ERP not to be particularly useful, and gave a 50/50 weighting to CAPM and DCF in a 2007 National Fuel Gas rate case (Case 07-G-0141).

[62] See above, text page 15 and footnote 34.

[63] NEB, Letter Decision, RH-2-95, December 1995. The TransCanada settlement covered the period 1 January 1996 through 31 December 1999.

[64] NEB, RfD, Westcoast Energy Inc., RH-2-97, Part II, August 1997. The Westcoast settlement covered the period 1 January 1997 through December 31, 2001.

[65] NEB, Compilation of Key Documents Related to the Board's RH-2-95 Decisions, TransCanada, June 1996, page 19, sub Article 1, item 1.2, v).

[66] NEB, RH-2-97, op cit, page 1, sub Article 1, item 1.2, (f).

[67] EUB, Decision 2005-057, NOVA Gas Transmission Ltd., 2005-2007 Revenue Requirement Settlement, July 7, 2005, see page 2 thereof.

[68] BCUC Order G-51-03 of 29 July 2003 for the initial term.

[69] BCUC Order G-33-07 of 23 March 2007 for the extension.

[70] "TransCanada PipeLines. Annual Report, 1996. Letter to Shareholders, page 4, final paragraph.

[71] Supra, page 9.

[72] Makholm, Jeff D., op cit, page 18, column 1.

[73] CPUC, D-05-12-043 on Test Year 2006 Return on Equity for the major energy utilities, Findings of Fact, paragraph 16.

[74] It is acknowledged that the Canadian "0.75 ratio" to forecasted changes in long Canadas has this effect.

[75] National Economic Research Associates (NERA). Allowed Return on (Gas Utility) Equity in Canada and the United States: An Economic, Financial and Institutional Analysis. Ken Gordon, Jeff Makholm, Wayne Olsen, November 2007. Tax differences are dealt with on page 13, business risk on pages 24-25 and regulatory risk on pages 25-32.

[76] Concentric Energy Advisors concluded for the OEB that "(6) On the whole, there are no evident fundamental differences in the business and operating risks facing Ontario utilities as compared to those facing U.S. companies or other provinces' utilities that would explain the difference in ROEs." See Concentric op. cit., Section VII Conclusions and Summary of Findings, paragraph (6) on page 57.

[77] *Alliance Pipeline Ltd* (Alliance) filed on 31 October 2007 its normal annual toll revisions to become effective 1 January 2008 The NEB filing ID is A16816. Alliance noted that the filed-for tolls reflect a base return on equity of 12%, subject to an incentive adjustment, on a deemed capital structure that provides for 30% equity. These are the same numbers as appeared in Alliance's original certificate application to the

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NEB which was approved in November 1998 in GH-3-97. At the time of writing, Alliance's 2008 tolls are still interim.

*Emera Brunswick Pipeline Company Ltd*. reached a negotiated agreement for a monthly fixed toll that would cover all fixed charges including an equity return typically in the 11 to 14 percent range. NEB RfD Emera Brunswick Pipeline Company Ltd., GH-1-2006, May 2007, Section 7.1 Tolls and Tariffs, page 76

*Mackenzie Valley Gas Pipeline*, Section 3.1 of the August 2004 application in GH-1-2004 which is still under consideration presents toll principles that include a deemed capital structure based on 30% equity and an ROE equal to the NEB multi-pipeline ROE plus 2.21% for the initial 10 years, see page 3-4

*Maritimes and Northeast Pipeline* filed on 28 December 2007 a negotiated toll settlement for the calendar year 2008 which embodies an allowed ROE of 11.66 per cent on a deemed equity of 31.18%. NEB filing ID A17299.

[78] The seminal NEB decision in TransCanada's first rate application, RH-1-70 of December 1971 contains some important language relating to both points.

First, as to mechanistic approaches, the Board stated at page 6 – 6 "The final conclusion as to what is enough but not too much in the way of return, and rate of return, is not precisely supportable on a mathematical basis. If it were, one computer and a few programmers could replace all the regulatory boards in North America and dispense undeniable justice instantaneously."

Second, as to the exercise of judgment, the Board said at pages 6 – 2 and 6 – 3 that "Many tests and techniques for assisting the process of reaching a just decision have been used, but no single test is conclusive nor is any group of them definitive: whatever tests may be used, in the last analysis the adjudicating body can not escape the responsibility of exercising judgment as to what, in a stated set of circumstances, is a just and reasonable return or rate of return, or what is a range of justness and reasonableness of return or rate of return." These early comments by the NEB in a sense echo the view expressed by the SCC in Lamont where, in 1929 S.C.R., at page 199, the Court stated "The question of a fair rate of return on a risky investment is largely a matter of opinion, and is hardly capable of being reduced to certainty by evidence, and appears to be on one of the things entrusted by the statute to the judgment of the Board."

[79] Note that, in applying its automatic mechanism to adjust the rate of return on common equity, the BCUC initially advised the affected companies that it had "…reviewed the performance of the automatic mechanism to adjust the rate of return…and has determined that the mechanism has performed favourably." (Letters L-61-96, December 2, 1996; L-73-97 of December 2, 1997; L-89-98 of December 4, 1998). After 1998, however, the references to review and to favourable performance were dropped and the annual notification letters now simply state that "…the Commission has determined that the current ROE automatic adjustment mechanism results in an allowed return of…" (example: Letter L-93-07 of November 22, 2007). Essentially the same approach is followed by the EUB (Example: Order U2007-347 of 30 November 2007) and NEB (Example: Letter of 29 November 2007, File OF-TollsGen-RRCE 02).

[80] EUB Decision 2004-052, July 2, 2004, page 34.

[81] CGA op cit, Section 3: Maintaining a Fair Return, pages 14-17.

[82] NERA, op cit, particularly pages 7 – 11.

[83] Note that the EUB, in giving its reasons for establishing a standardized approach for setting an ROE, stated "An applicant is also free to apply to the Board to review the ROE formula in the manner provided for in this Decision. Even without an application by a particular party, the ROE formula will be subject to review in certain circumstances and in any event will be considered for review after five years." See EUB, Decision 2004-052, op.cit., page 8.

[84] A scan of Bank of Canada published comments for the past few years points to the following as rate-affecting monetary policy factors: economic growth; utilization of economic capacity; demand on the economy, domestic and export; inflation rates and inflation risks; U.S. economy and major sectors; global economy and major components EU, Japan, China; global markets, including commodity markets (e.g. energy), and their balances; Canada/USA exchange rates and the influence on the Canadian economy; cost of credit to firms and households; state of financial markets, Canada and abroad. These notes are based mainly on reading the Bank of Canada's semi-annual Monetary Report and Update available online at http://www.bank-banque-canada.ca/en/mpr/mpr_previous.html.

[85] Concentric Energy Advisors. A Comparative Analysis of Return on Equity of Natural Gas Utilities. Prepared for the OEB. June 14, 2007, pages 18-19. Concentric correctly point out that, "…as interest rates

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have declined dramatically in Canada in the past ten years, one would expect the OEB formula to yield accordingly lower authorized ROEs. The formula, however, is symmetrical, and ROEs will most likely recover at a faster rate in Ontario than in the U.S., when interest rates begin to rise. In fact, if interest rates continue to steadily rise, the OEB adjustment formula could surpass and yield higher results than historical data suggest U.S. authorized returns would reach under the same circumstances."

[86] Ibid, page 57, last sentence in item 5.

[87] NEB, Rfd, RH-4-2001, heading Regulatory Precedent, at page 43.

[88] Régie de l'énergie. Décision D-2007-116., pages 23-24.

[89] The example has already been given of the 17 December 2007 application to the NEB by Gazoduc Trans-Québec et Maritimes for cost of capital determination for the years 2007 and 2008. See footnote 3, which also notes the lengthy hearing process which this application may involve, extending over about a 13-month period.

|  | (a) Government of Canada Benchmark Long-Term Bond Yield | (b) Province of Quebec Generic Benchmark 30-year | (c) Spread (b) – (a) | (d) Bloomberg Fair Value Province of Quebec 30-year | (e) Spread (d) – (a) | (f) Bloomberg Fair Value Canada A-rated Utility 30-year | (g) Spread (f) – (a) | (h) Hydro-Quebec | (i) Spread (h) – (a) | (j) Enbridge Gas Distribution Inc. | (k) Spread (j) – (a) | (l) Canadian Utilities Limited | (m) Spread (l) – (a) | (n) FortisBC Energy Inc. | (o) Spread (n) – (a) | (p) Union Gas Limited | (q) Spread (p) – (a) | (r) Gaz Metro Inc. | (s) Spread (s) – (a) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jun-13 | 2.76 | 3.88 | 1.11 | 3.85 | 1.09 | 4.13 | 1.36 | 3.31 | 0.55 | 3.93 | 1.17 | 3.95 | 1.19 | 4.13 | 1.37 | 4.11 | 1.35 | 4.15 | 1.39 |
| Jul-13 | 2.93 | 4.02 | 1.09 | 4.00 | 1.07 | 4.31 | 1.39 | 3.61 | 0.68 | 4.17 | 1.25 | 4.16 | 1.23 | 4.34 | 1.41 | 4.36 | 1.43 | 4.38 | 1.45 |
| Aug-13 | 3.09 | 4.19 | 1.10 | 4.19 | 1.09 | 4.48 | 1.39 | 3.76 | 0.67 | 4.32 | 1.23 | 4.31 | 1.22 | 4.51 | 1.41 | 4.53 | 1.44 | 4.47 | 1.38 |
| Sep-13 | 3.19 | 4.32 | 1.13 | 4.33 | 1.14 | 4.67 | 1.48 | 3.79 | 0.60 | 4.48 | 1.28 | 4.51 | 1.32 | 4.72 | 1.53 | 4.72 | 1.53 | 4.67 | 1.48 |

Notes:

Averages based on daily yields

Bloomberg Fair Value Province of Quebec 30-year provided for comparison

Utility bond yields equal to average yield to maturity (bid) for all bonds with 30-year maturity

Source: Bloomberg Finance

# AMEREN NYSE-AEE

| RECENT PRICE | 33.27 | P/E RATIO | 16.4 (Trailing: 22.3 Median: 14.0) | RELATIVE P/E RATIO | 0.93 | DIV'D YLD | 4.8% | VALUE LINE |
|---|---|---|---|---|---|---|---|---|

**TIMELINESS** 3 Raised 3/29/13
**SAFETY** 3 Lowered 6/26/09
TECHNICAL 2 Raised 9/20/13
**BETA** .80 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 40 | (+20%) | *9%* |
| Low | 25 | (-25%) | *-1%* |

### Insider Decisions

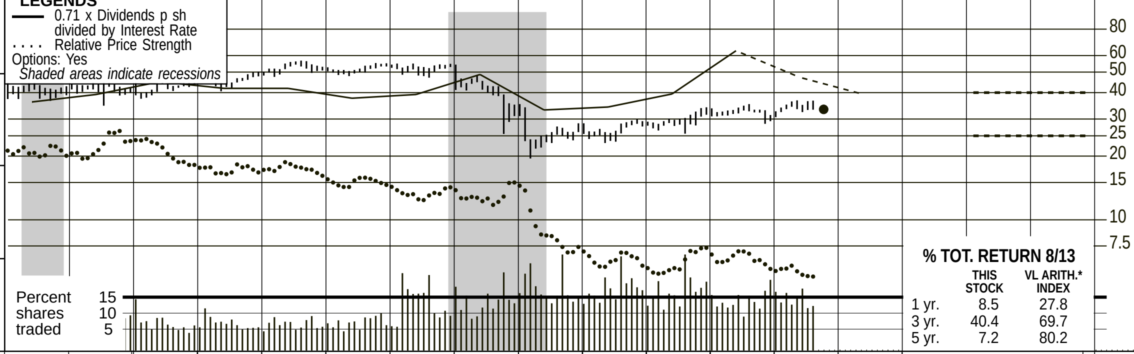
| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 177 | 160 | 163 |
| to Sell | 186 | 207 | 193 |
| Hld's(000) | 146944 | 143859 | 149861 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 45.3 | 46.5 | 50.4 | 56.8 | 55.2 | 55.0 | 54.3 | 35.3 | 29.9 | 34.1 | 35.3 | 36.7 | | |
| Low: | 34.7 | 37.4 | 40.6 | 47.5 | 48.0 | 47.1 | 25.5 | 19.5 | 23.1 | 25.5 | 28.4 | 30.6 | | |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 8.5 | 27.8 |
| 3 yr. | 40.4 | 69.7 |
| 5 yr. | 7.2 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.24 | 24.18 | 25.68 | 28.10 | 32.64 | 24.93 | 28.20 | 26.43 | 33.12 | 33.30 | 36.23 | 36.92 | 29.87 | 31.77 | 31.04 | 28.15 | ***24.30*** | ***25.20*** | **Revenues per sh** | ***27.50*** |
| 4.96 | 5.36 | 5.36 | 6.11 | 6.33 | 5.28 | 6.29 | 5.57 | 6.10 | 6.02 | 6.76 | 6.44 | 6.06 | 6.33 | 5.87 | 5.87 | ***5.25*** | ***5.60*** | **"Cash Flow" per sh** | ***6.25*** |
| 2.44 | 2.82 | 2.81 | 3.33 | 3.41 | 2.66 | 3.14 | 2.82 | 3.13 | 2.66 | 2.98 | 2.88 | 2.78 | 2.77 | 2.47 | 2.41 | ***2.00*** | ***2.25*** | **Earnings per sh** A | ***2.50*** |
| 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 1.54 | 1.54 | 1.56 | 1.60 | ***1.60*** | ***1.60*** | **Div'd Decl'd per sh** B ■ | ***1.70*** |
| 2.77 | 2.37 | 4.16 | 6.77 | 7.99 | 5.11 | 4.19 | 4.13 | 4.63 | 4.99 | 6.96 | 9.75 | 7.51 | 4.66 | 4.50 | 5.49 | ***6.35*** | ***7.40*** | **Cap'l Spending per sh** | ***6.50*** |
| 22.00 | 22.27 | 22.52 | 23.30 | 24.26 | 24.93 | 26.73 | 29.71 | 31.09 | 31.86 | 32.41 | 32.80 | 33.08 | 32.15 | 32.64 | 27.27 | ***26.45*** | ***27.10*** | **Book Value per sh** C | ***29.50*** |
| 137.22 | 137.22 | 137.22 | 137.22 | 138.05 | 154.10 | 162.90 | 195.20 | 204.70 | 206.60 | 208.30 | 212.30 | 237.40 | 240.40 | 242.60 | 242.60 | ***242.65*** | ***246.00*** | **Common Shs Outst'g** D | ***255.00*** |
| 15.5 | 14.2 | 13.5 | 11.0 | 12.1 | 15.8 | 13.5 | 16.3 | 16.7 | 19.4 | 17.4 | 14.2 | 9.3 | 9.7 | 11.9 | 13.4 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.5*** |
| .89 | .74 | .77 | .72 | .62 | .86 | .77 | .86 | .89 | 1.05 | .92 | .85 | .62 | .62 | .75 | .85 | | | **Relative P/E Ratio** | ***.90*** |
| 6.7% | 6.3% | 6.7% | 6.9% | 6.2% | 6.1% | 6.0% | 5.5% | 4.9% | 4.9% | 4.9% | 6.2% | 6.0% | 5.8% | 5.3% | 5.0% | | | **Avg Ann'l Div'd Yield** | ***5.0%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $6183.0 mill. **Due in 5 Yrs** $2110.0 mill.
**LT Debt** $5274.0 mill. **LT Interest** $306.0 mill.
(LT interest earned: 2.9x)
**Leases, Uncapitalized** Annual rentals $31.0 mill.
**Pension Assets-12/12** $3.19 bill. **Oblig.** $4.15 bill.
**Pfd Stock** $142.0 mill. **Pfd Div'd** $8.0 mill.
807,595 shs. $3.50 to $5.50 cum. (no par), $100 stated value, redeemable at $102.176-$110/sh.; 616,323 shs. 4.00% to 6.625%, $100 par, redeemable at $100-$104/sh.
**Common Stock** 242,634,671 shs.
**as of 7/31/13**
**MARKET CAP: $8.1 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4593.0 | 5160.0 | 6780.0 | 6880.0 | 7546.0 | 7839.0 | 7090.0 | 7638.0 | 7531.0 | 6828.0 | ***5900*** | ***6200*** | **Revenues ($mill)** | ***7000*** |
| 517.0 | 541.0 | 628.0 | 547.0 | 629.0 | 615.0 | 624.0 | 669.0 | 602.0 | 589.0 | ***490*** | ***555*** | **Net Profit ($mill)** | ***655*** |
| 36.8% | 34.3% | 35.6% | 32.7% | 33.5% | 33.7% | 34.7% | 36.8% | 37.3% | 36.9% | ***38.0%*** | ***38.0%*** | **Income Tax Rate** | ***38.0%*** |
| 1.9% | 1.8% | 2.9% | .7% | .8% | 4.6% | 5.8% | 7.8% | 5.6% | 6.1% | ***7.0%*** | ***6.0%*** | **AFUDC % to Net Profit** | ***6.0%*** |
| 47.3% | 45.5% | 44.9% | 43.8% | 45.0% | 47.8% | 49.7% | 48.2% | 45.3% | 49.5% | ***46.0%*** | ***47.5%*** | **Long-Term Debt Ratio** | ***44.0%*** |
| 50.6% | 52.6% | 53.3% | 54.6% | 53.4% | 50.8% | 49.1% | 50.9% | 53.7% | 49.4% | ***52.5%*** | ***51.5%*** | **Common Equity Ratio** | ***55.0%*** |
| 8606.0 | 11036 | 11932 | 12063 | 12654 | 13712 | 15991 | 15185 | 14738 | 13384 | ***12175*** | ***12925*** | **Total Capital ($mill)** | ***13700*** |
| 10917 | 13297 | 13572 | 14286 | 15069 | 16567 | 17610 | 17853 | 18127 | 16096 | ***16100*** | ***17100*** | **Net Plant ($mill)** | ***19500*** |
| 7.4% | 6.0% | 6.5% | 5.7% | 6.2% | 5.7% | 5.3% | 6.0% | 5.6% | 6.0% | ***5.5%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.0%*** |
| 11.4% | 9.0% | 9.5% | 8.1% | 9.0% | 8.6% | 7.8% | 8.5% | 7.5% | 8.7% | ***7.5%*** | ***8.0%*** | **Return on Shr. Equity** | ***8.5%*** |
| 11.6% | 9.1% | 9.7% | 8.1% | 9.2% | 8.7% | 7.8% | 8.6% | 7.5% | 8.8% | ***7.5%*** | ***8.0%*** | **Return on Com Equity** E | ***8.5%*** |
| 2.2% | .9% | 1.7% | .2% | 1.3% | 1.0% | 3.5% | 3.8% | 2.8% | 3.0% | ***1.5%*** | ***2.5%*** | **Retained to Com Eq** | ***3.0%*** |
| 81% | 91% | 83% | 97% | 86% | 88% | 56% | 56% | 63% | 66% | ***80%*** | ***71%*** | **All Div'ds to Net Prof** | ***67%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +8.5 | -1.9 | -.7 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 4.63 | 4.93 | 4.80 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 293 | 295 | 291 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | .5% | -2.5% | *-1.5%* |
| "Cash Flow" | - - | -1.0% | *.5%* |
| Earnings | -2.0% | -2.5% | *-.5%* |
| Dividends | -4.5% | -9.0% | *1.5%* |
| Book Value | 2.5% | -.5% | *-.5%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 1940 | 1725 | 2267 | 1706 | 7638.0 |
| **2011** | 1904 | 1781 | 2268 | 1578 | 7531.0 |
| **2012** | 1658 | 1660 | 2001 | 1509 | 6828.0 |
| **2013** | 1475 | 1403 | ***1722*** | ***1300*** | ***5900*** |
| **2014** | ***1550*** | ***1475*** | ***1825*** | ***1350*** | ***6200*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .43 | .64 | 1.49 | .21 | 2.77 |
| **2011** | .29 | .57 | 1.50 | .10 | 2.47 |
| **2012** | d.11 | .87 | 1.54 | .11 | 2.41 |
| **2013** | .22 | .44 | ***1.25*** | ***.09*** | ***2.00*** |
| **2014** | ***.25*** | ***.70*** | ***1.30*** | ***Nil*** | ***2.25*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .385 | .385 | .385 | .385 | 1.54 |
| **2010** | .385 | .385 | .385 | .385 | 1.54 |
| **2011** | .385 | .385 | .385 | .40 | 1.56 |
| **2012** | .40 | .40 | .40 | .40 | 1.60 |
| **2013** | .40 | .40 | | | |

**BUSINESS:** Ameren Corp. is a holding company formed through the merger of Union Electric and CIPSCO. Acquired CILCORP 1/03; Illinois Power 10/04. Has 1.2 million electric and 127,000 gas customers in Missouri; 1.2 million electric and 811,000 gas customers in Illinois. Discontinued power-generation operation in '13. Electric revenue breakdown: residential, 48%; commercial, 31%; industrial, 11%; other, 10%. Generating sources: coal, 67%; nuclear, 9%; hydro, 1%; gas, 1%; purchased, 22%. Fuel costs: 37% of revenues. '12 reported deprec. rates: 3%-4%. Has 8,400 employees. Chairman, President & CEO: Thomas R. Voss. Inc.: MO. Address: One Ameren Plaza, 1901 Chouteau Ave., P.O. Box 66149, St. Louis, MO 63166-6149. Tel.: 314-621-3222. Internet: www.ameren.com.

**Ameren hopes to complete its disposal of its nonregulated power-generating business by yearend.** Ameren discontinued this operation because wholesale power prices are low and its coal-fired plants are facing extensive capital spending requirements. In fact, conditions in the power markets are so unfavorable that Ameren won't even get any cash upon completion of the transaction. Instead, the company will shed $825 million of long-term debt and will obtain tax benefits with a net present value of $180 million. (Most of these will be realized in 2015.) The deal requires approvals from the Illinois Pollution Control Board and the Federal Energy Regulatory Commission.

**Regulatory matters are pending in Illinois.** Ameren is seeking a gas rate increase of $47 million, based on a return of 10.4% on a common-equity ratio of 51.82%. The staff of the Illinois regulators recommended a raise of $27 million, based on a return of just 8.81%. The commission's order is due by December 19th, with new tariffs taking effect in late December. Separately, the utility made an electric filing in Illinois under a regulatory mechanism that provides for rate relief each year for certain kinds of capital projects. However, no such mechanism exists in Missouri, so the company still faces the effects of regulatory lag. This is one reason why returns on equity have been unimpressive in recent years.

**We expect earnings to improve in 2014.** Ameren will benefit from the refinancing of $425 million in debt. This should reduce parent-level expenses by $0.05-$0.10 a share. Rate relief should be another positive factor.

**Ameren is stepping up its investment in electric transmission.** The company expects to spend $2.2 billion on federally regulated transmission projects from 2013 through 2017. Ameren has received approval for a $1.1 billion project in Illinois that should be completed in 2019.

**The dividend yield of Ameren stock is fractionally above the utility mean.** However, we project little dividend growth over the 3- to 5-year period, and with the recent price near the midpoint of our 2016-2018 Target Price Range, total return potential is low.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecur. gain (losses): '03, 11¢; '05, (11¢); '10, ($2.19); '11, (32¢); '12, ($6.42); loss from disc. ops.: '13, 82¢. '11 EPS don't add due to rounding. Next egs. report due early Nov. **(B)** Div'ds histor. paid in late Mar., June, Sept., & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '12: $9.12/sh. **(D)** In mill. **(E)** Rate base: Orig. cost deprec. Rate allowed on com. eq. in MO in '13: 9.8% elec., in '10: 10.1% gas; in IL in '10: 9.9%-10.3% elec., in '12: 9.06% gas; earned on avg. com. eq., '12: 7.3%. Reg. Clim.: MO, Avg.; IL, Below Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 10 |
| **Earnings Predictability** | 85 |

# AMERICAN ELEC. PWR. NYSE-AEP

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 42.89 | 13.6 (Trailing: 14.7 Median: 13.0) | 0.77 | 4.7% | |

| | | |
|---|---|---|
| **TIMELINESS** | 4 | Lowered 8/16/13 |
| **SAFETY** | 3 | Lowered 10/4/02 |
| TECHNICAL | 3 | Raised 9/6/13 |

**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+40%) | *12%* |
| Low | 40 | (-5%) | *3%* |

**Insider Decisions**

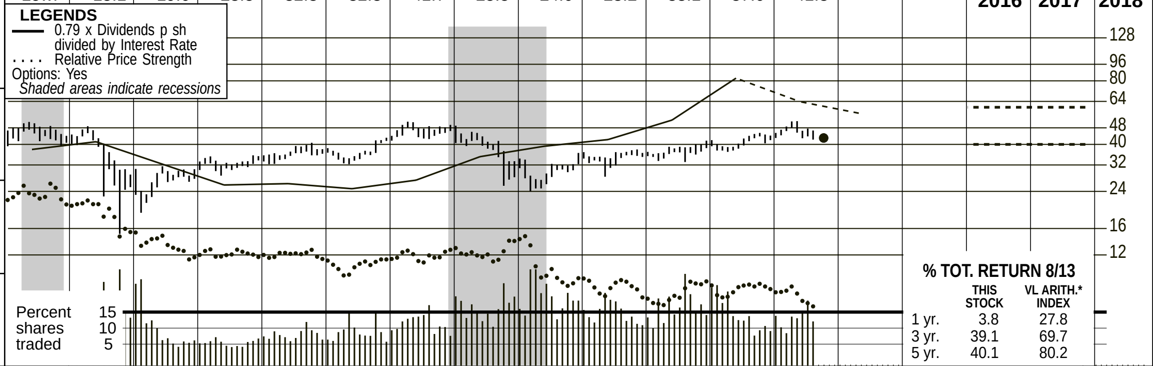
| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Options | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 304 | 321 | 316 |
| to Sell | 271 | 264 | 296 |
| Hld's(000) | 297607 | 307129 | 313640 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 48.8 | 31.5 | 35.5 | 40.8 | 43.1 | 51.2 | 49.1 | 36.5 | 37.9 | 41.7 | 45.4 | 51.6 |
| Low: | 15.1 | 19.0 | 28.5 | 32.3 | 32.3 | 41.7 | 25.5 | 24.0 | 28.2 | 33.1 | 37.0 | 41.8 |

**Target Price Range**



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 3.8 | 27.8 |
| 3 yr. | 39.1 | 69.7 |
| 5 yr. | 40.1 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32.43 | 33.08 | 35.63 | 42.53 | 190.10 | 42.96 | 36.82 | 35.51 | 30.76 | 31.82 | 33.41 | 35.56 | 28.22 | 30.01 | 31.27 | 30.77 | **31.60** | **32.30** | Revenues per sh | **36.75** |
| 6.47 | 6.03 | 6.36 | 5.11 | 7.65 | 6.99 | 5.76 | 5.89 | 5.96 | 6.67 | 6.80 | 6.84 | 6.32 | 6.29 | 6.83 | 6.64 | **6.60** | **7.00** | "Cash Flow" per sh | **8.25** |
| 3.28 | 2.81 | 2.69 | 1.04 | 3.27 | 2.86 | 2.53 | 2.61 | 2.64 | 2.86 | 2.86 | 2.99 | 2.97 | 2.60 | 3.13 | 2.98 | **3.05** | **3.25** | Earnings per sh A | **3.75** |
| 2.40 | 2.40 | 2.40 | 2.40 | 2.40 | 2.40 | 1.65 | 1.40 | 1.42 | 1.50 | 1.58 | 1.64 | 1.64 | 1.71 | 1.85 | 1.88 | **1.94** | **2.04** | Div'd Decl'd per sh B ■ | **2.30** |
| 4.00 | 4.13 | 4.47 | 5.51 | 5.69 | 5.08 | 3.44 | 4.28 | 6.11 | 8.89 | 8.88 | 9.83 | 6.19 | 5.07 | 5.74 | 6.45 | **7.55** | **7.75** | Cap'l Spending per sh | **7.50** |
| 24.62 | 25.24 | 25.79 | 25.01 | 25.54 | 20.85 | 19.93 | 21.32 | 23.08 | 23.73 | 25.17 | 26.33 | 27.49 | 28.33 | 30.33 | 31.37 | **32.45** | **33.70** | Book Value per sh C | **38.00** |
| 189.99 | 191.82 | 194.10 | 322.02 | 322.24 | 338.84 | 395.02 | 395.86 | 393.72 | 396.67 | 400.43 | 406.07 | 478.05 | 480.81 | 483.42 | 485.67 | **489.00** | **492.00** | Common Shs Outst'g D | **505.00** |
| 13.4 | 17.0 | 14.3 | NMF | 13.9 | 12.7 | 10.7 | 12.4 | 13.7 | 12.9 | 16.3 | 13.1 | 10.0 | 13.4 | 11.9 | 13.8 | ***Bold figures are Value Line estimates*** | | Avg Ann'l P/E Ratio | **13.5** |
| .77 | .88 | .82 | NMF | .71 | .69 | .61 | .66 | .73 | .70 | .87 | .79 | .67 | .85 | .75 | .88 | | | Relative P/E Ratio | **.90** |
| 5.5% | 5.0% | 6.2% | 6.7% | 5.3% | 6.6% | 6.1% | 4.3% | 3.9% | 4.1% | 3.4% | 4.2% | 5.5% | 4.9% | 5.0% | 4.6% | | | Avg Ann'l Div'd Yield | **4.5%** |
| | | | | | | 14545 | 14057 | 12111 | 12622 | 13380 | 14440 | 13489 | 14427 | 15116 | 14945 | **15450** | **15900** | Revenues ($mill) | **18550** |
| | | | | | | 984.0 | 1038.0 | 1036.0 | 1131.0 | 1147.0 | 1208.0 | 1365.0 | 1248.0 | 1513.0 | 1443.0 | **1450** | **1560** | Net Profit ($mill) | **1890** |
| | | | | | | 38.8% | 33.1% | 29.3% | 33.0% | 31.1% | 31.3% | 29.7% | 34.8% | 31.7% | 33.9% | **36.0%** | **35.0%** | Income Tax Rate | **35.0%** |
| | | | | | | 3.8% | 3.6% | 5.4% | 9.9% | 9.8% | 9.9% | 10.9% | 10.4% | 10.6% | 11.2% | **6.0%** | **6.0%** | AFUDC % to Net Profit | **6.0%** |
| | | | | | | 60.6% | 56.2% | 54.8% | 56.7% | 58.3% | 59.1% | 54.4% | 53.1% | 50.7% | 50.6% | **49.5%** | **48.0%** | Long-Term Debt Ratio | **45.5%** |
| | | | | | | 38.7% | 43.1% | 44.9% | 43.0% | 41.4% | 40.7% | 45.4% | 46.7% | 49.3% | 49.4% | **50.5%** | **52.0%** | Common Equity Ratio | **54.5%** |
| | | | | | | 20333 | 19584 | 20222 | 21902 | 24342 | 26290 | 28958 | 29184 | 29747 | 30823 | **31425** | **31900** | Total Capital ($mill) | **35300** |
| | | | | | | 22029 | 22801 | 24284 | 26781 | 29870 | 32987 | 34344 | 35674 | 36971 | 38763 | **40625** | **42575** | Net Plant ($mill) | **47800** |
| | | | | | | 6.6% | 7.0% | 6.6% | 6.7% | 6.3% | 6.2% | 6.2% | 5.7% | 6.6% | 6.1% | **6.0%** | **6.0%** | Return on Total Cap'l | **6.5%** |
| | | | | | | 12.3% | 12.1% | 11.3% | 11.9% | 11.3% | 11.2% | 10.3% | 9.1% | 10.3% | 9.5% | **9.0%** | **9.5%** | Return on Shr. Equity | **10.0%** |
| | | | | | | 12.4% | 12.2% | 11.3% | 12.0% | 11.4% | 11.3% | 10.4% | 9.1% | 10.3% | 9.5% | **9.5%** | **9.5%** | Return on Com Equity E | **10.0%** |
| | | | | | | 4.5% | 5.7% | 5.2% | 5.7% | 5.1% | 5.1% | 4.6% | 3.1% | 4.2% | 3.5% | **3.5%** | **3.5%** | Retained to Com Eq | **4.0%** |
| | | | | | | 64% | 54% | 54% | 53% | 55% | 55% | 56% | 66% | 60% | 63% | **65%** | **64%** | All Div'ds to Net Prof | **61%** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $17337 mill. **Due in 5 Yrs** $8822 mill.
**LT Debt** $15799 mill. **LT Interest** $790 mill.
Incl. $2098 mill. securitized bonds.
(LT interest earned: 3.2x)

**Leases, Uncapitalized** Annual rentals $302 mill.
**Pension Assets-12/12** $4.70 bill. **Oblig.** $5.21 bill.
**Pfd Stock** None

**Common Stock** 486,772,596 shs.
**as of 7/25/13**
**MARKET CAP: $21 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.5 | +1.2 | -2.1 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 4.95 | 4.95 | 4.69 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 257 | 286 | 280 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -10.5% | -1.0% | *3.0%* |
| "Cash Flow" | - - | .5% | *4.0%* |
| Earnings | 2.0% | 1.0% | *4.5%* |
| Dividends | -3.0% | 4.0% | *4.0%* |
| Book Value | 2.5% | 4.5% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 3569 | 3360 | 4064 | 3434 | 14427 |
| 2011 | 3730 | 3609 | 4333 | 3444 | 15116 |
| 2012 | 3625 | 3551 | 4156 | 3613 | 14945 |
| 2013 | 3826 | 3582 | **4392** | **3650** | **15450** |
| 2014 | **3900** | **3700** | **4500** | **3800** | **15900** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .72 | .35 | 1.16 | .37 | 2.60 |
| 2011 | .83 | .73 | 1.17 | .41 | 3.13 |
| 2012 | .80 | .75 | 1.00 | .43 | 2.98 |
| 2013 | .75 | .73 | **1.12** | **.45** | **3.05** |
| 2014 | **.85** | **.80** | **1.15** | **.45** | **3.25** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .41 | .41 | .41 | .41 | 1.64 |
| 2010 | .41 | .42 | .42 | .46 | 1.71 |
| 2011 | .46 | .46 | .46 | .47 | 1.85 |
| 2012 | .47 | .47 | .47 | .47 | 1.88 |
| 2013 | .47 | .49 | .49 | | |

**BUSINESS:** American Electric Power Company, Inc. (AEP), through 10 operating utilities, serves 5.3 mill. customers in Arkansas, Kentucky, Indiana, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia. Electric revenue breakdown: residential, 38%; commercial, 24%; industrial, 20%; wholesale, 16%; other, 2%. Sold 50% stake in Yorkshire Holdings (British utility) '01; sold SEEBOARD (British utility) '02; sold Houston Pipeline '05. Generating sources not available. Fuel costs: 35% of revenues. '12 reported depr. rates (utility): 1.2%-3.9%. Has 18,500 employees. Chairman: Michael G. Morris. President & CEO: Nicholas K. Akins. Inc.: NY. Address: 1 Riverside Plaza, Columbus, OH 43215-2373. Tel.: 614-716-1000. Internet: www.aep.com.

**American Electric Power's transition to competitive markets in Ohio has run into a few difficulties.** AEP's generating assets in Ohio are undergoing a corporate separation into a nonutility affiliate, and the company wants to transfer some of its plants to its regulated utilities in other states. Among these proposed moves is the transfer of half of the Mitchell coal-fired plant to Kentucky Power and the other half to Appalachian Power (in Virginia and West Virginia). Kentucky Power has reached a settlement (pending commission approval) that allows for this transfer, but the Virginia regulators rejected the asset transfer. If AEP can't convince the commission to change its position, this half of the Mitchell facility would remain with AEP Generation Resources as a merchant unit, subject to the vagaries of the power markets. Separately, the company took a $0.20-a-share impairment charge related to a coal-fired unit that it expects to retire in 2015. This is over and above the costs that AEP is incurring regarding the transition to competition in Ohio, which reduced profits by $0.20 a share in the first half of 2013.

**One of AEP's utilities is awaiting a rate order.** SWEPCO asked the Texas regulators for an $83.5 million rate hike, based on an 11.25% return on equity, but an administrative law judge, the commission's staff, and intervenors are recommending increases ranging from $16 million-$52 million, based on ROEs ranging from 9.00%-9.55%. A ruling should come soon, and will be retroactive to January 29th. Most of AEP's other utilities are earning adequate ROEs.

**Despite the aforementioned transition costs, earnings should improve in 2013 and rise again in 2014.** Rate relief and lower interest expense should be the key factors this year, and an increasing contribution from AEP's transmission business should help next year. However, our 2013 estimate is at the low end of the company's targeted range of $3.05-$3.25 a share.

**AEP stock is untimely, but has appeal for utility investors.** The dividend yield is above average, even for this industry, and 3- to 5-year total return potential is also higher than the utility norm.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '02, ($3.86); '03, ($1.92); '04, 24¢; '05, (62¢); '06, (20¢); '07, (20¢); '08, 40¢; '10, (7¢); '11, 89¢; '12, (38¢); '13, (4¢); discont. ops.: '02, (57¢); '03, (32¢); '04, 15¢; '05, 7¢; '06, 2¢; '08, 3¢. '11 EPS don't add due to rounding. Next egs. report due late Oct. **(B)** Div'ds historically paid early Mar., June, Sept., & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '12: $18.41/sh. **(D)** In mill. **(E)** Rate base: various. Rates all'd on com. eq.: 9.96%-10.9%; earned on avg. com. eq., '12: 9.6%. Regul. Clim.: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 90 |

# ALLETE NYSE-ALE

**RECENT PRICE** 46.69 **P/E RATIO** 17.5 (Trailing: 17.2 Median: NMF) **RELATIVE P/E RATIO** 0.99 **DIV'D YLD** 4.2% **VALUE LINE**

**TIMELINESS** 5 Lowered 9/20/13
**SAFETY** 2 New 10/1/04
TECHNICAL 3 Raised 9/13/13
**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 55 | (+20%) | *8%* |
| Low | 40 | (-15%) | *1%* |

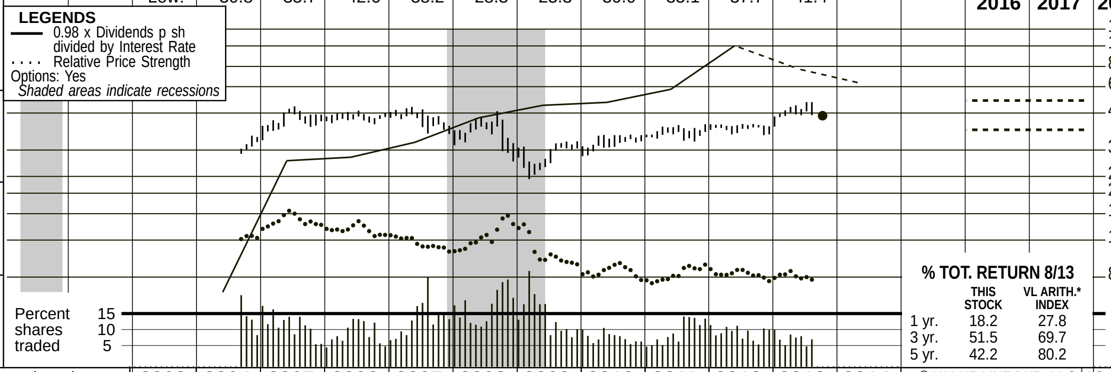
**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 3 | 0 |
| to Sell | 1 | 1 | 1 | 0 | 5 | 5 | 0 | 3 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 72 | 79 | 87 |
| to Sell | 65 | 61 | 57 |
| Hld's(000) | 22857 | 24313 | 24547 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|
| High: | 37.5 | 51.7 | 49.3 | 51.3 | 49.0 | 35.3 | 37.9 | 42.5 | 42.7 | 54.1 |
| Low: | 30.8 | 35.7 | 42.6 | 38.2 | 28.3 | 23.3 | 30.0 | 35.1 | 37.7 | 41.4 |



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 18.2 | 27.8 |
| 3 yr. | 51.5 | 69.7 |
| 5 yr. | 42.2 | 80.2 |

ALLETE, in its current configuration, began trading on September 21, 2004, the day after it spun off its automotive services business, ADESA (now KAR Auction Services, NYSE: KAR), to shareholders and effected a 1-for-3 reverse stock split. ALLETE shareholders received one share of ADESA for each ALLETE share held. Data for the "old" ALLETE are not shown because they are not comparable.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | 25.30 | 24.50 | 25.23 | 27.33 | 24.57 | 21.57 | 25.34 | 24.75 | 24.40 | ***24.45*** | ***24.55*** | **Revenues per sh** | ***28.00*** |
| - - | 2.97 | 3.85 | 4.14 | 4.42 | 4.23 | 3.57 | 4.35 | 4.91 | 5.01 | ***5.25*** | ***5.50*** | **"Cash Flow" per sh** | ***7.00*** |
| - - | 1.35 | 2.48 | 2.77 | 3.08 | 2.82 | 1.89 | 2.19 | 2.65 | 2.58 | ***2.65*** | ***2.90*** | **Earnings per sh A** | ***3.75*** |
| - - | .30 | 1.25 | 1.45 | 1.64 | 1.72 | 1.76 | 1.76 | 1.78 | 1.84 | ***1.90*** | ***1.96*** | **Div'd Decl'd per sh B ■ †** | ***2.20*** |
| - - | 2.12 | 1.95 | 3.37 | 6.82 | 9.24 | 9.05 | 6.95 | 6.38 | 10.30 | ***9.05*** | ***14.60*** | **Cap'l Spending per sh** | ***4.00*** |
| - - | 21.23 | 20.03 | 21.90 | 24.11 | 25.37 | 26.41 | 27.26 | 28.78 | 30.48 | ***31.50*** | ***32.85*** | **Book Value per sh C** | ***36.50*** |
| - - | 29.70 | 30.10 | 30.40 | 30.80 | 32.60 | 35.20 | 35.80 | 37.50 | 39.40 | ***41.50*** | ***44.00*** | **Common Shs Outst'g D** | ***45.50*** |
| - - | 25.2 | 17.9 | 16.5 | 14.8 | 13.9 | 16.1 | 16.0 | 14.7 | 15.9 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| - - | 1.33 | .95 | .89 | .79 | .84 | 1.07 | 1.02 | .92 | 1.01 | | | **Relative P/E Ratio** | ***.85*** |
| - - | .9% | 2.8% | 3.2% | 3.6% | 4.4% | 5.8% | 5.0% | 4.6% | 4.5% | | | **Avg Ann'l Div'd Yield** | ***4.5%*** |
| - - | 751.4 | 737.4 | 767.1 | 841.7 | 801.0 | 759.1 | 907.0 | 928.2 | 961.2 | ***1015*** | ***1080*** | **Revenues ($mill)** | ***1275*** |
| - - | 38.5 | 68.0 | 77.3 | 87.6 | 82.5 | 61.0 | 75.3 | 93.8 | 97.1 | ***100*** | ***120*** | **Net Profit ($mill)** | ***160*** |
| - - | 38.8% | 28.4% | 37.5% | 34.8% | 34.3% | 33.7% | 37.2% | 27.6% | 28.1% | ***20.0%*** | ***20.0%*** | **Income Tax Rate** | ***20.0%*** |
| - - | 1.8% | .4% | 1.4% | 6.6% | 5.8% | 12.8% | 8.9% | 2.7% | 5.3% | ***5.0%*** | ***7.0%*** | **AFUDC % to Net Profit** | ***2.0%*** |
| - - | 38.2% | 39.1% | 35.1% | 35.6% | 41.6% | 42.8% | 44.2% | 44.3% | 43.7% | ***45.5%*** | ***47.5%*** | **Long-Term Debt Ratio** | ***43.0%*** |
| - - | 61.8% | 60.9% | 64.9% | 64.4% | 58.4% | 57.2% | 55.8% | 55.7% | 56.3% | ***54.5%*** | ***52.5%*** | **Common Equity Ratio** | ***57.0%*** |
| - - | 1020.7 | 990.6 | 1025.6 | 1153.5 | 1415.4 | 1625.3 | 1747.6 | 1937.2 | 2134.6 | ***2390*** | ***2755*** | **Total Capital ($mill)** | ***2925*** |
| - - | 883.1 | 860.4 | 921.6 | 1104.5 | 1387.3 | 1622.7 | 1805.6 | 1982.7 | 2347.6 | ***2605*** | ***3125*** | **Net Plant ($mill)** | ***3325*** |
| - - | 5.1% | 8.0% | 8.6% | 8.6% | 6.7% | 4.8% | 5.4% | 6.0% | 5.6% | ***5.5%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.5%*** |
| - - | 6.1% | 11.3% | 11.6% | 11.8% | 10.0% | 6.6% | 7.7% | 8.7% | 8.1% | ***8.0%*** | ***8.0%*** | **Return on Shr. Equity** | ***10.0%*** |
| - - | 6.1% | 11.3% | 11.6% | 11.8% | 10.0% | 6.6% | 7.7% | 8.7% | 8.1% | ***8.0%*** | ***8.0%*** | **Return on Com Equity E** | ***10.0%*** |
| - - | 4.7% | 5.2% | 5.0% | 5.8% | 3.9% | .5% | 1.5% | 2.9% | 2.3% | ***2.0%*** | ***2.5%*** | **Retained to Com Eq** | ***4.0%*** |
| - - | 23% | 54% | 57% | 51% | 61% | 93% | 81% | 66% | 71% | ***75%*** | ***71%*** | **All Div'ds to Net Prof** | ***61%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $1102.6 mill. **Due in 5 Yrs** $319.6 mill.
**LT Debt** $1064.7 mill. **LT Interest** $51.4 mill.
(LT interest earned: 4.0x)
**Leases, Uncapitalized** Annual rentals $11.5 mill.

**Pension Assets-12/12** $460.1 mill.
**Oblig.** $652.1 mill.

**Pfd Stock** None

**Common Stock** 40,127,405 shs.

**MARKET CAP: $1.8 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +29.1 | +5.6 | +1.1 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 5.20 | 5.30 | 5.24 |
| Capacity at Peak (Mw) | 1812 | 1789 | 1790 |
| Peak Load, Winter (Mw) F | 1604 | 1599 | 1633 |
| Annual Load Factor (%) | 79.0 | 79.0 | 79.0 |
| % Change Customers (avg.) | +1.0 | +.5 | +.5 |
| Fixed Charge Cov. (%) | 334 | 344 | 341 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | - - | -.5% | *2.0%* |
| "Cash Flow" | - - | 3.0% | *6.5%* |
| Earnings | - - | -2.5% | *7.0%* |
| Dividends | - - | 4.5% | *3.5%* |
| Book Value | - - | 5.5% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 233.6 | 211.2 | 224.1 | 238.1 | 907.0 |
| 2011 | 242.2 | 219.9 | 226.9 | 239.2 | 928.2 |
| 2012 | 240.0 | 216.4 | 248.8 | 256.0 | 961.2 |
| 2013 | 263.8 | 235.6 | ***255*** | ***260.6*** | ***1015*** |
| 2014 | ***270*** | ***255*** | ***275*** | ***280*** | ***1080*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .68 | .57 | .56 | .38 | 2.19 |
| 2011 | 1.07 | .48 | .57 | .53 | 2.65 |
| 2012 | .66 | .39 | .78 | .75 | 2.58 |
| 2013 | .83 | .35 | ***.76*** | ***.71*** | ***2.65*** |
| 2014 | ***.85*** | ***.55*** | ***.77*** | ***.73*** | ***2.90*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .44 | .44 | .44 | .44 | 1.76 |
| 2010 | .44 | .44 | .44 | .44 | 1.76 |
| 2011 | .445 | .445 | .445 | .445 | 1.78 |
| 2012 | .46 | .46 | .46 | .46 | 1.84 |
| 2013 | .475 | .475 | .475 | | |

**BUSINESS:** ALLETE, Inc. is the parent company of Minnesota Power, which supplies electricity to 146,000 customers in northeastern MN, & Superior Water, Light & Power in northwestern WI. Electric revenue breakdown: taconite mining/processing, 24%; paper/wood products, 9%; other industrial, 10%; residential, 13%; commercial, 14%; wholesale, 13% other, 17%. Has real estate operation in FL. Disc. water-utility ops. in '01. Spun off automotive remarketing operation in '04. Generating sources: coal & lignite, 74%; biomass, 4%; hydro, 4%; wind, 2%; purch., 16%. '12 deprec. rate: 2.9%. Has 1,400 employees. Chairman, President & CEO: Alan R. Hodnik. Inc.: MN. Address: 30 West Superior St., Duluth, MN 55802-2093. Tel.: 218-279-5000. Internet: www.allete.com.

**We have lowered our 2013 and 2014 share-earnings estimates for ALLETE by $0.10 and $0.05, respectively.** We reduced our estimate for this year because second-quarter profits were well below our expectation, due to some expenses at the nonutility operations. Our revised estimate of $2.65 remains within management's targeted range of $2.58-$2.78. We thought Minnesota Power would benefit next year from a taconite plant that a large customer is building, but pellet production won't begin until late 2014—a year later than we expected. On a positive note, some other industrial customers are looking to expand their facilities, as well.

**Minnesota Power is building another wind project.** The utility already has 300 megawatts of wind capacity that it brought on line in the past two years. It plans to add another 200 mw by year-end 2014 at a cost of $345 million. This will enable Minnesota Power to approach the state's renewable-energy mandate. The company will finance its construction with a combination of debt and equity. Its balance sheet should remain strong.

**Another major project is in the utility's plans.** Minnesota Power is proposing an environmental upgrade at a coal-fired unit at a cost of $350 million-$400 million. This would be completed by April of 2016. Approval from the Minnesota Public Utilities Commission is required. Its ruling is expected later this quarter.

**The utility receives current cost recovery on certain kinds of capital spending.** Renewable energy and environmental upgrades are among these kinds. This will help boost ALLETE's profits next year, despite the delay in the startup of the taconite facility.

**ALLETE is trying to sell its real estate holdings in Florida.** This business was once solidly profitable, but it sunk into the red after the real estate market in the state fell on hard times. It is losing some $3.5 million annually. As of June 30th, ALLETE had $86.6 million of land in the state. Management is optimistic that it will close on some small sales by yearend.

**This untimely stock has a dividend yield and 3- to 5-year total return potential that are comparable to the utility averages.**

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gain (loss): '04, 2¢; '05, ($1.84); gain (losses) on disc. ops.: '04, $2.57, '05, (16¢); '06, (2¢); loss from accounting change: '04, 27¢. Next egs. report due late Oct. **(B)** Div'ds historically paid in early Mar., June, Sept. and Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred chgs. In '12: $8.64/sh. **(D)** In mill. **(E)** Rate base: Original cost deprec. Rate allowed on com. eq. in '10: 10.38%; earned on avg. com. eq., '12: 8.6%. Regulatory Climate: Avg. **(F)** Summer peak in '10 & '12.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 55 |
| **Earnings Predictability** | 80 |

# AVISTA CORP. NYSE-AVA

| RECENT PRICE | 28.89 | P/E RATIO | 17.0 (Trailing: 20.9 Median: 16.0) | RELATIVE P/E RATIO | 0.94 | DIV'D YLD | 4.3% | VALUE LINE |
|---|---|---|---|---|---|---|---|---|

**TIMELINESS** 3 Raised 9/14/12

**SAFETY** 2 Raised 5/7/10

TECHNICAL 2 Raised 6/28/13

**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

|  | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 35 | (+20%) | *9%* |
| Low | 25 | (-15%) | *1%* |

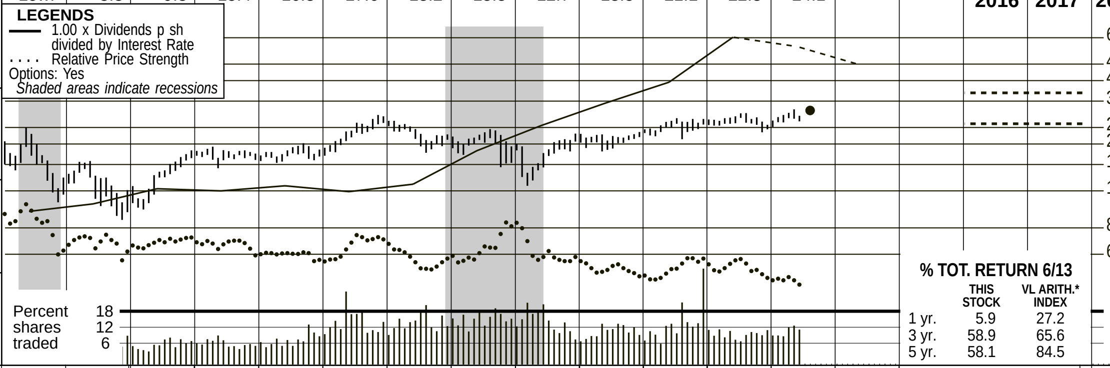
**Insider Decisions**

|  | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| to Sell | 2 | 0 | 0 | 2 | 0 | 3 | 1 | 0 | 4 |

**Institutional Decisions**

|  | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 91 | 100 | 86 |
| to Sell | 84 | 75 | 79 |
| Hld's(000) | 41233 | 40512 | 40452 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 16.6 | 18.7 | 19.4 | 20.2 | 27.5 | 25.8 | 23.6 | 22.4 | 22.8 | 26.5 | 28.0 | 29.3 |
| Low: | 8.8 | 9.8 | 15.4 | 16.3 | 17.6 | 18.2 | 15.5 | 12.7 | 18.5 | 21.1 | 22.8 | 24.1 |



**% TOT. RETURN 6/13**

|  | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 5.9 | 27.2 |
| 3 yr. | 58.9 | 65.6 |
| 5 yr. | 58.1 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.27 | 91.07 | 221.75 | 167.59 | 126.17 | 20.41 | 23.24 | 23.76 | 27.98 | 28.68 | 26.80 | 30.77 | 27.58 | 27.29 | 27.73 | 25.86 | ***26.20*** | ***27.20*** | **Revenues per sh** | ***31.25*** |
| 3.20 | 3.47 | 2.28 | 3.31 | 2.71 | 2.19 | 2.63 | 2.35 | 2.72 | 4.27 | 2.93 | 3.98 | 4.45 | 3.62 | 3.78 | 3.70 | ***3.85*** | ***4.10*** | **"Cash Flow" per sh** | ***5.00*** |
| 1.96 | 1.28 | .12 | 1.76 | 1.20 | .67 | 1.02 | .73 | .92 | 1.47 | .72 | 1.36 | 1.58 | 1.65 | 1.72 | 1.32 | ***1.70*** | ***1.80*** | **Earnings per sh** A | ***2.00*** |
| 1.24 | 1.05 | .48 | .48 | .48 | .48 | .49 | .52 | .55 | .57 | .60 | .69 | .81 | 1.00 | 1.10 | 1.16 | ***1.22*** | ***1.28*** | **Div'd Decl'd per sh** B ■ † | ***1.40*** |
| 1.82 | 2.70 | 3.30 | 4.24 | 5.92 | 1.74 | 2.21 | 2.47 | 3.23 | 3.14 | 4.04 | 4.09 | 3.86 | 3.64 | 4.20 | 4.61 | ***4.40*** | ***4.25*** | **Cap'l Spending per sh** | ***4.25*** |
| 13.38 | 11.76 | 10.69 | 15.34 | 15.12 | 14.84 | 15.54 | 15.54 | 15.87 | 17.46 | 17.27 | 18.30 | 19.17 | 19.71 | 20.30 | 21.06 | ***21.65*** | ***22.15*** | **Book Value per sh** C | ***24.00*** |
| 55.96 | 40.45 | 35.65 | 47.21 | 47.63 | 48.04 | 48.34 | 48.47 | 48.59 | 52.51 | 52.91 | 54.49 | 54.84 | 57.12 | 58.42 | 59.81 | ***62.00*** | ***62.50*** | **Common Shs Outst'g** D | ***64.00*** |
| 10.0 | 16.5 | NMF | 13.6 | 13.7 | 19.3 | 13.8 | 24.4 | 19.4 | 15.4 | 30.9 | 15.0 | 11.4 | 12.7 | 14.1 | 19.3 | ***Bold figures are Value Line estimates*** |  | **Avg Ann'l P/E Ratio** | ***14.5*** |
| .58 | .86 | NMF | .88 | .70 | 1.05 | .79 | 1.29 | 1.03 | .83 | 1.64 | .90 | .76 | .81 | .88 | 1.23 |  |  | **Relative P/E Ratio** | ***.95*** |
| 6.4% | 5.0% | 2.8% | 2.0% | 2.9% | 3.7% | 3.5% | 2.9% | 3.0% | 2.5% | 2.7% | 3.4% | 4.5% | 4.8% | 4.5% | 4.6% |  |  | **Avg Ann'l Div'd Yield** | ***4.8%*** |
|  |  |  |  |  |  | 1123.4 | 1151.6 | 1359.6 | 1506.3 | 1417.8 | 1676.8 | 1512.6 | 1558.7 | 1619.8 | 1547.0 | ***1625*** | ***1700*** | **Revenues ($mill)** | ***2000*** |
|  |  |  |  |  |  | 51.8 | 37.8 | 47.2 | 75.1 | 38.5 | 73.6 | 87.1 | 92.4 | 100.2 | 78.2 | ***110*** | ***115*** | **Net Profit ($mill)** | ***135*** |
|  |  |  |  |  |  | 40.5% | 36.4% | 35.4% | 35.9% | 38.7% | 38.3% | 34.3% | 35.0% | 35.4% | 34.4% | ***36.0%*** | ***36.0%*** | **Income Tax Rate** | ***36.0%*** |
|  |  |  |  |  |  | 2.1% | 3.7% | 3.6% | 3.9% | 22.4% | 14.0% | 4.2% | 4.0% | 5.2% | 8.3% | ***6.0%*** | ***5.0%*** | **AFUDC % to Net Profit** | ***5.0%*** |
|  |  |  |  |  |  | 57.1% | 56.5% | 58.0% | 53.7% | 41.0% | 48.1% | 50.9% | 51.6% | 51.4% | 50.8% | ***50.5%*** | ***51.0%*** | **Long-Term Debt Ratio** | ***48.5%*** |
|  |  |  |  |  |  | 41.3% | 41.9% | 40.6% | 46.3% | 59.0% | 51.9% | 49.1% | 48.4% | 48.6% | 49.2% | ***49.5%*** | ***49.0%*** | **Common Equity Ratio** | ***51.5%*** |
|  |  |  |  |  |  | 1819.4 | 1796.2 | 1900.8 | 1980.1 | 1548.9 | 1919.5 | 2139.0 | 2325.3 | 2439.9 | 2561.2 | ***2710*** | ***2825*** | **Total Capital ($mill)** | ***3000*** |
|  |  |  |  |  |  | 1944.6 | 1956.1 | 2126.4 | 2215.0 | 2351.3 | 2492.2 | 2607.0 | 2714.2 | 2860.8 | 3023.7 | ***3160*** | ***3285*** | **Net Plant ($mill)** | ***3600*** |
|  |  |  |  |  |  | 5.2% | 4.3% | 4.8% | 6.1% | 5.2% | 5.8% | 5.5% | 5.4% | 5.5% | 4.3% | ***5.5%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.0%*** |
|  |  |  |  |  |  | 6.6% | 4.8% | 5.9% | 8.2% | 4.2% | 7.4% | 8.3% | 8.2% | 8.5% | 6.2% | ***8.0%*** | ***8.0%*** | **Return on Shr. Equity** | ***8.5%*** |
|  |  |  |  |  |  | 6.6% | 4.7% | 5.9% | 8.0% | 4.2% | 7.4% | 8.3% | 8.2% | 8.5% | 6.2% | ***8.0%*** | ***8.0%*** | **Return on Com Equity** E | ***8.5%*** |
|  |  |  |  |  |  | 3.4% | 1.4% | 2.4% | 4.9% | .8% | 3.7% | 4.1% | 3.3% | 3.1% | .8% | ***2.5%*** | ***2.5%*** | **Retained to Com Eq** | ***3.0%*** |
|  |  |  |  |  |  | 50% | 72% | 60% | 40% | 82% | 50% | 51% | 60% | 64% | 88% | ***69%*** | ***70%*** | **All Div'ds to Net Prof** | ***66%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1416.3 mill. **Due in 5 Yrs** $135.7 mill.
**LT Debt** $1298.2 mill. **LT Interest** $66.2 mill.
Incl. $51.5 mill. debt to affiliated trusts; $17.8 mill. nonrecourse debt; $54.0 mill. LT borroiwings under line of credit.
(LT interest earned: 2.9x)
**Leases, Uncapitalized** Annual rentals $6.8 mill.
**Pension Assets-12/12** $406.1 mill.
**Oblig.** $584.6 mill.
**Pfd Stock** None
**Common Stock** 59,920,196 shs.
**as of 4/30/13**
**MARKET CAP: $1.7 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

|  | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -1.1 | +2.0 | -1.8 |
| Avg. Indust. Use (MWH) | 1525 | 1556 | 1505 |
| Avg. Indust. Revs. per KWH (¢) | 5.47 | 5.71 | 5.69 |
| Capacity at Peak (Mw) | 2905 | 2923 | 3060 |
| Peak Load, Winter (Mw) F | 2507 | 2381 | 2485 |
| Annual Load Factor (%) | 60.0 | 61.0 | 58.0 |
| % Change Customers (yr-end) | +.7 | +.4 | +.6 |
| Fixed Charge Cov. (%) | 301 | 318 | 245 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -12.5% | -.5% | *2.5%* |
| "Cash Flow" | 3.0% | 2.5% | *5.0%* |
| Earnings | 2.5% | 8.5% | *4.0%* |
| Dividends | 8.5% | 14.0% | *4.5%* |
| Book Value | 3.0% | 4.0% | *3.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 456.4 | 360.7 | 367.2 | 374.4 | 1558.7 |
| **2011** | 476.6 | 360.6 | 343.7 | 438.9 | 1619.8 |
| **2012** | 452.3 | 343.6 | 340.6 | 410.5 | 1547.0 |
| **2013** | 482.9 | ***350*** | ***350*** | ***442.1*** | ***1625*** |
| **2014** | ***515*** | ***365*** | ***365*** | ***455*** | ***1700*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .52 | .46 | .22 | .45 | 1.65 |
| **2011** | .73 | .39 | .18 | .42 | 1.72 |
| **2012** | .65 | .31 | .10 | .26 | 1.32 |
| **2013** | .71 | ***.35*** | ***.14*** | ***.50*** | ***1.70*** |
| **2014** | ***.75*** | ***.40*** | ***.15*** | ***.50*** | ***1.80*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .18 | .21 | .21 | .21 | .81 |
| **2010** | .25 | .25 | .25 | .25 | 1.00 |
| **2011** | .275 | .275 | .275 | .275 | 1.10 |
| **2012** | .29 | .29 | .29 | .29 | 1.16 |
| **2013** | .305 | .305 |  |  |  |

**BUSINESS:** Avista Corporation (formerly The Washington Water Power Company) supplies electricity & gas in eastern Washington & northern Idaho. Supplies gas to part of Oregon. Customers: 362,000 electric, 323,000 gas. Has 79%-owned nonutility subsidiary (Ecova) involved in energy-management services. Electric revenue breakdown: residential, 32%; commercial, 30%; industrial, 12%; wholesale, 11%; other, 15%. Generating sources: hydro, 45%; coal, 16%; gas, 13%; wood waste, 2%; purchased, 24%. Fuel costs: 45% of revenues. '12 reported deprec. rate (utility): 2.9%. Has 2,800 employees. Chairman, President & CEO: Scott L. Morris. Inc.: Washington. Address: 1411 E. Mission Ave., Spokane, WA 99202-2600. Tel.: 509-489-0500. Internet: www.avistacorp.com.

**This year, Avista's earnings will probably return to near or above the 2011 level.** A number of factors hurt the bottom line in 2012: mild weather, volume that was lower than expected (over and above the effects of weather); a disappointing showing from the Ecova energy services operation; and an $0.08-a-share charge in the December quarter for a voluntary severance program. The weather patterns were more favorable for Avista in the first two months of 2013, and the utility is benefiting from rate relief (see below). Ecova is experiencing a strengthening in demand, and should easily top its $0.03-a-share contribution of a year ago (although its $0.16-a-share profit of 2011 appears out of reach). And power supply costs are below those reflected in rates, which provides a partial benefit to the company. We are sticking with our $1.70-a-share earnings estimate for 2013, which is at the low end of Avista's targeted range of $1.70-$1.90 a share.

**Electric and gas rates were raised in Washington and Idaho earlier this year, and additional tariff hikes are coming in the next few months.** At the start of 2013, electric and gas rates in Washington were increased by $13.65 million (3.0%) and $5.3 million (3.6%), respectively. At the start of 2014, additional raises of $14.0 million (3.0%) and $1.4 million (0.9%) will take effect. At the beginning of April, gas tariffs in Idaho were boosted by $3.1 million (4.9%), and electric and gas rates will be hiked by $7.8 million (3.1%) and $1.3 million (2.0%), respectively, at the start of October. The additional rate increases should help boost earnings in 2014.

**Avista will probably file additional rate cases in the next several months.** The utility is considering a gas petition in Oregon. It will likely put forth rate applications in Washington and Idaho in 2014 so that new tariffs will take effect as soon as rate freezes in each state expire at the start of 2015.

**This stock is worthy of consideration by income-oriented investors.** Its dividend yield is fractionally above the utility average. Its 3- to 5-year total return potential is not impressive, but is still superior to that of most utility issues.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. nonrec. losses: '00, 27¢; '02, 9¢; '03, 3¢; gain (losses) on disc. ops.: '01, ($1.00); '02, 2¢; '03, (10¢). Next earnings report due early Aug. **(B)** Div'ds historically paid in mid-Mar., June, Sept. & Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '12: $10.99/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in WA in '13: 9.8%; in ID in '13: 9.8%; earned on avg. com. eq., '12: 6.4%. Regulatory Climate: WA, Avg.; ID, Above Avg. **(F)** Summer peak in '12.

| **Company's Financial Strength** | A |
|---|---|
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 70 |
| **Earnings Predictability** | 65 |

# BLACK HILLS CORP. NYSE-BKH

**RECENT PRICE** 52.65 **P/E RATIO** 21.9 (Trailing: 24.7 Median: 17.0) **RELATIVE P/E RATIO** 1.21 **DIV'D YLD** 2.9% **VALUE LINE**

**TIMELINESS** 2 Raised 5/17/13

**SAFETY** 3 Lowered 8/15/03

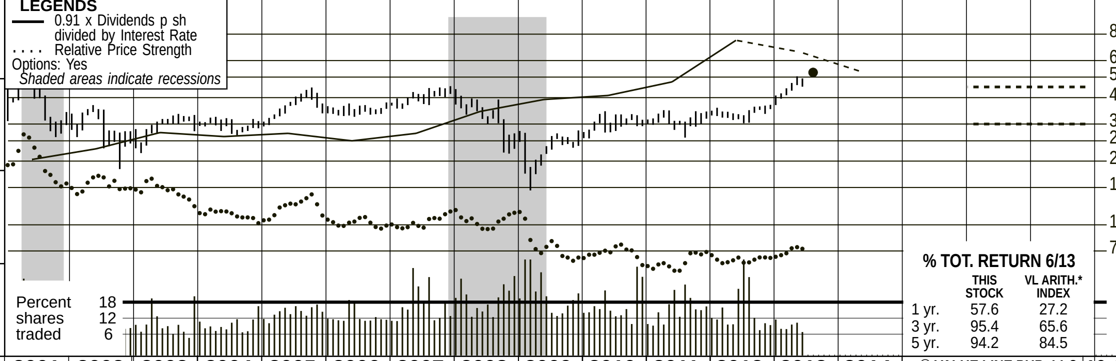
TECHNICAL 3 Lowered 12/21/12

**BETA** .80 (1.00 = Market)

|  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 36.9 | 33.5 | 32.5 | 44.6 | 37.9 | 45.4 | 44.0 | 28.0 | 34.5 | 34.8 | 37.0 | 54.1 |
| Low: | 18.3 | 21.8 | 26.5 | 29.2 | 32.5 | 35.4 | 21.7 | 14.5 | 25.7 | 25.8 | 30.3 | 36.9 |

**Target Price Range**

| 2016 | 2017 | 2018 |
|---|---|---|



**% TOT. RETURN 6/13**

|  | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 57.6 | 27.2 |
| 3 yr. | 95.4 | 65.6 |
| 5 yr. | 94.2 | 84.5 |

## 2016-18 PROJECTIONS

|  | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (-15%) | *Nil* |
| Low | 30 | (-45%) | *-9%* |

### Insider Decisions

|  | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Institutional Decisions

|  | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 107 | 92 | 90 |
| to Sell | 56 | 81 | 84 |
| Hld's(000) | 30145 | 30054 | 30032 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.45 | 31.48 | 37.05 | 69.69 | 57.96 | 15.74 | 35.17 | 34.54 | 41.97 | 19.69 | 18.41 | 26.03 | 32.58 | 33.29 | 28.96 | 26.55 | ***27.98*** | ***29.00*** | **Revenues per sh** | ***31.75*** |
| 2.52 | 2.72 | 2.88 | 3.68 | 5.27 | 4.93 | 4.26 | 4.46 | 4.81 | 5.04 | 5.29 | 2.95 | 5.41 | 4.88 | 4.01 | 5.59 | ***5.90*** | ***6.15*** | **"Cash Flow" per sh** | ***7.25*** |
| 1.49 | 1.60 | 1.70 | 2.37 | 3.42 | 2.33 | 1.84 | 1.74 | 2.11 | 2.21 | 2.68 | .18 | 2.32 | 1.66 | 1.01 | 1.97 | ***2.40*** | ***2.55*** | **Earnings per sh A** | ***3.00*** |
| .95 | 1.00 | 1.04 | 1.08 | 1.12 | 1.16 | 1.20 | 1.24 | 1.28 | 1.32 | 1.37 | 1.40 | 1.42 | 1.44 | 1.46 | 1.48 | ***1.52*** | ***1.56*** | **Div'd Decl'd per sh B ■** | ***1.70*** |
| .98 | 1.18 | 4.89 | 5.79 | 14.07 | 8.65 | 2.80 | 2.80 | 4.18 | 9.24 | 6.92 | 8.51 | 8.90 | 12.04 | 10.03 | 7.90 | ***10.35*** | ***8.70*** | **Cap'l Spending per sh** | ***8.75*** |
| 9.46 | 9.58 | 10.14 | 11.95 | 18.95 | 19.66 | 21.72 | 22.43 | 22.29 | 23.68 | 25.66 | 27.19 | 27.84 | 28.02 | 27.53 | 27.88 | ***28.70*** | ***29.65*** | **Book Value per sh C** | ***33.25*** |
| 21.70 | 21.58 | 21.37 | 23.30 | 26.89 | 26.93 | 32.30 | 32.48 | 33.16 | 33.37 | 37.80 | 38.64 | 38.97 | 39.27 | 43.92 | 44.21 | ***44.50*** | ***44.80*** | **Common Shs Outst'g D** | ***45.70*** |
| 13.0 | 14.9 | 13.6 | 10.9 | 11.4 | 12.5 | 15.9 | 17.1 | 17.3 | 15.8 | 15.0 | NMF | 9.9 | 18.1 | 31.1 | 17.1 | ***Bold figures are Value Line estimates*** |  | **Avg Ann'l P/E Ratio** | ***12.5*** |
| .75 | .77 | .78 | .71 | .58 | .68 | .91 | .90 | .92 | .85 | .80 | NMF | .66 | 1.15 | 1.95 | 1.09 |  |  | **Relative P/E Ratio** | ***.85*** |
| 4.9% | 4.2% | 4.5% | 4.2% | 2.9% | 4.0% | 4.1% | 4.2% | 3.5% | 3.8% | 3.4% | 4.2% | 6.2% | 4.8% | 4.6% | 4.4% |  |  | **Avg Ann'l Div'd Yield** | ***4.5%*** |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |  | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1136.1 | 1121.7 | 1391.6 | 656.9 | 695.9 | 1005.8 | 1269.6 | 1307.3 | 1272.2 | 1173.9 | ***1240*** | ***1300*** | **Revenues ($mill)** | ***1450*** |
| 57.1 | 57.2 | 70.3 | 74.0 | 100.1 | 6.8 | 89.7 | 64.6 | 40.4 | 86.9 | ***105*** | ***115*** | **Net Profit ($mill)** | ***140*** |
| 34.4% | 31.8% | 33.8% | 31.3% | 31.3% | 33.1% | 30.7% | 26.4% | 31.1% | 35.5% | ***34.0%*** | ***34.0%*** | **Income Tax Rate** | ***34.0%*** |
| .7% | .3% | 1.0% | 9.7% | 14.8% | 173.2% | 20.1% | 28.0% | 65.0% | 5.4% | ***9.0%*** | ***9.0%*** | **AFUDC % to Net Profit** | ***7.0%*** |
| 55.0% | 49.9% | 47.6% | 44.3% | 36.8% | 32.3% | 48.4% | 51.9% | 51.4% | 43.2% | ***43.5%*** | ***49.0%*** | **Long-Term Debt Ratio** | ***51.5%*** |
| 44.5% | 49.6% | 52.4% | 55.7% | 63.2% | 67.7% | 51.6% | 48.1% | 48.6% | 56.8% | ***56.5%*** | ***51.0%*** | **Common Equity Ratio** | ***48.5%*** |
| 1578.2 | 1469.3 | 1409.1 | 1418.4 | 1534.2 | 1551.8 | 2100.7 | 2286.3 | 2489.7 | 2171.4 | ***2260*** | ***2605*** | **Total Capital ($mill)** | ***3125*** |
| 1442.4 | 1445.7 | 1435.4 | 1646.4 | 1823.5 | 2022.2 | 2160.7 | 2495.4 | 2789.6 | 2742.7 | ***3050*** | ***3275*** | **Net Plant ($mill)** | ***3800*** |
| 4.8% | 5.3% | 6.6% | 6.8% | 7.9% | 1.6% | 5.9% | 4.4% | 3.3% | 5.5% | ***6.0%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.0%*** |
| 8.0% | 7.8% | 9.5% | 9.4% | 10.3% | .7% | 8.3% | 5.9% | 3.3% | 7.1% | ***8.5%*** | ***8.5%*** | **Return on Shr. Equity** | ***9.5%*** |
| 8.1% | 7.8% | 9.5% | 9.4% | 10.3% | .7% | 8.3% | 5.9% | 3.3% | 7.1% | ***8.5%*** | ***8.5%*** | **Return on Com Equity E** | ***9.5%*** |
| 2.8% | 2.3% | 3.8% | 3.8% | 5.1% | NMF | 3.2% | .7% | NMF | 1.8% | ***3.0%*** | ***3.5%*** | **Retained to Com Eq** | ***4.0%*** |
| 65% | 71% | 60% | 59% | 50% | NMF | 62% | 87% | NMF | 75% | ***63%*** | ***61%*** | **All Div'ds to Net Prof** | ***55%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1286.1 mill. **Due in 5 Yrs** $690.9 mill.
**LT Debt** $936.5 mill. **LT Interest** $61.8 mill.
(LT interest earned: 3.0x)
**Leases, Uncapitalized** Annual rentals $2.7 mill.

**Pension Assets-12/12** $268.8 mill. **Oblig.** $363.3 mill.

**Pfd Stock** None

**Common Stock** 44,442,886 shs.
**as of 4/30/13**

**MARKET CAP: $2.3 billion (Mid Cap)**

### ELECTRIC OPERATING STATISTICS

|  | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.9 | +1.3 | +.2 |
| Avg. Indust. Use (MWH) | 8489 | 8482 | 8921 |
| Avg. Indust. Revs. per KWH (¢) | 6.95 | 7.58 | 8.01 |
| Capacity at Yearend (Mw) | 1127 | 1315 | 1318 |
| Peak Load, Summer (Mw) | 956 | 1025 | 1036 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | -.1 | +.3 | +.3 |
| Fixed Charge Cov. (%) | 174 | 160 | 205 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -4.5% | 2.0% | *1.0%* |
| "Cash Flow" | .5% | -1.0% | *7.0%* |
| Earnings | -5.5% | -8.0% | *11.5%* |
| Dividends | 2.5% | 2.0% | *2.5%* |
| Book Value | 5.0% | 3.0% | *3.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 442.3 | 271.3 | 264.4 | 329.3 | 1307.3 |
| **2011** | 400.8 | 260.7 | 249.5 | 361.2 | 1272.2 |
| **2012** | 365.8 | 242.4 | 246.8 | 318.9 | 1173.9 |
| **2013** | 380.7 | ***260*** | ***260*** | ***339.3*** | ***1240*** |
| **2014** | ***405*** | ***270*** | ***270*** | ***355*** | ***1300*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .81 | d.22 | .22 | .85 | 1.66 |
| **2011** | .73 | .09 | d.29 | .44 | 1.01 |
| **2012** | .80 | .11 | .38 | .67 | 1.97 |
| **2013** | .97 | ***.30*** | ***.43*** | ***.70*** | ***2.40*** |
| **2014** | ***.90*** | ***.35*** | ***.50*** | ***.80*** | ***2.55*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .355 | .355 | .355 | .355 | 1.42 |
| **2010** | .36 | .36 | .36 | .36 | 1.44 |
| **2011** | .365 | .365 | .365 | .365 | 1.46 |
| **2012** | .37 | .37 | .37 | .37 | 1.48 |
| **2013** | .38 | .38 |  |  |  |

**BUSINESS:** Black Hills Corporation is a holding company for utilities that serve 202,000 electric customers in CO, SD, WY and MT, and 567,000 gas customers in NE, IA, KS, CO and WY. Electric revenue breakdown: res'l, 31%; comm'l, 36%; ind'l, 13%; wholesale, 11%; other, 9%. Generating sources: coal, 37%; other, 2%; purch., 61%. Mines coal & has a gas & oil E&P bus. Acq'd Wickford Energy Mktg. 7/97 (discontinued in '11); Mallon Resources 3/03; Cheyenne Light 1/05; utility ops. from Aquila 7/08. Discont. telecom in '05; oil mktg. in '06. Fuel costs: 35% of revs. '12 depr. rate: 4.1%. Has 1,900 empls. Chairman, President & CEO: David R. Emery. Inc.: SD. Address: P.O. Box 1400, 625 Ninth St., Rapid City, SD 57701. Tel.: 605-721-1700. Internet: www.blackhillscorp.com.

**Black Hills has an electric rate case pending in South Dakota.** The utility filed for a tariff hike of $13.7 million (9.9%), based on a 10.25% return on a 53% common-equity ratio. Black Hills also requested a regulatory mechanism that would enable it to recover its financing costs each quarter for Cheyenne Prairie, a gas-fired plant that is under construction (see below). The company already has such a mechanism in Wyoming. Hearings are scheduled for October. We don't know when the final order will be issued.

**Black Hills Power and Cheyenne Light have begun construction of Cheyenne Prairie.** The 132-megawatt plant will provide power to South Dakota and Wyoming at an estimated cost of $237 million. The company expects the new facility to begin commercial operation early in the fourth quarter of 2014. Black Hills and Cheyenne Light will file rate cases in late 2013 or early 2014 to enable them to place Cheyenne Prairie in the rate base.

**Earnings should rise substantially this year.** The year got off to a good start, thanks to more-favorable weather and $0.11 a share of mark-to-market accounting gains stemming from an interest-rate swap. We include mark-to-market gains or charges in our presentation because they are an ongoing part of quarterly results.

**We expect good profit growth in 2014.** The key reasons are expected rate relief in South Dakota and the refinancing of high-cost debt.

**This stock has been the top performer among electric utility stocks in 2013, having risen more than 40%, year to date.** However, in our view, there really isn't anything to account for such a move, such as a takeover bid, a big dividend hike, or a sharp upward revision in earnings guidance. The stock carries a favorable Timeliness rank, but we are concerned about the lofty valuation. At the recent price, the relative price-earnings ratio is well above 1.00—which is high for a utility—and the dividend yield is below 3%—which is low for a utility. Moreover, the quotation is above our 2016-2018 Target Price Range. Perhaps there is some takeover speculation here. Whatever the reason, income-oriented investors can find more-attractive selections elsewhere.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '05, (99¢); '08, ($1.55); '09, (28¢); '10, 10¢; '12, 4¢ net; gains (losses) on disc. ops.: '05, (7¢); '06, 21¢; '07, (4¢); '08, $4.12; '09, 7¢; '11, 23¢; '12, (16¢). '11, '12 EPS don't add due to chng. in shs. or rounding. Next egs. due early Aug. **(B)** Div'ds paid early Mar., Jun., Sept., & Dec. ■ Div'd reinv. plan avail. **(C)** Incl. def'd chgs. In '12: $12.28/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate all'd on com. eq. in SD in '10: none spec.; in CO in '12: 9.8%-10.2%; earn. on avg. com. eq., '12: 7.1%. Regul. Climate: Avg.

|  |  |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 40 |
| **Earnings Predictability** | 40 |

# CMS ENERGY CORP. NYSE-CMS

**RECENT PRICE** 26.11 | **P/E RATIO** 15.6 (Trailing: 16.1 Median: 14.0) | **RELATIVE P/E RATIO** 0.89 | **DIV'D YLD** 4.1% | **VALUE LINE**

**TIMELINESS** 4 Lowered 8/2/13

**SAFETY** 3 Raised 12/29/06

TECHNICAL 3 Raised 9/13/13

**BETA** .75 (1.00 = Market)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 24.8 | 10.7 | 10.6 | 16.8 | 17.0 | 19.5 | 17.5 | 16.1 | 19.3 | 22.4 | 25.0 | 30.0 |
| Low: | 5.4 | 3.4 | 7.8 | 9.7 | 12.1 | 15.0 | 8.3 | 10.0 | 14.1 | 17.0 | 21.1 | 24.6 |

**Target Price Range**

| 2016 | 2017 | 2018 |
|---|---|---|

### 2016-18 PROJECTIONS

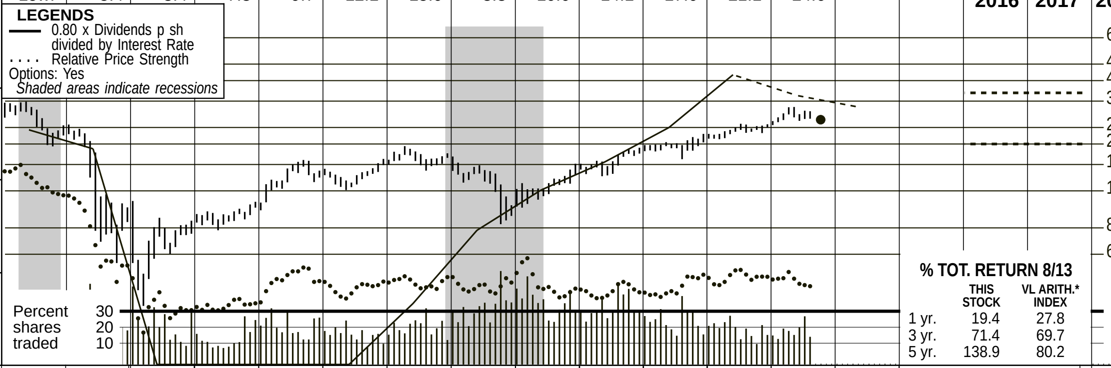
|  | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 35 | (+35%) | *11%* |
| Low | 20 | (-25%) | *-1%* |

### Insider Decisions

|  | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 4 | 0 | 0 | 1 | 1 | 0 | 4 | 0 |

### Institutional Decisions

|  | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 164 | 184 | 196 |
| to Sell | 179 | 167 | 166 |
| Hld's(000) | 219002 | 224706 | 227643 |



**% TOT. RETURN 8/13**

|  | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 19.4 | 27.8 |
| 3 yr. | 71.4 | 69.7 |
| 5 yr. | 138.9 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47.49 | 47.56 | 52.59 | 74.24 | 72.16 | 60.28 | 34.21 | 28.06 | 28.52 | 30.57 | 28.95 | 30.13 | 27.23 | 25.77 | 25.59 | 23.90 | ***24.60*** | ***25.00*** | **Revenues per sh** | ***27.25*** |
| 7.39 | 6.60 | 7.87 | 7.61 | 5.24 | d.09 | 2.39 | 2.87 | 3.43 | 3.22 | 3.08 | 3.88 | 3.47 | 3.70 | 3.65 | 3.82 | ***4.05*** | ***4.20*** | **"Cash Flow" per sh** | ***4.75*** |
| 2.61 | 2.24 | 2.85 | 2.53 | 1.27 | d2.99 | d.29 | .74 | 1.10 | .64 | .64 | 1.23 | .93 | 1.33 | 1.45 | 1.53 | ***1.65*** | ***1.75*** | **Earnings per sh** A | ***2.00*** |
| 1.14 | 1.26 | 1.39 | 1.46 | 1.46 | 1.09 | - - | - - | - - | - - | .20 | .36 | .50 | .66 | .84 | .96 | ***1.02*** | ***1.08*** | **Div'd Decl'd per sh** B ■ | ***1.30*** |
| 7.05 | 11.98 | 9.69 | 8.51 | 9.49 | 5.18 | 3.32 | 2.69 | 2.69 | 3.01 | 5.61 | 3.50 | 3.59 | 3.29 | 3.47 | 4.65 | ***5.30*** | ***5.60*** | **Cap'l Spending per sh** | ***4.50*** |
| 19.61 | 20.63 | 21.17 | 19.48 | 14.21 | 7.86 | 9.84 | 10.63 | 10.53 | 10.03 | 9.46 | 10.88 | 11.42 | 11.19 | 11.92 | 12.09 | ***12.85*** | ***13.65*** | **Book Value per sh** C | ***16.25*** |
| 100.79 | 108.11 | 116.04 | 121.20 | 132.99 | 144.10 | 161.13 | 195.00 | 220.50 | 222.78 | 225.15 | 226.41 | 227.89 | 249.60 | 254.10 | 264.10 | ***266.00*** | ***268.00*** | **Common Shs Outst'g** D | ***274.00*** |
| 13.5 | 19.9 | 13.9 | 9.6 | 20.8 | - - | - - | 12.4 | 12.6 | 22.2 | 26.8 | 10.9 | 13.6 | 12.5 | 13.6 | 15.1 | ***Bold figures are Value Line estimates*** |  | **Avg Ann'l P/E Ratio** | ***13.5*** |
| .78 | 1.03 | .79 | .62 | 1.07 | - - | - - | .66 | .67 | 1.20 | 1.42 | .66 | .91 | .80 | .85 | .96 |  |  | **Relative P/E Ratio** | ***.90*** |
| 3.2% | 2.8% | 3.5% | 6.0% | 5.5% | 7.5% | - - | - - | - - | - - | 1.2% | 2.7% | 4.0% | 4.0% | 4.3% | 4.2% |  |  | **Avg Ann'l Div'd Yield** | ***4.8%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $7597.0 mill. **Due in 5 Yrs** $3123.0 mill.
**LT Debt** $6839.0 mill. **LT Interest** $369.0 mill.
Incl. $144.0 mill. capitalized leases.
(LT interest earned: 3.1x)
**Leases, Uncapitalized** Annual rentals $26.0 mill.
**Pension Assets-12/12** $1.73 bill. **Oblig.** $2.35 bill.
**Pfd Stock** $37.0 mill. **Pfd Div'd** $2.0 mill.
Incl. 373,148 shs. $4.50 $100 par, cum., callable at $110.00.
**Common Stock** 265,900,000 shs.

**MARKET CAP: $6.9 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |  | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5513.0 | 5472.0 | 6288.0 | 6810.0 | 6519.0 | 6821.0 | 6205.0 | 6432.0 | 6503.0 | 6312.0 | ***6550*** | ***6700*** | **Revenues ($mill)** | ***7450*** |
| d40.0 | 144.0 | 247.0 | 158.0 | 168.0 | 300.0 | 231.0 | 356.0 | 384.0 | 413.0 | ***455*** | ***485*** | **Net Profit ($mill)** | ***575*** |
| NMF | 18.6% | 25.6% | - - | 37.6% | 31.6% | 34.6% | 38.1% | 36.8% | 39.4% | ***37.0%*** | ***37.0%*** | **Income Tax Rate** | ***37.0%*** |
| - - | - - | 15.4% | 6.3% | 3.6% | 1.3% | 13.0% | 2.2% | 2.6% | 2.9% | ***3.0%*** | ***2.0%*** | **AFUDC % to Net Profit** | ***2.0%*** |
| 78.2% | 75.3% | 73.5% | 71.7% | 70.5% | 69.4% | 67.9% | 70.1% | 66.9% | 67.9% | ***67.5%*** | ***66.0%*** | **Long-Term Debt Ratio** | ***61.5%*** |
| 18.3% | 21.5% | 23.4% | 24.9% | 25.9% | 27.4% | 29.0% | 29.5% | 32.6% | 31.6% | ***32.0%*** | ***33.5%*** | **Common Equity Ratio** | ***38.0%*** |
| 8652.0 | 9640.0 | 9913.0 | 8961.0 | 8212.0 | 8993.0 | 8977.0 | 9473.0 | 9279.0 | 10101 | ***10650*** | ***10900*** | **Total Capital ($mill)** | ***11700*** |
| 6944.0 | 8636.0 | 7845.0 | 7976.0 | 8728.0 | 9190.0 | 9682.0 | 10069 | 10633 | 11551 | ***12325*** | ***13200*** | **Net Plant ($mill)** | ***15200*** |
| 2.7% | 4.4% | 5.0% | 4.5% | 4.5% | 5.4% | 4.7% | 5.8% | 6.3% | 5.9% | ***6.0%*** | ***6.5%*** | **Return on Total Cap'l** | ***6.5%*** |
| NMF | 6.1% | 9.4% | 6.2% | 6.9% | 10.9% | 8.0% | 12.5% | 12.5% | 12.8% | ***13.0%*** | ***13.0%*** | **Return on Shr. Equity** | ***13.0%*** |
| NMF | 6.2% | 9.9% | 6.4% | 7.2% | 11.7% | 8.5% | 12.5% | 12.6% | 12.9% | ***13.0%*** | ***13.0%*** | **Return on Com Equity** E | ***13.0%*** |
| NMF | 6.2% | 9.9% | 6.4% | 5.1% | 8.4% | 4.1% | 6.9% | 5.6% | 5.0% | ***5.5%*** | ***5.5%*** | **Retained to Com Eq** | ***5.0%*** |
| NMF | 11% | 6% | 10% | 35% | 31% | 54% | 46% | 55% | 61% | ***60%*** | ***60%*** | **All Div'ds to Net Prof** | ***62%*** |

**ELECTRIC OPERATING STATISTICS**

|  | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +5.4 | +.4 | +.6 |
| Avg. Indust. Use (MWH) | 1027 | 1086 | 1113 |
| Avg. Indust. Revs. per KWH (¢) | 8.27 | 8.21 | 8.06 |
| Capacity at Peak (Mw) | 9246 | 8588 | 8607 |
| Peak Load, Summer (Mw) | 8190 | 8930 | 9006 |
| Annual Load Factor (%) | 55.3 | 50.8 | 48.7 |
| % Change Customers (yr-end) | -.3 | -.1 | - - |
| Fixed Charge Cov. (%) | 215 | 237 | 268 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -9.5% | -3.0% | *1.5%* |
| "Cash Flow" | -1.5% | 3.0% | *4.0%* |
| Earnings | 18.0% | 12.5% | *5.5%* |
| Dividends | -5.0% | - - | *8.0%* |
| Book Value | -1.5% | 3.0% | *5.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1967 | 1340 | 1443 | 1682 | 6432.0 |
| **2011** | 2055 | 1364 | 1464 | 1620 | 6503.0 |
| **2012** | 1802 | 1333 | 1507 | 1670 | 6312.0 |
| **2013** | 1979 | 1406 | ***1500*** | ***1665*** | ***6550*** |
| **2014** | ***2000*** | ***1450*** | ***1550*** | ***1700*** | ***6700*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .35 | .26 | .53 | .21 | 1.33 |
| **2011** | .51 | .26 | .53 | .15 | 1.45 |
| **2012** | .36 | .37 | .55 | .25 | 1.53 |
| **2013** | .53 | .29 | ***.58*** | ***.25*** | ***1.65*** |
| **2014** | ***.55*** | ***.35*** | ***.60*** | ***.25*** | ***1.75*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .125 | .125 | .125 | .125 | .50 |
| **2010** | .15 | .15 | .15 | .21 | .66 |
| **2011** | .21 | .21 | .21 | .21 | .84 |
| **2012** | .24 | .24 | .24 | .24 | .96 |
| **2013** | .255 | .255 | .255 |  |  |

**BUSINESS:** CMS Energy Corporation is a holding company for Consumers Energy, which supplies electricity and gas to lower Michigan (excluding Detroit). Has 1.8 million electric, 1.7 million gas customers. Has 1,035 megawatts of nonregulated generating capacity. Sold Palisades nuclear plant in '07. Electric revenue breakdown: residential, 46%; commercial, 31%; industrial, 20%; other, 3%. Generating sources: coal, 39%; gas, 8%; other, 1%; purchased, 52%. Fuel costs: 51% of revenues. '12 reported deprec. rates: 3.2% electric, 2.9% gas, 7.2% other. Has 7,500 employees. Chairman: David W. Joos. President & CEO: John G. Russell. Incorporated: Michigan. Address: One Energy Plaza, Jackson, Michigan 49201. Tel.: 517-788-0550. Internet: www.cmsenergy.com.

**CMS Energy's utility subsidiary has asked the Michigan Public Service Commission (MPSC) for a certificate of need for a base-load generating plant.** The proposed gas-fired facility would provide Consumers Energy with 700 megawatts of capacity at an expected cost of $750 million. It would begin commercial operation in 2017. The utility has tax-loss carryforwards that should preclude the need for a large stock offering, although CMS will issue a small amount of equity each year. The MPSC's decision is expected by mid-April. Opposition to the proposal has already emerged, however.

**The MPSC has approved a wind project for Consumers.** This would add 105 mw of capacity at an expected cost of $255 million. It is expected to be in service in late 2014, and should enable the utility to comply with Michigan's renewable-energy requirement.

**It will be several months before Consumers' next rate application.** Earlier this year, the utility was granted an electric tariff hike of $89 million, based on a 10.3% return on equity. Consumers had also requested a gas rate increase, but withdrew its filing in June due to better-than-expected revenues and reduced costs this year. The utility is trying to cut expenses even more, to the point where it can postpone its need for rate relief (for electricity or gas) until 2015.

**CMS should continue to produce steady earnings increases.** Rate relief and effective cost controls have helped. The company has enough flexibility in its operations for it to manage its earnings around things such as unusually favorable or unfavorable weather patterns. Its targeted bottom-line range for 2013 is narrow, at $1.63-$1.66 a share. Our estimate remains within this range, at $1.65 a share. We forecast a 6% profit increase in 2014, to $1.75 a share. This is within the company's goal of 5%-7% annual earnings growth.

**Untimely CMS stock has a dividend yield and 2016-2018 total return potential that are average, by utility standards.** We believe the good earnings and dividend growth that we project over the 3- to 5-year period are reflected in the recent price.

*Paul E. Debbas, CFA* *September 20, 2013*

**(A)** Diluted EPS. Excl. nonrec. gains (losses): '05, ($1.61); '06, ($1.08); '07, ($1.26); '09, (7¢); '10, 3¢; '11, 12¢; '12, (14¢); gains (losses) on disc. ops.: '05, 7¢; '06, 3¢; '07, (40¢); '09, 8¢; '10, (8¢); '11, 1¢; '12, 3¢. '10 EPS don't add due to change in shs. Next earnings report due late Oct. **(B)** Div'ds historically paid late Feb., May, Aug., & Nov. ■ Div'd reinvestment plan avail. **(C)** Incl. intang. In '12: $8.66/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '13: 10.3%; earned on avg. com. eq., '12: 12.7%. Regulatory Climate: Average.

|  |  |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 95 |
| **Earnings Predictability** | 60 |

# CLECO CORPORATION NYSE-CNL

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 44.72 | 16.9 (Trailing: 17.5 Median: 14.0) | 0.96 | 3.4% | VALUE LINE |

**TIMELINESS** 4 Raised 8/16/13

**SAFETY** 1 Raised 6/22/12

TECHNICAL 3 Raised 9/13/13

**BETA** .65 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 24.9 | 18.4 | 20.8 | 24.4 | 26.2 | 29.8 | 28.4 | 28.1 | 31.8 | 38.3 | 45.3 | 50.4 |
| Low: | 9.7 | 11.0 | 16.2 | 18.9 | 20.5 | 22.1 | 17.3 | 18.7 | 24.3 | 30.1 | 36.2 | 40.4 |

**Target Price Range**
2016 | 2017 | 2018

**2016-18 PROJECTIONS**

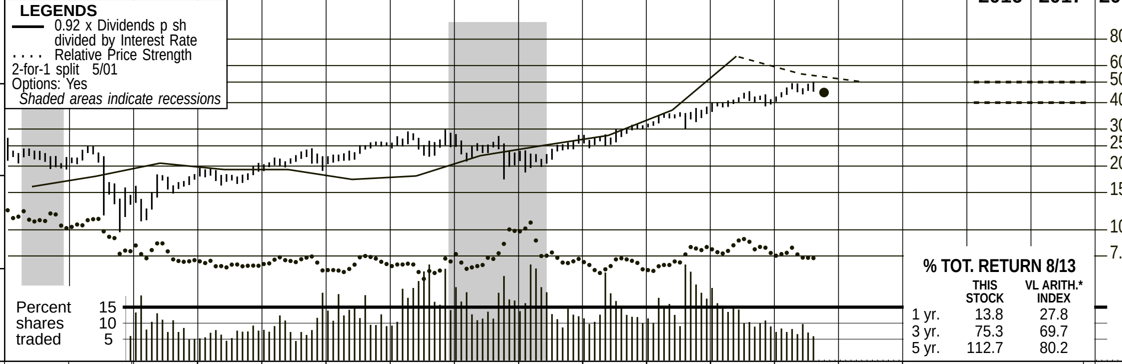
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+10%) | 6% |
| Low | 40 | (-10%) | 1% |

**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 97 | 92 | 87 |
| to Sell | 95 | 101 | 96 |
| Hld's(000) | 42755 | 43353 | 43917 |



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 13.8 | 27.8 |
| 3 yr. | 75.3 | 69.7 |
| 5 yr. | 112.7 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.16 | 11.46 | 17.12 | 18.23 | 23.55 | 15.33 | 18.54 | 15.03 | 18.41 | 17.38 | 17.19 | 17.99 | 14.17 | 18.98 | 18.53 | 16.46 | ***17.75*** | ***19.85*** | **Revenues per sh** | ***22.75*** |
| 2.18 | 2.28 | 2.36 | 2.77 | 2.94 | 3.05 | 2.98 | 2.56 | 2.76 | 2.63 | 2.69 | 3.71 | 3.78 | 5.12 | 5.28 | 5.40 | ***5.35*** | ***5.75*** | **"Cash Flow" per sh** | ***7.00*** |
| 1.09 | 1.12 | 1.19 | 1.46 | 1.51 | 1.52 | 1.26 | 1.32 | 1.42 | 1.36 | 1.32 | 1.70 | 1.76 | 2.29 | 2.59 | 2.70 | ***2.60*** | ***2.85*** | **Earnings per sh A** | ***3.50*** |
| .79 | .81 | .83 | .85 | .87 | .90 | .90 | .90 | .90 | .90 | .90 | .90 | .90 | .98 | 1.12 | 1.30 | ***1.43*** | ***1.58*** | **Div'd Decl'd per sh B ■ †** | ***2.00*** |
| 1.73 | 2.09 | 3.99 | 2.52 | 1.10 | 1.91 | 1.58 | 1.61 | 3.19 | 4.11 | 8.51 | 5.59 | 4.15 | 4.68 | 3.25 | 4.06 | ***3.95*** | ***2.30*** | **Cap'l Spending per sh** | ***2.00*** |
| 8.68 | 9.07 | 9.44 | 10.04 | 10.69 | 11.77 | 10.09 | 10.83 | 13.69 | 15.22 | 16.85 | 17.65 | 18.50 | 21.76 | 23.55 | 24.84 | ***25.95*** | ***27.25*** | **Book Value per sh C** | ***31.75*** |
| 44.93 | 44.97 | 44.88 | 44.99 | 44.96 | 47.04 | 47.18 | 49.62 | 49.99 | 57.57 | 59.94 | 60.04 | 60.26 | 60.53 | 60.29 | 60.36 | ***60.50*** | ***60.50*** | **Common Shs Outst'g D** | ***60.50*** |
| 12.5 | 14.4 | 13.4 | 13.2 | 14.6 | 12.2 | 12.4 | 13.8 | 15.0 | 17.3 | 19.6 | 14.1 | 13.2 | 12.3 | 13.3 | 15.0 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| .72 | .75 | .76 | .86 | .75 | .67 | .71 | .73 | .80 | .93 | 1.04 | .85 | .88 | .78 | .83 | .96 | | | **Relative P/E Ratio** | ***.85*** |
| 5.8% | 5.0% | 5.2% | 4.4% | 3.9% | 4.8% | 5.8% | 5.0% | 4.2% | 3.8% | 3.5% | 3.8% | 3.9% | 3.5% | 3.3% | 3.2% | | | **Avg Ann'l Div'd Yield** | ***4.5%*** |
| | | | | | | 874.6 | 745.8 | 920.2 | 1000.7 | 1030.6 | 1080.2 | 853.8 | 1148.7 | 1117.3 | 993.7 | ***1075*** | ***1200*** | **Revenues ($mill)** | ***1375*** |
| | | | | | | 61.2 | 66.1 | 75.0 | 74.7 | 79.6 | 102.1 | 106.3 | 139.5 | 157.8 | 163.6 | ***160*** | ***175*** | **Net Profit ($mill)** | ***215*** |
| | | | | | | 37.2% | 35.2% | 39.2% | 36.0% | 24.3% | 15.3% | 8.3% | 44.1% | 30.6% | 28.5% | ***32.0%*** | ***32.0%*** | **Income Tax Rate** | ***32.0%*** |
| | | | | | | 5.8% | 7.5% | 4.3% | 14.2% | 57.9% | 82.8% | 93.5% | 12.2% | 4.3% | 5.5% | ***4.0%*** | ***3.0%*** | **AFUDC % to Net Profit** | ***4.0%*** |
| | | | | | | 64.4% | 44.5% | 46.3% | 40.9% | 43.2% | 51.1% | 54.2% | 51.5% | 48.5% | 45.6% | ***47.0%*** | ***44.0%*** | **Long-Term Debt Ratio** | ***36.0%*** |
| | | | | | | 33.8% | 53.1% | 52.0% | 57.8% | 56.7% | 48.9% | 45.8% | 48.5% | 51.5% | 54.4% | ***53.0%*** | ***56.0%*** | **Common Equity Ratio** | ***64.0%*** |
| | | | | | | 1408.5 | 1011.6 | 1315.9 | 1515.6 | 1780.5 | 2167.7 | 2436.4 | 2717.9 | 2756.9 | 2756.5 | ***2965*** | ***2940*** | **Total Capital ($mill)** | ***3025*** |
| | | | | | | 1417.1 | 1060.0 | 1188.7 | 1304.9 | 1725.9 | 2045.3 | 2247.0 | 2784.2 | 2893.9 | 3009.5 | ***3085*** | ***3050*** | **Net Plant ($mill)** | ***2825*** |
| | | | | | | 6.7% | 8.9% | 7.1% | 6.3% | 5.6% | 6.1% | 5.9% | 6.6% | 7.0% | 7.3% | ***6.5%*** | ***7.0%*** | **Return on Total Cap'l** | ***8.0%*** |
| | | | | | | 12.2% | 11.8% | 10.6% | 8.3% | 7.9% | 9.6% | 9.5% | 10.6% | 11.1% | 10.9% | ***10.0%*** | ***10.5%*** | **Return on Shr. Equity** | ***11.0%*** |
| | | | | | | 12.5% | 11.9% | 10.7% | 8.3% | 7.8% | 9.6% | 9.5% | 10.6% | 11.1% | 10.9% | ***10.0%*** | ***10.5%*** | **Return on Com Equity E** | ***11.0%*** |
| | | | | | | 3.5% | 3.9% | 4.1% | 3.0% | 2.6% | 4.5% | 4.7% | 6.1% | 6.3% | 5.7% | ***4.5%*** | ***5.0%*** | **Retained to Com Eq** | ***5.0%*** |
| | | | | | | 72% | 68% | 62% | 65% | 68% | 53% | 51% | 42% | 43% | 48% | ***54%*** | ***55%*** | **All Div'ds to Net Prof** | ***57%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $1343.4 mill. **Due in 5 Yrs** $243.7 mill.
**LT Debt** $1323.8 mill. **LT Interest** $74.8 mill.
Incl. $9.2 million capitalized leases.
(LT interest earned: 3.8x)

**Leases, Uncapitalized** Annual rentals $9.3 mill.
**Pension Assets-12/12** $344.0 mill.
**Oblig.** $431.6 mill.
**Pfd Stock** None

**Common Stock** 60,449,895 shs.
**as of 7/26/13**
**MARKET CAP: $2.7 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +5.9 | +.4 | -3.4 |
| Avg. Indust. Use (MWH) | 3657 | 3904 | 3814 |
| Avg. Indust. Revs. per KWH (¢) | 7.68 | 7.58 | 6.83 |
| Capacity at Peak (Mw) | 2559 | 2544 | 3315 |
| Peak Load, Summer (Mw) | 2348 | 2355 | 2282 |
| Annual Load Factor (%) | 55.8 | 56.2 | 55.1 |
| % Change Customers (avg.) | +.7 | +.6 | +.6 |
| Fixed Charge Cov. (%) | 294 | 415 | 326 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -.5% | .5% | *4.0%* |
| "Cash Flow" | 6.0% | 14.5% | *5.0%* |
| Earnings | 5.5% | 13.0% | *5.5%* |
| Dividends | 2.5% | 4.5% | *10.0%* |
| Book Value | 8.0% | 9.0% | *5.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 272.3 | 275.9 | 343.9 | 256.6 | 1148.7 |
| **2011** | 253.7 | 272.9 | 351.6 | 239.1 | 1117.3 |
| **2012** | 222.8 | 240.1 | 297.4 | 233.4 | 993.7 |
| **2013** | 240.9 | 263.9 | ***320*** | ***250.2*** | ***1075*** |
| **2014** | ***250*** | ***300*** | ***375*** | ***275*** | ***1200*** |

| **Cal-endar** | **EARNINGS PER SHARE A** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .56 | .58 | .82 | .33 | 2.29 |
| **2011** | .48 | .52 | 1.08 | .51 | 2.59 |
| **2012** | .50 | .77 | 1.05 | .38 | 2.70 |
| **2013** | .45 | .69 | ***1.10*** | ***.36*** | ***2.60*** |
| **2014** | ***.50*** | ***.70*** | ***1.20*** | ***.45*** | ***2.85*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID B ■ †** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .225 | .225 | .225 | .225 | .90 |
| **2010** | .225 | .25 | .25 | .25 | .98 |
| **2011** | .25 | .28 | .28 | .3125 | 1.12 |
| **2012** | .3125 | .3125 | .3375 | .3375 | 1.30 |
| **2013** | .3375 | .3625 | .3625 | | |

**BUSINESS:** Cleco Corporation is a holding company for Cleco Power, which supplies electricity to about 283,000 customers in central Louisiana. Through a subsidiary, has 775 megawatts of wholesale capacity. Electric revenue breakdown: residential, 46%; commercial, 30%; industrial, 14%; other, 10%. Largest industrial customers are paper mills and other wood-product industries. Generating sources: gas & oil, 37%; coal & lignite, 34%; petroleum coke, 19%; purchased, 10%. Fuel costs: 34% of revenues. '12 reported deprec. rate (utility): 2.7%. Has 1,300 employees. Chairman: J. Patrick Garrett. President & CEO: Bruce A. Williamson. Inc.: LA. Address: 2030 Donahue Ferry Road, P.O. Box 5000, Pineville, LA 71361-5000. Tel.: 318-484-7400. Internet: www.cleco.com.

**Cleco is awaiting the outcome of two regulatory matters with the Louisiana Public Service Commission (LPSC).** The company wants to transfer the 775-megawatt Coughlin gas-fired plant from a nonutility subsidiary to its regulated utility, Cleco Power. This is Cleco's only significant nonregulated asset. The utility also wants to extend its formula rate plan through 2020. This regulatory mechanism was established in 2010 and is now scheduled to expire in 2015. Under the formula rate plan, Cleco is able to earn a return on new utility investment each year without filing a general rate case. Coughlin would be placed in the utility's rate base under this plan. The company is asking the LPSC for decisions on each of these matters by April of 2014.

**We forecast significant profit growth in 2014.** On April 1st, a 10-year wholesale power contract with an electrical cooperative that serves suburban Baton Rouge will commence. This will increase Cleco's load by more than 20%. (The addition of Coughlin would help the utility meet this demand.) After a bottom-line decline in 2013 (due mainly to a tough comparison), we look for earnings to advance about 10% next year.

**Cleco went several years without a dividend increase, but has become known for dividend growth.** A look at the statistical array above shows that the annual disbursement was stuck on $0.90 a share from 2002 through 2009. The board of directors finally resumed raising the payout in the second quarter of 2010, and four more dividend hikes have followed. Cleco's solid balance sheet, healthy cash flow, and modest payout ratio give the board the ability to continue raising the dividend through late decade.

**Top-quality Cleco stock is ranked unfavorably for Timeliness, and doesn't stand out among utility issues for its dividend yield or its 3- to 5-year total return prospects.** The dividend yield is below the industry average. With the recent price near the midpoint of our 2016-2018 Target Price Range, total return potential is low. We think the stock's valuation reflects Cleco's good dividend growth, but perhaps also some takeover speculation.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted earnings. Excl. nonrec. gains (losses): '00, 5¢; '02, (5¢), '03, ($2.05); '05, $2.11; '07, $1.22; '10, $1.91; '11, 63¢; losses from discont. ops.: '00, 14¢; '01, 4¢. Next earnings report due early Nov. **(B)** Div'ds historically paid in mid-Feb., May, Aug. and Nov. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '12: $10.71/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '09: 11.7%; earned on avg. com. eq., '12: 11.2%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 95 |
| **Earnings Predictability** | 80 |

# CENTERPOINT EN'RGY NYSE-CNP

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|---|
| 23.11 | 18.3 | (Trailing: 17.2 Median: 14.0) | 1.04 | 3.7% |

**VALUE LINE**

**TIMELINESS** 4 Lowered 9/20/13

**SAFETY** 2 Raised 9/21/12

TECHNICAL 2 Raised 9/13/13

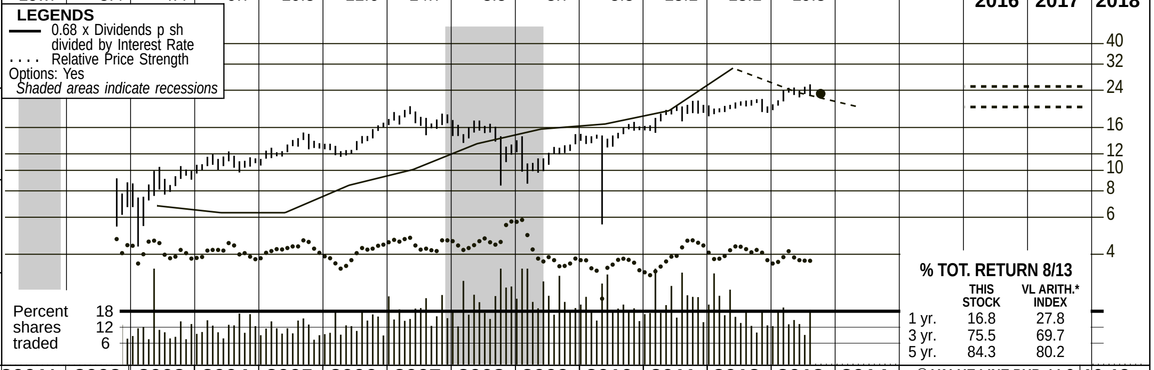
**BETA** .80 (1.00 = Market)

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 9.2 | 10.5 | 12.3 | 15.1 | 16.9 | 20.2 | 17.3 | 14.9 | 17.0 | 21.5 | 21.8 | 25.7 |
| Low: | 5.4 | 4.4 | 9.7 | 10.5 | 11.6 | 14.7 | 8.5 | 8.7 | 5.5 | 15.1 | 18.1 | 19.3 |

**LEGENDS**
- 0.68 x Dividends p sh divided by Interest Rate
- . . . . Relative Price Strength

Options: Yes

*Shaded areas indicate recessions*



### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 25 | (+10%) | *6%* |
| Low | 20 | (-15%) | *1%* |

### Insider Decisions

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 214 | 187 | 168 |
| to Sell | 179 | 191 | 194 |
| Hld's(000) | 310491 | 315304 | 321340 |

**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 16.8 | 27.8 |
| 3 yr. | 75.5 | 69.7 |
| 5 yr. | 84.3 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001ᴬ | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | - - | - - | - - | 35.18 | 26.40 | 31.87 | 27.63 | 31.33 | 29.71 | 29.82 | 32.71 | 21.14 | 20.69 | 19.83 | 17.43 | *19.35* | *19.05* | Revenues per sh | *21.25* |
| - - | - - | - - | - - | 3.69 | 3.34 | 3.98 | 2.56 | 2.72 | 3.47 | 3.39 | 3.42 | 2.94 | 3.14 | 3.43 | 3.89 | *3.75* | *3.85* | "Cash Flow" per sh | *4.50* |
| - - | - - | - - | - - | 1.54 | 1.29 | 1.37 | .61 | .67 | 1.33 | 1.17 | 1.30 | 1.01 | 1.07 | 1.27 | 1.35 | *1.25* | *1.30* | Earnings per sh ᴮ | *1.75* |
| - - | - - | - - | - - | 1.50 | 1.07 | .40 | .40 | .40 | .60 | .68 | .73 | .76 | .78 | .79 | .81 | *.83* | *.85* | Div'd Decl'd per sh ᶜ ■ | *1.00* |
| - - | - - | - - | - - | 6.78 | 2.85 | 2.11 | 1.72 | 2.23 | 3.21 | 3.45 | 2.95 | 2.96 | 3.55 | 3.06 | 2.84 | *3.15* | *2.70* | Cap'l Spending per sh | *2.25* |
| - - | - - | - - | - - | 22.24 | 4.74 | 5.75 | 3.59 | 4.18 | 4.96 | 5.61 | 5.89 | 6.74 | 7.53 | 9.91 | 10.06 | *9.95* | *10.35* | Book Value per sh ᴰ | *12.25* |
| - - | - - | - - | - - | 302.94 | 300.10 | 306.30 | 308.05 | 310.33 | 313.65 | 322.72 | 346.09 | 391.75 | 424.70 | 426.03 | 427.44 | *429.00* | *430.00* | Common Shs Outst'g ᴱ | *433.00* |
| - - | - - | - - | - - | - - | 5.6 | 6.0 | 17.8 | 19.1 | 10.3 | 15.0 | 11.3 | 11.8 | 13.8 | 14.6 | 14.8 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *13.5* |
| - - | - - | - - | - - | - - | .31 | .34 | .94 | 1.02 | .56 | .80 | .68 | .79 | .88 | .92 | .95 | | | Relative P/E Ratio | *.90* |
| - - | - - | - - | - - | - - | 14.8% | 4.8% | 3.7% | 3.1% | 4.4% | 3.9% | 5.0% | 6.4% | 5.3% | 4.3% | 4.0% | | | Avg Ann'l Div'd Yield | *4.3%* |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9760.1 | 8510.4 | 9722.0 | 9319.0 | 9623.0 | 11322 | 8281.0 | 8785.0 | 8450.0 | 7452.0 | *8300* | *8200* | Revenues ($mill) | *9200* |
| 419.7 | 205.7 | 225.0 | 432.0 | 399.0 | 447.0 | 372.0 | 442.0 | 546.0 | 581.0 | *535* | *560* | Net Profit ($mill) | *760* |
| 32.5% | 40.2% | 40.5% | 12.6% | 32.8% | 38.3% | 32.1% | 37.3% | 33.6% | 33.4% | *32.0%* | *36.5%* | Income Tax Rate | *36.5%* |
| 3.1% | 1.9% | 1.8% | 2.3% | 5.5% | 2.7% | 1.3% | 2.7% | .7% | 1.5% | *2.0%* | *2.0%* | AFUDC % to Net Profit | *1.0%* |
| 86.0% | 86.7% | 86.9% | 83.4% | 82.2% | 83.3% | 77.6% | 73.8% | 67.2% | 66.0% | *65.0%* | *62.5%* | Long-Term Debt Ratio | *57.0%* |
| 14.0% | 13.3% | 13.1% | 16.6% | 17.8% | 16.7% | 22.4% | 26.2% | 32.8% | 34.0% | *35.0%* | *37.5%* | Common Equity Ratio | *43.0%* |
| 12544 | 8298.5 | 9864.0 | 9358.0 | 10174 | 12218 | 11758 | 12199 | 12863 | 12658 | *12150* | *11950* | Total Capital ($mill) | *12300* |
| 11812 | 8186.4 | 8492.0 | 9204.0 | 9740.0 | 10296 | 10788 | 11732 | 12402 | 13597 | *9425* | *9725* | Net Plant ($mill) | *10000* |
| 6.5% | 6.8% | 5.3% | 7.8% | 6.9% | 6.0% | 5.8% | 6.1% | 6.4% | 6.8% | *6.0%* | *6.5%* | Return on Total Cap'l | *7.5%* |
| 23.8% | 18.6% | 17.4% | 27.8% | 22.0% | 21.9% | 14.1% | 13.8% | 12.9% | 13.5% | *12.5%* | *12.5%* | Return on Shr. Equity | *14.5%* |
| 23.8% | 18.6% | 17.4% | 27.8% | 22.0% | 21.9% | 14.1% | 13.8% | 12.9% | 13.5% | *12.5%* | *12.5%* | Return on Com Equity ᶠ | *14.5%* |
| 16.0% | 7.5% | 7.8% | 15.7% | 10.0% | 9.9% | 3.6% | 3.8% | 5.0% | 5.5% | *4.0%* | *4.5%* | Retained to Com Eq | *6.0%* |
| 33% | 60% | 55% | 43% | 55% | 55% | 74% | 72% | 62% | 60% | *66%* | *65%* | All Div'ds to Net Prof | *57%* |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $8604.0 mill. **Due in 5 Yrs** $3831.0 mill.
**LT Debt** $7919.0 mill. **LT Interest** $404.0 mill.
Incl. $3210.0 mill. securitized transition & system restoration bonds.
(LT interest earned: 2.7x)
**Leases, Uncapitalized** Annual rentals $12.0 mill.
**Pension Assets-12/12** $1.70 bill. **Oblig.** $2.32 bill.

**Pfd Stock** None
**Common Stock** 428,621,467 shs.
**as of 7/18/13**
**MARKET CAP: $9.9 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.2 | +3.9 | -1.8 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (avg.) | +1.3 | +2.1 | +2.0 |
| Fixed Charge Cov. (%) | 197 | 221 | 223 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -4.5% | -8.5% | *1.5%* |
| "Cash Flow" | - - | 2.0% | *4.5%* |
| Earnings | -1.5% | 3.0% | *6.0%* |
| Dividends | -4.5% | 7.0% | *4.0%* |
| Book Value | -4.0% | 13.5% | *5.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 3023 | 1756 | 1908 | 2098 | 8785.0 |
| 2011 | 2587 | 1837 | 1881 | 2145 | 8450.0 |
| 2012 | 2084 | 1525 | 1705 | 2138 | 7452.0 |
| 2013 | 2388 | 1894 | *1900* | *2118* | *8300* |
| 2014 | *2200* | *1900* | *1950* | *2150* | *8200* |

| Cal-endar | EARNINGS PER SHARE ᴮ Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .29 | .20 | .29 | .29 | 1.07 |
| 2011 | .35 | .28 | .38 | .27 | 1.27 |
| 2012 | .34 | .29 | .40 | .31 | 1.35 |
| 2013 | .34 | .29 | *.38* | *.24* | *1.25* |
| 2014 | *.35* | *.30* | *.40* | *.25* | *1.30* |

| Cal-endar | QUARTERLY DIVIDENDS PAID ᶜ ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .19 | .19 | .19 | .19 | .76 |
| 2010 | .195 | .195 | .195 | .195 | .78 |
| 2011 | .1975 | .1975 | .1975 | .1975 | .79 |
| 2012 | .2025 | .2025 | .2025 | .2025 | .81 |
| 2013 | .2075 | .2075 | .2075 | | |

**BUSINESS:** CenterPoint Energy, Inc. is a holding company for Houston Electric, which serves 2.1 million customers in Houston and environs, and gas utilities with 3.3 million customers: Entex (Texas, Louisiana, Mississippi); Arkla (Arkansas, Louisiana, Oklahoma, Texas); and Minnegasco (Minnesota). Owns 58.3% of Enable Midstream Partners. Discontinued Texas Genco Holdings in '04. Electric rev. breakdown: residential, 52%; commercial, 31%; industrial, 15%; other, 2%. Does not own generating assets. Gas costs: 39% of revs. '12 deprec. rate: 5.9%. Has 7,600 employees. Chairman: Milton Carroll. Pres. & CEO: David M. McClanahan. Inc.: TX. Address: 1111 Louisiana, P.O. Box 4567, Houston, TX 77210-4567. Tel.: 713-207-1111. Internet: www.centerpointenergy.com.

**CenterPoint Energy and OGE Energy are planning an initial public offering of their midstream gas master limited partnership.** The new MLP, 58.3%-owned by CenterPoint and with nearly $11 billion in assets, has been named Enable Midstream Partners. Enable plans to make its S-1 filing with the SEC in the late third quarter or the fourth quarter of 2013. Until this occurs, the MLP is limited in the amount of information it may disclose. Based on this timing, Enable's IPO would likely occur in the fourth quarter of 2013 or the first period of 2014.

**The transaction will probably be dilutive to earnings by about $0.05 a share this year, but the stock has reacted favorably.** The dilution arises from the fact that CenterPoint's asset contribution to Enable is greater than its stake in the new MLP, because the operations it contributed aren't growing as fast as those that came from OGE's Enogex subsidiary. Even so, Wall Street likes the move for its long-term benefits. Accordingly, the stock price is up more than 20% in 2013. Our earnings estimate for this year is at the upper end of CenterPoint's targeted range of $1.17-$1.25 a share. Note that CenterPoint's operations that were contributed to Enable were deconsolidated from its financial statements as of May 1st. That's why net plant will wind up sharply lower this year. Enable's contribution is being booked as equity income.

**We expect modest earnings growth in 2014.** This is based mainly on growth at CenterPoint's utility subsidiaries, which are earning their allowed returns on equity or are close to doing so. We expect a small dividend hike next year, but the company's dividend policy might change as a result of the new corporate structure.

**CenterPoint has filed a gas rate application in Minnesota.** The utility is seeking a $44 million (5%) tariff increase, based on a 10.24% return on equity. Interim rates are expected to take effect at the start of October, with the final order due in 2014.

**This untimely stock doesn't have a lot of appeal at the recent price.** The dividend yield is a bit below the industry average, and 3- to 5-year total return potential is low.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Pro forma data. **(B)** Diluted EPS. Excl. extraordinary gains (losses): '04, ($2.72); '05, 9¢; '11, $1.89; '12, (38¢) net; '13, (52¢); gain (losses) on disc. ops.: '03, 2¢; '04, (37¢); '05, (1¢). '11 & '12 EPS don't add due to rounding. Next egs. report due early Nov. **(C)** Div'ds historically paid in early Mar., June, Sept. & Dec. ■ Div'd reinvest. plan avail. **(D)** Incl. intang. In '12: $13.55/sh. **(E)** In mill. **(F)** Rate base: Net orig. cost. Rate all'd on com. eq. (elec.) in '11: 10%; (gas): 9.45%-11.25%; earned on avg. com. eq., '12: 13.3%. Regulatory Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 90 |
| **Earnings Predictability** | 85 |

# DOMINION RES. NYSE-D

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 60.07 | 18.8 (Trailing: 21.9 Median: 16.0) | 1.07 | 3.8% | VALUE LINE |

**TIMELINESS** 3 Lowered 12/14/12
**SAFETY** 2 Raised 9/11/98
TECHNICAL 3 Lowered 8/16/13
**BETA** .70 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 33.5 | 33.0 | 34.4 | 43.5 | 42.2 | 49.4 | 48.5 | 39.8 | 45.1 | 53.6 | 55.6 | 61.8 |
| Low: | 17.7 | 25.9 | 30.4 | 33.3 | 34.4 | 39.8 | 31.3 | 27.1 | 36.1 | 42.1 | 48.9 | 51.9 |

### 2016-18 PROJECTIONS

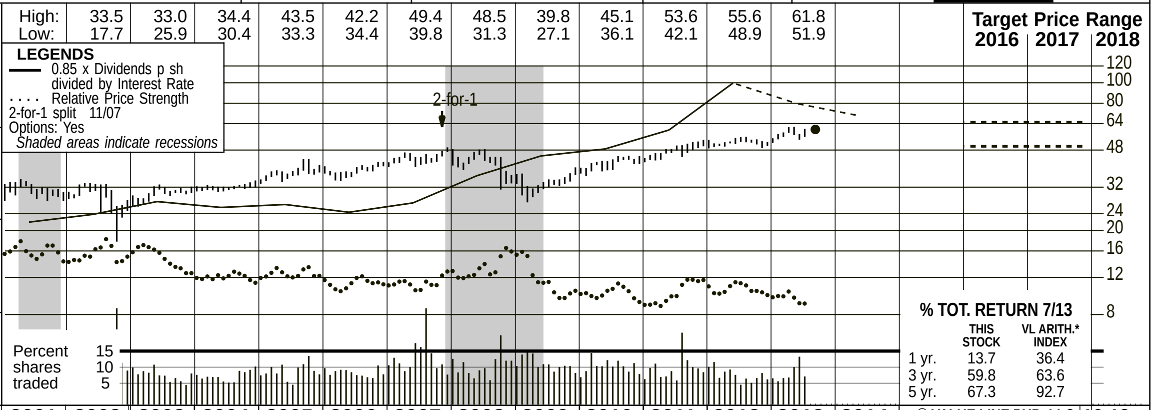
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+10%) | *6%* |
| Low | 50 | (-15%) | *Nil* |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 296 | 320 | 328 |
| to Sell | 327 | 366 | 349 |
| Hld's(000) | 313878 | 325389 | 333529 |



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 13.7 | 36.4 |
| 3 yr. | 59.8 | 63.6 |
| 5 yr. | 67.3 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.44 | 15.65 | 14.81 | 18.84 | 19.94 | 16.58 | 18.58 | 20.55 | 26.00 | 23.61 | 27.17 | 27.93 | 25.26 | 26.16 | 25.23 | 22.73 | ***22.90*** | ***23.60*** | **Revenues per sh** | ***24.75*** |
| 3.89 | 2.99 | 3.68 | 3.71 | 3.92 | 4.45 | 3.97 | 4.18 | 3.71 | 4.91 | 5.08 | 5.07 | 4.82 | 5.10 | 5.04 | 5.24 | ***5.70*** | ***6.00*** | **"Cash Flow" per sh** | ***6.75*** |
| 1.50 | .86 | 1.50 | 1.25 | 1.49 | 2.41 | 1.96 | 2.13 | 1.50 | 2.40 | 2.13 | 3.04 | 2.64 | 2.89 | 2.76 | 2.75 | ***3.15*** | ***3.30*** | **Earnings per sh** A | ***3.75*** |
| 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.30 | 1.34 | 1.38 | 1.46 | 1.58 | 1.75 | 1.83 | 1.97 | 2.11 | ***2.25*** | ***2.37*** | **Div'd Decl'd per sh** B ■ † | ***2.70*** |
| 1.73 | 1.60 | 2.16 | 2.82 | 2.31 | 2.17 | 5.20 | 3.88 | 4.84 | 5.81 | 6.89 | 6.09 | 6.41 | 5.89 | 6.41 | 7.20 | ***8.05*** | ***7.10*** | **Cap'l Spending per sh** | ***5.75*** |
| 13.42 | 13.67 | 12.75 | 14.22 | 15.81 | 16.57 | 16.21 | 16.80 | 14.98 | 18.50 | 16.31 | 17.28 | 18.67 | 20.65 | 20.08 | 18.35 | ***19.50*** | ***20.70*** | **Book Value per sh** C | ***25.50*** |
| 375.60 | 388.92 | 372.64 | 491.60 | 529.40 | 616.20 | 650.00 | 680.00 | 694.00 | 698.00 | 576.80 | 583.20 | 599.00 | 581.00 | 570.00 | 576.00 | ***581.00*** | ***586.00*** | **Common Shs Outst'g** D | ***620.00*** |
| 12.5 | 24.6 | 14.5 | 19.4 | 20.9 | 12.0 | 15.2 | 15.1 | 24.9 | 16.0 | 20.6 | 13.8 | 12.7 | 14.3 | 17.3 | 18.9 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***15.0*** |
| .72 | 1.28 | .83 | 1.26 | 1.07 | .66 | .87 | .80 | 1.33 | .86 | 1.09 | .83 | .85 | .91 | 1.09 | 1.20 | | | **Relative P/E Ratio** | ***1.00*** |
| 6.9% | 6.1% | 5.9% | 5.3% | 4.1% | 4.4% | 4.3% | 4.0% | 3.6% | 3.6% | 3.3% | 3.8% | 5.2% | 4.4% | 4.1% | 4.1% | | | **Avg Ann'l Div'd Yield** | ***4.8%*** |
| | | | | | | 12078 | 13972 | 18041 | 16482 | 15674 | 16290 | 15131 | 15197 | 14379 | 13093 | ***13300*** | ***13800*** | **Revenues ($mill)** | ***15300*** |
| | | | | | | 1261.0 | 1425.0 | 1050.0 | 1704.0 | 1414.0 | 1781.0 | 1585.0 | 1724.0 | 1603.0 | 1594.0 | ***1835*** | ***1940*** | **Net Profit ($mill)** | ***2345*** |
| | | | | | | 34.9% | 35.4% | 35.7% | 35.5% | 33.4% | 37.1% | 33.2% | 38.6% | 34.6% | 36.2% | ***35.5%*** | ***35.5%*** | **Income Tax Rate** | ***35.5%*** |
| | | | | | | 7.9% | 4.9% | 9.7% | 7.9% | 7.3% | 4.9% | 4.8% | 5.9% | 5.3% | 5.7% | ***5.0%*** | ***5.0%*** | **AFUDC % to Net Profit** | ***5.0%*** |
| | | | | | | 59.4% | 57.0% | 57.9% | 52.9% | 57.8% | 59.1% | 57.5% | 56.3% | 59.8% | 60.9% | ***62.0%*** | ***61.5%*** | **Long-Term Debt Ratio** | ***58.5%*** |
| | | | | | | 39.7% | 42.0% | 41.1% | 46.2% | 41.1% | 39.8% | 41.5% | 42.8% | 39.3% | 38.2% | ***37.0%*** | ***37.5%*** | **Common Equity Ratio** | ***41.0%*** |
| | | | | | | 26571 | 27190 | 25307 | 27961 | 22898 | 25290 | 26923 | 28012 | 29097 | 27676 | ***30600*** | ***32100*** | **Total Capital ($mill)** | ***38500*** |
| | | | | | | 25850 | 26716 | 28940 | 29382 | 21352 | 23274 | 25592 | 26713 | 29670 | 30773 | ***33950*** | ***36500*** | **Net Plant ($mill)** | ***41300*** |
| | | | | | | 6.5% | 6.9% | 6.1% | 7.9% | 8.0% | 8.7% | 7.5% | 7.7% | 7.0% | 7.5% | ***7.5%*** | ***7.5%*** | **Return on Total Cap'l** | ***7.5%*** |
| | | | | | | 11.7% | 12.2% | 9.9% | 12.9% | 14.6% | 17.2% | 13.9% | 14.1% | 13.7% | 14.7% | ***16.0%*** | ***15.5%*** | **Return on Shr. Equity** | ***14.5%*** |
| | | | | | | 11.8% | 12.3% | 9.9% | 13.1% | 14.9% | 17.5% | 14.0% | 14.2% | 13.9% | 14.9% | ***16.0%*** | ***16.0%*** | **Return on Com Equity** E | ***14.5%*** |
| | | | | | | 4.0% | 4.8% | 1.1% | 5.6% | 5.0% | 8.4% | 4.7% | 5.3% | 4.0% | 3.5% | ***4.5%*** | ***4.5%*** | **Retained to Com Eq** | ***4.0%*** |
| | | | | | | 67% | 62% | 89% | 58% | 67% | 52% | 67% | 63% | 71% | 77% | ***72%*** | ***72%*** | **All Div'ds to Net Prof** | ***72%*** |

### CAPITAL STRUCTURE as of 3/31/13

**Total Debt** $21325 mill. **Due in 5 Yrs** $9074.0 mill.
**LT Debt** $17277 mill. **LT Interest** $895.0 mill.
(LT interest earned: 3.5x)
**Leases, Uncapitalized** Annual rentals $79.0 mill.
**Pension Assets-12/12** $5.55 bill. **Oblig.** $6.13 bill.
**Pfd Stock** $257.0 mill. **Pfd Div'd** $16.0 mill.
1,340,140 shs. $4.04-$7.05, $100 liq. pref., redeemable at $101.00-$112.50/sh.; 2,500,000 variable rate Money Market Preferred shs.
**Common Stock** 577,676,451 shs.

**MARKET CAP: $35 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.5 | -3.4 | -2.3 |
| Avg. Indust. Use (MWH) | 15162 | 14823 | 15241 |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 16563 | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.8 | +.5 | +.9 |
| Fixed Charge Cov. (%) | 378 | 318 | 316 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 3.0% | -.5% | *Nil* |
| "Cash Flow" | 2.5% | 2.5% | *4.5%* |
| Earnings | 5.0% | 7.0% | *5.0%* |
| Dividends | 4.5% | 7.0% | *5.5%* |
| Book Value | 2.5% | 3.5% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 4168 | 3333 | 3950 | 3746 | 15197 |
| **2011** | 4057 | 3341 | 3803 | 3178 | 14379 |
| **2012** | 3462 | 3053 | 3411 | 3167 | 13093 |
| **2013** | 3523 | 2980 | ***3547*** | ***3250*** | ***13300*** |
| **2014** | ***3700*** | ***3100*** | ***3700*** | ***3300*** | ***13800*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .51 | .79 | .98 | .61 | 2.89 |
| **2011** | .89 | .58 | .69 | .60 | 2.76 |
| **2012** | .86 | .48 | .80 | .61 | 2.75 |
| **2013** | .86 | .47 | ***.86*** | ***.96*** | ***3.15*** |
| **2014** | ***.90*** | ***.65*** | ***.90*** | ***.85*** | ***3.30*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .4375 | .4375 | .4375 | .4375 | 1.75 |
| **2010** | .4575 | .4575 | .4575 | .4575 | 1.83 |
| **2011** | .4925 | .4925 | .4925 | .4925 | 1.97 |
| **2012** | .5275 | .5275 | .5275 | .5275 | 2.11 |
| **2013** | .5625 | .5625 | | | |

**BUSINESS:** Dominion Resources, Inc. is a holding company for Virginia Power & North Carolina Power, which serve 2.5 mill. customers in Virginia & northeastern North Carolina. Acq'd Consolidated Natural Gas (1.3 mill. customers in Ohio & West Virginia) 1/00. Nonutility operations include independent power production & retail energy services. Electric rev. breakdown: residential, 46%; commercial, 33%; industrial, 7%; other, 14%. Generating sources: nuclear, 33%; coal, 22%; gas, 17%; other, 1%; purch., 27%. Fuel costs: 41% of revs. '12 reported depr. rates: 2.0%-4.6%. Has 15,500 employees. Chairman, President & CEO: Thomas F. Farrell II. Inc.: VA. Address: 120 Tredegar St., P.O. Box 26532, Richmond, VA 23261-6532. Tel.: 804-819-2000. Internet: www.dom.com.

**Dominion Resources' earnings will likely advance solidly in 2013, despite the likelihood of a flattish showing in the first half.** The fourth-quarter comparison should be favorable for several reasons, including the absence of a refueling outage at the Millstone nuclear station and other reductions in operating and maintenance expenses. Although second-quarter profits fell far short of our expectation, we have reduced our full-year estimate by just $0.05 a share, to $3.15.

**We have lowered our 2014 forecast by $0.10 a share, to $3.30.** Virginia Power is seeing signs of weakness in commercial and governmental electric sales. Even so, the company should still post higher profits for the year. We note, though, that Dominion often books unusual (but not nonrecurring) charges, thereby making earnings less predictable.

**Virginia Power is adding generating capacity.** The utility is building a 1,329-megawatt gas-fired plant at an expected cost of $1.1 billion. This facility is expected to be in service in late 2014. Virginia Power has received permission to build a similar plant at a cost of $1.3 billion for commercial operation in the summer of 2016. These plant additions benefit the utility's earning power through riders on customers' rates.

**Dominion has some growth opportunities on the nonutility side of its business, too.** Most noteworthy is an expansion of the Cove Point liquefied natural gas facility so that it can serve as an export facility. The capital spending for this investment is projected at $3.4 billion-$3.8 billion over the next five years. Dominion also has a joint venture that is focused on gas gathering and processing in Ohio. The company has already contributed some assets to the partnership.

**Financing needs are significant.** Dominion is adding mostly debt, so the common-equity ratio is likely to remain on the low side for a while.

**We have a neutral opinion of this stock.** We believe Dominion's strong dividend growth prospects are reflected in the quotation. Like most utility issues, 3- to 5-year total return potential is low, especially with the recent price above the midpoint of our 2016-2018 Target Price Range.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Diluted earnings. Excl. nonrec. gains (losses): '01, (42¢); '03, ($1.46); '04, (22¢); '06, (18¢); '07, $1.67; '08, 12¢; '09, (47¢); '10, $2.18; '11, (7¢); '12, ($1.70); losses from disc. ops.: '06, 26¢; '07, 1¢; '10, 26¢; '12, 4¢; '13, 12¢. Next egs. report due late Oct. **(B)** Div'ds historically paid in mid-Mar., June, Sept., & Dec. ■ Div'd reinvestment plan avail. **(C)** Incl. intang. In '12: $9.35/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Net orig. cost, adj. Rate all'd on com. eq. in '11: 10.9%; earned on avg. com. eq., '12: 13.7%. Regulatory Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 80 |
| **Earnings Predictability** | 75 |

# DTE ENERGY CO. NYSE-DTE

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|---|
| 66.71 | 16.6 | (Trailing: 16.6<br>Median: 14.0) | 0.94 | 4.0% |

**VALUE LINE**

**TIMELINESS** 5 Lowered 9/13/13

**SAFETY** 2 Raised 12/21/12

TECHNICAL 3 Raised 9/20/13

**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 47.7 | 49.5 | 45.5 | 48.3 | 49.2 | 54.7 | 45.3 | 45.0 | 49.1 | 55.3 | 62.6 | 73.3 |
| Low: | 33.1 | 34.0 | 37.9 | 41.4 | 38.8 | 44.0 | 27.8 | 23.3 | 41.3 | 43.2 | 52.5 | 60.3 |

### 2016-18 PROJECTIONS

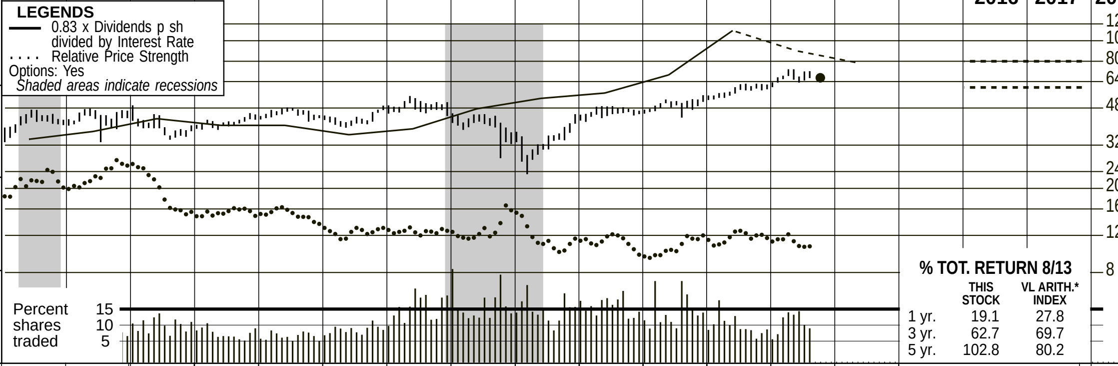
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 80 | (+20%) | 8% |
| Low | 60 | (-10%) | 2% |

### Insider Decisions

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Options | 0 | 2 | 3 | 0 | 7 | 2 | 0 | 1 | 0 |
| to Sell | 0 | 2 | 4 | 0 | 7 | 3 | 0 | 2 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 211 | 195 | 201 |
| to Sell | 157 | 178 | 194 |
| Hld's(000) | 99659 | 103185 | 106384 |



| % TOT. RETURN 8/13 | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 19.1 | 27.8 |
| 3 yr. | 62.7 | 69.7 |
| 5 yr. | 102.8 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.94 | 29.10 | 32.60 | 39.24 | 48.71 | 40.30 | 41.76 | 40.84 | 50.74 | 50.93 | 54.28 | 57.23 | 48.45 | 50.51 | 52.57 | 51.01 | **53.10** | **54.00** | Revenues per sh | **58.75** |
| 7.42 | 7.61 | 8.40 | 8.59 | 6.98 | 8.31 | 6.95 | 6.81 | 8.14 | 8.19 | 8.48 | 8.26 | 9.38 | 9.78 | 9.57 | 9.77 | **10.30** | **10.65** | "Cash Flow" per sh | **12.00** |
| 2.88 | 3.05 | 3.33 | 3.27 | 2.15 | 3.83 | 2.85 | 2.55 | 3.27 | 2.45 | 2.66 | 2.73 | 3.24 | 3.74 | 3.67 | 3.88 | **4.10** | **4.30** | Earnings per sh A | **4.75** |
| 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.08 | 2.12 | 2.12 | 2.12 | 2.18 | 2.32 | 2.42 | **2.59** | **2.73** | Div'd Decl'd per sh B ■ | **3.15** |
| 3.14 | 3.83 | 5.10 | 5.25 | 6.80 | 5.88 | 4.45 | 5.19 | 5.99 | 7.92 | 7.96 | 8.42 | 6.26 | 6.49 | 8.77 | 10.56 | **12.30** | **11.00** | Cap'l Spending per sh | **10.25** |
| 24.55 | 25.49 | 26.95 | 28.15 | 28.48 | 27.26 | 31.36 | 31.85 | 32.44 | 33.02 | 35.86 | 36.77 | 37.96 | 39.67 | 41.41 | 42.78 | **44.85** | **46.95** | Book Value per sh C | **53.00** |
| 145.10 | 145.07 | 145.04 | 142.65 | 161.13 | 167.46 | 168.61 | 174.21 | 177.81 | 177.14 | 163.23 | 163.02 | 165.40 | 169.43 | 169.25 | 172.35 | **177.00** | **181.50** | Common Shs Outst'g D | **190.00** |
| 10.3 | 13.3 | 11.6 | 10.3 | 19.3 | 11.3 | 13.7 | 16.0 | 13.8 | 17.4 | 18.3 | 14.8 | 10.4 | 12.3 | 13.5 | 14.9 | ***Bold figures are Value Line estimates*** | | Avg Ann'l P/E Ratio | **14.5** |
| .59 | .69 | .66 | .67 | .99 | .62 | .78 | .85 | .73 | .94 | .97 | .89 | .69 | .78 | .85 | .95 | | | Relative P/E Ratio | **.95** |
| 6.9% | 5.1% | 5.3% | 6.1% | 5.0% | 4.8% | 5.3% | 5.0% | 4.6% | 4.9% | 4.4% | 5.2% | 6.3% | 4.8% | 4.7% | 4.2% | | | Avg Ann'l Div'd Yield | **4.5%** |

**CAPITAL STRUCTURE as of 6/30/13**

**Total Debt** $7901.0 mill. **Due in 5 Yrs** $2886.0 mill.
**LT Debt** $6806.0 mill. **LT Interest** $361.0 mill.
Incl. $9.0 mill. capitalized leases, $480.0 mill. Trust Preferred Securities, and $201.0 mill. securitized bonds.
(LT interest earned: 3.3x)

**Leases, Uncapitalized** Annual rentals $38.0 mill.
**Pension Assets-12/12** $3.22 bill. **Oblig.** $4.73 bill.

**Pfd Stock** None

**Common Stock** 174,960,000 shs.

**MARKET CAP: $12 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7041.0 | 7114.0 | 9022.0 | 9022.0 | 8861.0 | 9329.0 | 8014.0 | 8557.0 | 8897.0 | 8791.0 | **9400** | **9800** | Revenues ($mill) | **11150** |
| 480.0 | 443.0 | 576.0 | 437.0 | 453.0 | 445.0 | 532.0 | 630.0 | 624.0 | 666.0 | **725** | **780** | Net Profit ($mill) | **925** |
| - - | 27.1% | 26.0% | 23.9% | 25.1% | 34.9% | 31.6% | 32.7% | 35.9% | 29.8% | **31.0%** | **31.0%** | Income Tax Rate | **31.0%** |
| 1.3% | .7% | 1.0% | 5.0% | 7.1% | 11.2% | 2.6% | 1.6% | 1.6% | 3.0% | **2.0%** | **5.0%** | AFUDC % to Net Profit | **4.0%** |
| 59.2% | 57.8% | 55.1% | 56.1% | 54.4% | 56.4% | 54.0% | 51.3% | 50.6% | 48.8% | **49.5%** | **49.0%** | Long-Term Debt Ratio | **50.0%** |
| 40.8% | 42.2% | 44.9% | 43.9% | 45.6% | 43.6% | 46.0% | 48.7% | 49.4% | 51.2% | **50.5%** | **51.0%** | Common Equity Ratio | **50.0%** |
| 12956 | 13154 | 12849 | 13323 | 12824 | 13736 | 13648 | 13811 | 14196 | 14387 | **15750** | **16725** | Total Capital ($mill) | **20100** |
| 10324 | 10491 | 10830 | 11451 | 11408 | 12231 | 12431 | 12992 | 13746 | 14684 | **15750** | **16600** | Net Plant ($mill) | **18400** |
| 5.6% | 5.2% | 6.3% | 5.1% | 5.3% | 5.0% | 5.7% | 6.3% | 5.9% | 6.1% | **6.0%** | **6.0%** | Return on Total Cap'l | **6.0%** |
| 9.1% | 8.0% | 10.0% | 7.5% | 7.7% | 7.4% | 8.5% | 9.4% | 8.9% | 9.0% | **9.0%** | **9.0%** | Return on Shr. Equity | **9.0%** |
| 9.1% | 8.0% | 10.0% | 7.5% | 7.7% | 7.4% | 8.5% | 9.4% | 8.9% | 9.0% | **9.0%** | **9.0%** | Return on Com Equity E | **9.0%** |
| 2.5% | 1.6% | 3.7% | 1.2% | 1.5% | 1.7% | 2.9% | 4.0% | 3.4% | 3.5% | **3.5%** | **3.5%** | Retained to Com Eq | **3.0%** |
| 72% | 80% | 63% | 84% | 80% | 77% | 65% | 57% | 62% | 61% | **62%** | **63%** | All Div'ds to Net Prof | **64%** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -.6 | +.6 | -.5 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NMF | NMF | NMF |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 11687 | 11314 | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | -.4 | - - | - - |
| Fixed Charge Cov. (%) | 262 | 282 | 270 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 2.0% | - - | *2.5%* |
| "Cash Flow" | 2.0% | 3.0% | *3.5%* |
| Earnings | 2.0% | 6.0% | *4.0%* |
| Dividends | 1.0% | 2.0% | *5.5%* |
| Book Value | 4.0% | 4.0% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 2453 | 1792 | 2139 | 2173 | 8557.0 |
| 2011 | 2431 | 2028 | 2265 | 2173 | 8897.0 |
| 2012 | 2239 | 2013 | 2190 | 2349 | 8791.0 |
| 2013 | 2516 | 2225 | ***2309*** | ***2350*** | ***9400*** |
| 2014 | ***2600*** | ***2350*** | ***2400*** | ***2450*** | ***9800*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 1.38 | .51 | .96 | .90 | 3.74 |
| 2011 | 1.04 | .67 | 1.07 | .89 | 3.67 |
| 2012 | .91 | .87 | 1.30 | .79 | 3.88 |
| 2013 | 1.34 | .60 | ***1.31*** | ***.85*** | ***4.10*** |
| 2014 | ***1.25*** | ***.80*** | ***1.35*** | ***.90*** | ***4.30*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .53 | .53 | .53 | .53 | 2.12 |
| 2010 | .53 | .53 | .53 | .56 | 2.15 |
| 2011 | .56 | .56 | .5875 | .5875 | 2.30 |
| 2012 | .5875 | .5875 | .5875 | .62 | 2.38 |
| 2013 | .62 | .62 | .655 | | |

**BUSINESS:** DTE Energy Company is a holding company for DTE Electric (formerly Detroit Edison), which supplies electricity in Detroit and a 7,600-square-mile area in southeastern Michigan, and DTE Gas (formerly Michigan Consolidated Gas). Customers: 2.1 mill. electric, 1.3 mill. gas. Acquired MCN Energy 6/01. Has various nonutility operations. Electric revenue breakdown: residential, 44%; commercial, 36%; industrial, 15%; other, 5%. Generating sources: coal, 67%; nuclear, 17%; gas, 1%; purchased, 15%. Fuel costs: 37% of revenues. '12 reported deprec. rates: 3.3% electric, 2.4% gas. Has 9,900 employees. Chairman, President & CEO: Gerard M. Anderson. Inc.: Michigan. Address: One Energy Plaza, Detroit, MI 48226-1279. Tel.: 313-235-4000. Internet: www.dteenergy.com.

**DTE Energy should post higher earnings in 2013.** The favorable year-to-year earnings comparison in the first quarter outweighed the unfavorable one in the second quarter. In each case, a return to normal weather conditions this year was the key factor. In addition, DTE Gas received a $20 million rate increase at the start of the year. The utility is benefiting from a regulatory mechanism (through 2017) that enables it to recover annual infrastructure investments. The company's nonutility activities are meeting its income expectations in businesses such as gas pipelines and storage, renewable energy, and reduced emissions fuel (see below). Across the board, DTE Energy is controlling costs effectively, and its utilities should earn their allowed returns on equity. So far, Detroit is paying its electric and gas bills, and the company expects no significant effect from the city's bankruptcy filing. Our earnings estimate is within the company's target of $3.90-$4.20 a share.

**We forecast further profit growth in 2014.** DTE Electric will amortize into income $127 million of regulatory liabilities that would otherwise have been passed through to customers. This will enable the utility to postpone its next rate application from 2013 until mid-2014, with interim tariffs taking effect at the start of 2015. And the aforementioned regulatory mechanism for DTE Gas will enable it to postpone its next filing for as much as three years. Our 2014 estimate is within DTE's guidance of $4.12-$4.42 a share.

**DTE Energy's nonutility operations are performing well.** The gas pipeline and storage business is benefiting from rising demand for natural gas and increased activity in the Marcellus and Utica shale regions. DTE's Power and Industrial segment has projects involving on-site energy, power plants fueled by wood or landfill gas, and fuel that reduces emissions from coal-fired facilities. These operations should be a significant contributor to DTE's profit growth.

**Untimely DTE Energy stock has a dividend yield and 3- to 5-year total return potential that are comparable with the averages for utilities.** Like most utility equities, the stock is trading within our 2016-2018 Target Price Range.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '03, (16¢); '05, (2¢); '06, 1¢; '07, $1.96; '08, 50¢; '11, 51¢; gains (losses) on disc. ops.: '03, 40¢; '04, (6¢); '05, (20¢); '06, (2¢); '07, $1.20; '08, 13¢; '12, (33¢). '10 & '12 EPS don't add due to rounding. Next egs. report due late Oct. **(B)** Div'ds histor. paid in mid-Jan., Apr., July and Oct. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '12: $39.46/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '11: 10.5% elec.; in '13: 10.5% gas; earned on avg. com. eq., '12: 9.0%. Regul. Clim.: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 80 |
| **Earnings Predictability** | 90 |

# DUKE ENERGY NYSE-DUK

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 70.77 | 16.8 (Trailing: 21.9 Median: NMF) | 0.95 | 4.4% | |

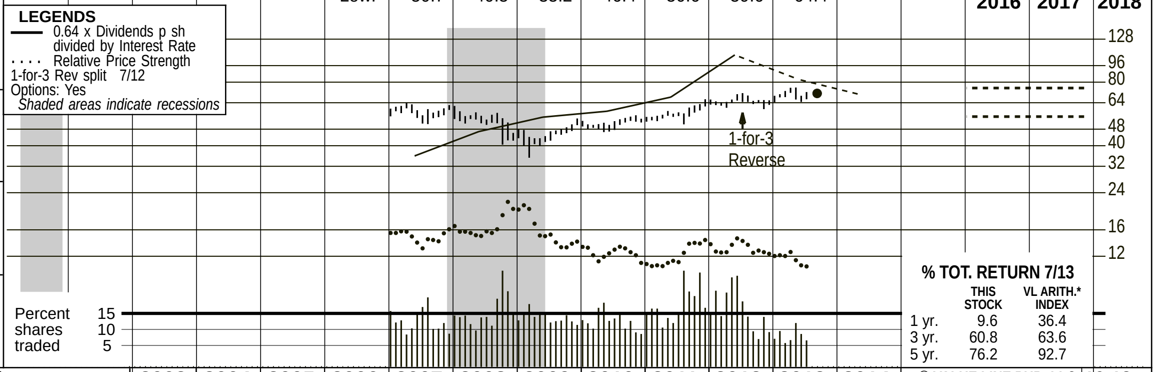
**TIMELINESS** 4 Lowered 4/19/13

**SAFETY** 2 New 6/1/07

TECHNICAL 4 Lowered 8/23/13

**BETA** .60 (1.00 = Market)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| High: | 63.9 | 61.8 | 53.8 | 55.8 | 66.4 | 71.1 | 75.5 |
| Low: | 50.7 | 40.5 | 35.2 | 46.4 | 50.6 | 59.6 | 64.4 |



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 9.6 | 36.4 |
| 3 yr. | 60.8 | 63.6 |
| 5 yr. | 76.2 | 92.7 |

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 75 | (+5%) | *6%* |
| Low | 55 | (-20%) | *-1%* |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Options | 0 | 0 | 1 | 1 | 0 | 8 | 0 | 0 | 3 |
| to Sell | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 7 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 432 | 428 | 409 |
| to Sell | 547 | 440 | 434 |
| Hld's(000) | 351679 | 364401 | 374796 |

Duke Energy Corporation, in its current configuration, began trading on January 3, 2007, the day after it spun off its midstream gas operations into a new company, Spectra Energy (NYSE: SE), to shareholders. Duke Energy shareholders received half a share of Spectra Energy for each Duke share held. In July of 2012, Duke acquired Progress Energy and effected a 1-for-3 reverse split. Data for the "old" Duke are not shown because they are not comparable.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | - - | - - | 25.32 | 30.24 | 31.15 | 29.18 | 32.22 | 32.63 | 27.88 | ***35.40*** | ***36.80*** | **Revenues per sh** | ***41.50*** |
| - - | - - | - - | 7.86 | 8.11 | 7.34 | 7.58 | 8.49 | 8.68 | 6.80 | ***8.50*** | ***8.95*** | **"Cash Flow" per sh** | ***10.00*** |
| - - | - - | - - | 2.76 | 3.60 | 3.03 | 3.39 | 4.02 | 4.14 | 3.71 | ***3.95*** | ***4.30*** | **Earnings per sh** A | ***5.00*** |
| - - | - - | - - | - - | 2.58 | 2.70 | 2.82 | 2.91 | 2.97 | 3.03 | ***3.09*** | ***3.15*** | **Div'd Decl'd per sh** B ■ † | ***3.35*** |
| - - | - - | - - | 8.07 | 7.43 | 10.35 | 9.85 | 10.84 | 9.80 | 7.81 | ***8.65*** | ***9.75*** | **Cap'l Spending per sh** | ***9.75*** |
| - - | - - | - - | 62.30 | 50.40 | 49.51 | 49.85 | 50.84 | 51.14 | 58.04 | ***58.50*** | ***59.60*** | **Book Value per sh** C | ***63.75*** |
| - - | - - | - - | 418.96 | 420.62 | 423.96 | 436.29 | 442.96 | 445.29 | 704.00 | ***706.00*** | ***707.00*** | **Common Shs Outst'g** D | ***710.00*** |
| - - | - - | - - | - - | 16.1 | 17.3 | 13.3 | 12.7 | 13.8 | 17.5 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| - - | - - | - - | - - | .85 | 1.04 | .89 | .81 | .87 | 1.11 | | | **Relative P/E Ratio** | ***.85*** |
| - - | - - | - - | - - | 4.4% | 5.2% | 6.2% | 5.7% | 5.2% | 4.7% | | | **Avg Ann'l Div'd Yield** | ***5.2%*** |
| - - | - - | - - | 10607 | 12720 | 13207 | 12731 | 14272 | 14529 | 19624 | ***25000*** | ***26000*** | **Revenues ($mill)** | ***29500*** |
| - - | - - | - - | 1080.0 | 1522.0 | 1279.0 | 1461.0 | 1765.0 | 1839.0 | 2136.0 | ***2790*** | ***3045*** | **Net Profit ($mill)** | ***3575*** |
| - - | - - | - - | 29.4% | 31.9% | 32.5% | 34.4% | 32.6% | 31.3% | 30.2% | ***34.5%*** | ***34.5%*** | **Income Tax Rate** | ***34.5%*** |
| - - | - - | - - | 6.9% | 7.2% | 16.0% | 17.5% | 22.7% | 23.2% | 22.3% | ***9.0%*** | ***9.0%*** | **AFUDC % to Net Profit** | ***8.0%*** |
| - - | - - | - - | 41.0% | 30.9% | 38.7% | 42.6% | 44.3% | 45.1% | 47.0% | ***48.0%*** | ***49.0%*** | **Long-Term Debt Ratio** | ***52.0%*** |
| - - | - - | - - | 59.0% | 69.1% | 61.3% | 57.4% | 55.7% | 54.9% | 52.9% | ***52.0%*** | ***51.0%*** | **Common Equity Ratio** | ***48.0%*** |
| - - | - - | - - | 44220 | 30697 | 34238 | 37863 | 40457 | 41451 | 77307 | ***79300*** | ***82850*** | **Total Capital ($mill)** | ***94400*** |
| - - | - - | - - | 41447 | 31110 | 34036 | 37950 | 40344 | 42661 | 68558 | ***71450*** | ***75050*** | **Net Plant ($mill)** | ***85300*** |
| - - | - - | - - | 3.1% | 6.0% | 4.8% | 4.9% | 5.5% | 5.6% | 3.6% | ***4.5%*** | ***5.0%*** | **Return on Total Cap'l** | ***5.0%*** |
| - - | - - | - - | 4.1% | 7.2% | 6.1% | 6.7% | 7.8% | 8.1% | 5.2% | ***7.0%*** | ***7.0%*** | **Return on Shr. Equity** | ***8.0%*** |
| - - | - - | - - | 4.1% | 7.2% | 6.1% | 6.7% | 7.8% | 8.1% | 5.2% | ***7.0%*** | ***7.0%*** | **Return on Com Equity** E | ***8.0%*** |
| - - | - - | - - | 4.1% | 2.0% | .6% | 1.1% | 2.1% | 2.2% | .9% | ***1.5%*** | ***2.0%*** | **Retained to Com Eq** | ***2.5%*** |
| - - | - - | - - | - - | 72% | 89% | 84% | 73% | 72% | 82% | ***78%*** | ***73%*** | **All Div'ds to Net Prof** | ***67%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $41348 mill. **Due in 5 Yrs** $12975 mill.
**LT Debt** $36339 mill. **LT Interest** $1646.0 mill.
Incl. $1689.0 mill. capitalized leases. Incl. $1255.0 mill. nonrecourse LT debt of variable interest entities.
(LT interest earned: 2.8x)
**Leases, Uncapitalized** Annual rentals $171.0 mill.
**Pension Assets-12/12** $7.75 bill. **Oblig.** $7.84 bill.
**Pfd Stock** None
**Common Stock** 705,739,261 shs.
**as of 5/6/13**
**MARKET CAP: $50 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +7.0 | -2.1 | -2.8 |
| Avg. Indust. Use (MWH) | 2440 | 3062 | 2541 |
| Avg. Indust. Revs. per KWH (¢) | 4.86 | 4.89 | 5.84 |
| Capacity at Peak (Mw) F | 19908 | 19356 | 19575 |
| Peak Load, Summer (Mw) F | 16712 | NA | NA |
| Annual Load Factor (%) F | 58.0 | NA | NA |
| % Change Customers (avg.) | +.4 | +.3 | +.8 |
| Fixed Charge Cov. (%) | 295 | 292 | 263 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | - - | 2.0% | *5.0%* |
| "Cash Flow" | - - | - - | *4.0%* |
| Earnings | - - | 4.5% | *4.0%* |
| Dividends | - - | 18.0% | *2.0%* |
| Book Value | - - | -1.0% | *3.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 3594 | 3287 | 3946 | 3445 | 14272 |
| **2011** | 3663 | 3534 | 3964 | 3368 | 14529 |
| **2012** | 3630 | 3577 | 6722 | 5695 | 19624 |
| **2013** | 5898 | 5879 | ***6923*** | ***6300*** | ***25000*** |
| **2014** | ***6100*** | ***6100*** | ***7300*** | ***6500*** | ***26000*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1.02 | .87 | 1.53 | .60 | 4.02 |
| **2011** | 1.14 | .99 | 1.35 | .66 | 4.14 |
| **2012** | .86 | .99 | 1.01 | .59 | 3.71 |
| **2013** | .89 | .74 | ***1.50*** | ***.82*** | ***3.95*** |
| **2014** | ***1.15*** | ***.90*** | ***1.55*** | ***.70*** | ***4.30*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .69 | .69 | .72 | .72 | 2.82 |
| **2010** | .72 | .72 | .735 | .735 | 2.91 |
| **2011** | .735 | .735 | .75 | .75 | 2.97 |
| **2012** | .75 | .75 | .765 | .765 | 3.03 |
| **2013** | .765 | .765 | .78 | | |

**BUSINESS:** Duke Energy Corporation is a holding company for utilities with 7.1 mill. elec. customers in North Carolina, Florida, Indiana, South Carolina, Ohio, & Kentucky, and over 500,000 gas customers in Ohio & Kentucky. Owns independent power plants & has international ops. Acq'd Cinergy 4/06; spun off midstream gas ops. 1/07; acq'd Progress Energy 7/12. Elec. rev. breakdown: residential, 43%; commercial, 31%; industrial, 15%; other, 11%. Generating sources: coal, 38%; nuclear, 29%; gas, 18%; purch., 15%. Fuel costs: 39% of revs. '12 reported deprec. rates: 2.5%-3.2%. Has 27,900 empls. Chairman: James E. Rogers. President & CEO: Lynn J. Good. Inc.: DE. Address: 550 South Tryon St., Charlotte, NC 28202-1803. Tel.: 704-382-3853. Internet: www.duke-energy.com.

**Duke Energy's utility subsidiaries have obtained some rate hikes this year and have reached regulatory settlements in other proceedings.** A $179 million (5.5%) rate hike for Progress Energy, based on a 10.2% return on equity, took effect in North Carolina at the start of June. Duke Energy has reached settlements in North and South Carolina calling for tariff increases of $235 million (5.1%) and $119 million (8.2%), respectively, based on a 10.2% ROE. New rates would take effect in September, if the settlements are approved by the commission in each state. In Ohio, a $49 million (2.9%) electric distribution rate increase, based on a 9.84% ROE, took effect in May. Progress Energy might file a rate application in South Carolina in late 2013, but other than this, the company probably won't file any more rate cases for the next few years.

**An important matter is pending in Ohio.** Duke is asking the commission for recovery of $729 million of capacity costs associated with its generating fleet there. Customers in Ohio can choose their power supplier and, due to competitive forces, Duke's profitability there has waned in recent years. A ruling is expected this fall.

**Earnings are likely to rise in 2013 and 2014.** Duke is still booking merger-related costs stemming from its takeover of Progress Energy in July of 2012, but these are declining over time. (They reduced share net by $0.07 in the first half this year.) The company is also changing the way it records scheduled nuclear outage costs, levelizing them each year instead of booking them when the outage occurs. This will boost the bottom line in the fourth quarter of 2013. Even so, we have cut our estimate by $0.10 a share because June-quarter results (including an $0.08-a-share charge for nuclear development costs) fell short of our estimate. With this charge absent in 2014, and Duke benefiting from a full year of the aforementioned rate hikes, profits should advance nicely. The outcome of the aforementioned regulatory matter in Ohio will affect results next year, however.

**This untimely stock's yield is fractionally above the utility average.** With the quotation near the top of our 2016-2018 Target Price Range, however, long-term total return potential is low.

*Paul E. Debbas, CFA* *August 23, 2013*

**(A)** Dil. EPS. Excl. nonrec. losses: '09, 63¢; '10, $1.02; '11, 30¢; '12, 70¢; '13, 26¢; gain on disc. ops.: '12, 6¢. '12 EPS don't add due to chg. in shs. Next egs. report due early Nov. **(B)** Div'ds hist. paid in mid-Mar., June, Sept., & Dec. ■ Div'd reinv. plan avail. **(C)** Incl. intang. In '12: $39.66/sh. **(D)** In mill., adj. for rev. split. **(E)** Rate base: Net orig. cost. Rates all'd on com. eq. in '12 in NC/SC: 10.5%; in '09 in OH: 10.63% (elec.); in '04 in IN: 10.3%; earn. on avg. com. eq., '12: 6.8%. Reg. Clim.: NC Avg.; SC, OH, IN Above Avg. **(F)** Carolinas only.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 70 |
| **Earnings Predictability** | 75 |

# CON. EDISON NYSE-ED

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 59.28 | 16.1 (Trailing: 15.2 Median: 15.0) | 0.91 | 4.2% | |

**TIMELINESS** 3 Raised 5/17/13

**SAFETY** 1 New 7/27/90

TECHNICAL 3 Lowered 8/16/13

**BETA** .60 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+10%) | *7%* |
| Low | 50 | (-15%) | *1%* |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |

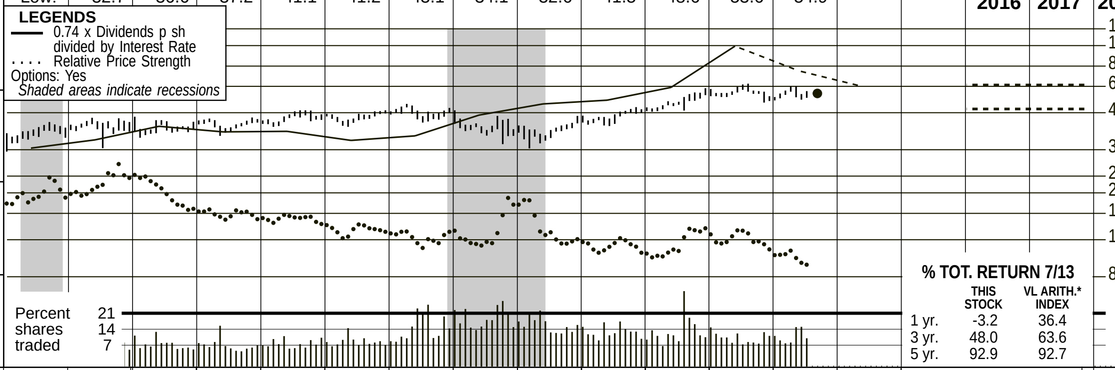
### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 241 | 264 | 268 |
| to Sell | 263 | 286 | 261 |
| Hld's(000) | 122900 | 126940 | 127317 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 45.4 | 46.0 | 45.6 | 49.3 | 49.3 | 52.9 | 49.3 | 46.3 | 51.0 | 62.7 | 66.0 | 64.0 |
| Low: | 32.7 | 36.6 | 37.2 | 41.1 | 41.2 | 43.1 | 34.1 | 32.6 | 41.5 | 48.6 | 53.6 | 54.9 |

**Target Price Range**

| 2016 | 2017 | 2018 |
|---|---|---|



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -3.2 | 36.4 |
| 3 yr. | 48.0 | 63.6 |
| 5 yr. | 92.9 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.24 | 30.46 | 35.04 | 44.48 | 45.41 | 39.65 | 43.51 | 40.24 | 47.66 | 47.14 | 48.23 | 49.62 | 46.36 | 45.69 | 44.17 | 41.62 | ***42.65*** | ***43.70*** | Revenues per sh | ***48.75*** |
| 5.08 | 5.29 | 5.74 | 5.51 | 5.70 | 5.44 | 5.12 | 4.54 | 5.27 | 5.28 | 5.77 | 5.99 | 5.86 | 6.24 | 6.61 | 7.15 | ***7.25*** | ***7.55*** | "Cash Flow" per sh | ***8.75*** |
| 2.95 | 3.04 | 3.13 | 2.74 | 3.21 | 3.13 | 2.83 | 2.32 | 2.99 | 2.95 | 3.48 | 3.36 | 3.14 | 3.47 | 3.57 | 3.86 | ***3.75*** | ***3.85*** | Earnings per sh A | ***4.25*** |
| 2.10 | 2.12 | 2.14 | 2.18 | 2.20 | 2.22 | 2.24 | 2.26 | 2.28 | 2.30 | 2.32 | 2.34 | 2.36 | 2.38 | 2.40 | 2.42 | ***2.46*** | ***2.50*** | Div'd Decl'd per sh B ■ | ***2.62*** |
| 2.78 | 2.66 | 3.17 | 4.52 | 5.20 | 5.68 | 5.72 | 5.60 | 6.59 | 7.17 | 7.09 | 8.50 | 7.80 | 6.96 | 6.72 | 7.06 | ***8.70*** | ***7.90*** | Cap'l Spending per sh | ***8.25*** |
| 25.18 | 25.88 | 25.31 | 25.81 | 26.71 | 27.68 | 28.44 | 29.09 | 29.80 | 31.09 | 32.58 | 35.43 | 36.46 | 37.93 | 39.05 | 40.53 | ***41.45*** | ***42.80*** | Book Value per sh C | ***47.75*** |
| 235.49 | 232.83 | 213.81 | 212.03 | 212.15 | 213.93 | 225.84 | 242.51 | 245.29 | 257.46 | 272.02 | 273.72 | 281.12 | 291.62 | 292.89 | 292.87 | ***293.00*** | ***293.00*** | Common Shs Outst'g D | ***293.00*** |
| 10.9 | 15.3 | 14.0 | 12.0 | 12.0 | 13.3 | 14.3 | 18.2 | 15.1 | 15.5 | 13.8 | 12.3 | 12.5 | 13.3 | 15.1 | 15.4 | ***Bold figures are*** | | Avg Ann'l P/E Ratio | ***13.5*** |
| .63 | .80 | .80 | .78 | .61 | .73 | .82 | .96 | .80 | .84 | .73 | .74 | .83 | .85 | .95 | .98 | ***Value Line*** | | Relative P/E Ratio | ***.90*** |
| 6.5% | 4.6% | 4.9% | 6.6% | 5.7% | 5.3% | 5.5% | 5.3% | 5.0% | 5.0% | 4.8% | 5.7% | 6.0% | 5.2% | 4.5% | 4.1% | ***estimates*** | | Avg Ann'l Div'd Yield | ***4.5%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $12379 mill. **Due in 5 Yrs** $4302.0 mill.
**LT Debt** $10496 mill. **LT Interest** $514.0 mill.
(LT interest earned: 4.0x)

**Leases, Uncapitalized** Annual rentals $52.0 mill.

**Pension Assets-12/12** $9.14 bill. **Oblig.** $13.4 bill.

**Pfd Stock** None

**Common Stock** 292,872,896 shs.
**as of 7/26/13**
**MARKET CAP: $17 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9827.0 | 9758.0 | 11690 | 12137 | 13120 | 13583 | 13032 | 13325 | 12938 | 12188 | ***12500*** | ***12800*** | Revenues ($mill) | ***14250*** |
| 639.0 | 560.0 | 719.0 | 749.0 | 936.0 | 933.0 | 868.0 | 992.0 | 1062.0 | 1141.0 | ***1115*** | ***1135*** | Net Profit ($mill) | ***1250*** |
| 33.7% | 34.3% | 33.6% | 35.2% | 32.6% | 36.0% | 34.2% | 36.0% | 36.1% | 34.5% | ***36.0%*** | ***36.0%*** | Income Tax Rate | ***36.0%*** |
| 4.2% | 7.7% | 2.2% | 1.6% | 1.9% | 1.7% | 2.6% | 2.4% | 1.6% | .5% | ***1.0%*** | ***1.0%*** | AFUDC % to Net Profit | ***1.0%*** |
| 50.4% | 47.4% | 49.6% | 50.2% | 45.6% | 48.3% | 48.5% | 48.6% | 46.5% | 45.9% | ***47.0%*** | ***47.0%*** | Long-Term Debt Ratio | ***47.0%*** |
| 48.0% | 51.0% | 49.0% | 48.5% | 53.1% | 50.6% | 50.4% | 50.4% | 52.5% | 54.1% | ***53.0%*** | ***53.0%*** | Common Equity Ratio | ***53.0%*** |
| 13369 | 13828 | 14921 | 16515 | 16687 | 19160 | 20330 | 21952 | 21794 | 21933 | ***22975*** | ***23625*** | Total Capital ($mill) | ***26300*** |
| 15225 | 16106 | 17112 | 18445 | 19914 | 20874 | 22464 | 23863 | 25093 | 26939 | ***28475*** | ***29700*** | Net Plant ($mill) | ***33300*** |
| 6.3% | 5.6% | 6.3% | 6.0% | 7.0% | 6.2% | 5.7% | 5.9% | 6.2% | 6.5% | ***6.0%*** | ***6.0%*** | Return on Total Cap'l | ***6.0%*** |
| 9.6% | 7.7% | 9.6% | 9.1% | 10.3% | 9.4% | 8.3% | 8.8% | 9.1% | 9.6% | ***9.0%*** | ***9.0%*** | Return on Shr. Equity | ***9.0%*** |
| 9.8% | 7.8% | 9.7% | 9.2% | 10.4% | 9.5% | 8.4% | 8.9% | 9.2% | 9.6% | ***9.0%*** | ***9.0%*** | Return on Com Equity E | ***9.0%*** |
| 2.9% | .8% | 2.6% | 2.6% | 3.9% | 3.1% | 2.5% | 3.2% | 3.1% | 3.6% | ***3.0%*** | ***3.0%*** | Retained to Com Eq | ***3.5%*** |
| 71% | 89% | 74% | 73% | 63% | 67% | 71% | 65% | 66% | 62% | ***65%*** | ***64%*** | All Div'ds to Net Prof | ***61%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.6 | -1.4 | -1.1 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NMF | NMF | NMF |
| Peak Load, Summer (Mw) | 12963 | 14788 | 14344 |
| Annual Load Factor (%) | NMF | NMF | NMF |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 331 | 360 | 382 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | - - | -1.5% | *2.0%* |
| "Cash Flow" | 2.0% | 4.0% | *4.5%* |
| Earnings | 2.0% | 3.0% | *2.5%* |
| Dividends | 1.0% | 1.0% | *1.5%* |
| Book Value | 4.0% | 4.5% | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 3462 | 3017 | 3707 | 3139 | 13325 |
| **2011** | 3349 | 2993 | 3629 | 2967 | 12938 |
| **2012** | 3078 | 2771 | 3438 | 2901 | 12188 |
| **2013** | 3306 | 2767 | ***3527*** | ***2900*** | ***12500*** |
| **2014** | ***3300*** | ***2900*** | ***3600*** | ***3000*** | ***12800*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .80 | .64 | 1.23 | .80 | 3.47 |
| **2011** | 1.06 | .56 | 1.30 | .65 | 3.57 |
| **2012** | .94 | .73 | 1.49 | .70 | 3.86 |
| **2013** | 1.17 | .49 | ***1.45*** | ***.64*** | ***3.75*** |
| **2014** | ***1.10*** | ***.60*** | ***1.50*** | ***.65*** | ***3.85*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .59 | .59 | .59 | .59 | 2.36 |
| **2010** | .595 | .595 | .595 | .595 | 2.38 |
| **2011** | .60 | .60 | .60 | .60 | 2.40 |
| **2012** | .605 | .605 | .605 | .605 | 2.42 |
| **2013** | .615 | .615 | | | |

**BUSINESS:** Consolidated Edison, Inc. is a holding company for Consolidated Edison Company of New York, Inc. (CECONY), which sells electricity, gas, and steam in most of New York City and Westchester County. Also owns Orange and Rockland Utilities (O&R, acquired 7/99), which operates in New York, New Jersey, and Pennsylvania. Has 3.6 million electric, 1.2 million gas customers. Pursues competitive energy opportunities through three wholly owned subsidiaries. Purchases most of its power. Fuel costs: 39% of revenues. '12 reported depreciation rates: 2.8%-3.1%. Has 15,000 employees. Chairman, President & CEO: Kevin Burke. Incorporated: New York. Address: 4 Irving Place, New York, New York 10003. Tel.: 212-460-4600. Internet: www.conedison.com.

**Consolidated Edison's largest subsidiary has revised its general rate case.** Initially, Consolidated Edison Company of New York filed for an electric rate increase of $375 million (3.3%), a gas tariff hike of $25 million (1.3%), and a $5 million decrease in steam rates. The utility sought a return of 10.35% on a common-equity ratio of 50%. New rates are to be effective at the start of 2014, and CECONY would get additional rate relief in the following two years. However, the staff of the New York State Public Service Commission (NYSPSC) is proposing sharp *decreases* for each service. The staff is recommending that electric, gas, and steam rates be slashed by $187 million, $122 million, and $28 million, respectively, based on a return of 8.7% on a common-equity ratio of 48%. In June, CECONY revised its request. The company is now seeking raises in its electric, gas, and steam rates of $425 million, $26 million, and $11 million, respectively, based on a 10.1% return on a 50% common-equity ratio.

**ConEd's utilities in New York State have proposed a storm-hardening plan.** Last fall, Hurricane Sandy caused CECONY and Orange and Rockland to incur $394 million of operating expenses and $156 million of capital costs. Most of the operating expenses were deferred for future recovery. CECONY is proposing to recoup these costs over a three-year period. As a result, ConEd wants to spend $1 billion through 2016 to improve its system so that it can better withstand severe storms. The proposal requires the approval of the NYSPSC.

**We have cut our 2013 and 2014 earnings estimates by $0.10 a share and $0.05 a share, respectively.** Second-quarter results were below our expectation due in part to a loss of $0.06 a share due to the effects of mark-to-market accounting. We include this in our presentation because it is an ongoing part of quarterly results. We are more cautious in our 2014 forecast due to the wide disparity between CECONY's rate request and the staff recommendation.

**This top-quality stock offers a dividend yield that is slightly above average for a utility.** Like most utility stocks, 3- to 5-year total return potential is low.

*Paul E. Debbas, CFA* *August 23, 2013*

(A) Diluted EPS. Excl. nonrec. losses: '02, 11¢; '03, 45¢; '13, 41¢; gain on discontinued operations: '08, $1.01. Next earnings report due late Oct. (B) Div'ds historically paid in mid-Mar., June, Sept., and Dec. ■ Div'd reinvestment plan available. (C) Incl. intangibles. In '12: $35.35/sh. (D) In mill. (E) Rate base: net orig. cost. Rate allowed on com. eq. for CECONY in '10: 10.15% elec., 9.6% gas and steam; O&R in '12 (elec.) 9.4%, in '09 (gas) 10.3%; earned on avg. com. eq., '12: 9.5%. Regulatory Climate: Below Average.

| | |
|---|---|
| **Company's Financial Strength** | A+ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 85 |

# EMPIRE DISTRICT NYSE-EDE

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 21.44 | 15.1 (Trailing: 15.3 Median: 16.0) | 0.86 | 4.7% |

VALUE LINE

**TIMELINESS** 1 Raised 7/5/13
**SAFETY** 2 Raised 3/23/12
TECHNICAL 2 Raised 9/20/13
**BETA** .70 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 25 | (+15%) | *9%* |
| Low | 19 | (-10%) | *3%* |

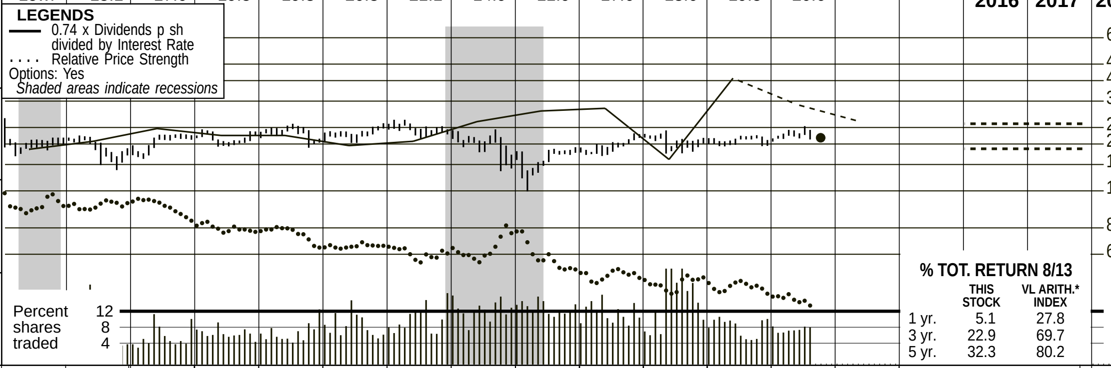
### Insider Decisions

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 53 | 56 | 64 |
| to Sell | 44 | 54 | 52 |
| Hld's(000) | 19863 | 20020 | 20669 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 22.0 | 22.5 | 23.5 | 25.0 | 25.1 | 26.1 | 23.5 | 19.4 | 22.5 | 23.3 | 22.0 | 24.3 |
| Low: | 15.1 | 17.0 | 19.5 | 19.3 | 20.3 | 21.1 | 14.9 | 11.9 | 17.6 | 18.0 | 19.5 | 20.6 |



Target Price Range
2016 | 2017 | 2018

% TOT. RETURN 8/13

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 5.1 | 27.8 |
| 3 yr. | 22.9 | 69.7 |
| 5 yr. | 32.3 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.83 | 14.02 | 13.94 | 14.78 | 13.37 | 13.56 | 13.03 | 12.67 | 14.80 | 13.67 | 14.59 | 15.25 | 13.04 | 13.02 | 13.74 | 13.11 | ***13.85*** | ***14.10*** | **Revenues per sh** | ***16.25*** |
| 2.67 | 2.97 | 2.89 | 3.12 | 2.19 | 2.43 | 2.48 | 2.22 | 2.45 | 2.75 | 2.69 | 2.91 | 2.72 | 2.85 | 3.21 | 2.99 | ***3.10*** | ***3.15*** | **"Cash Flow" per sh** | ***3.75*** |
| 1.29 | 1.53 | 1.13 | 1.35 | .59 | 1.19 | 1.29 | .86 | .92 | 1.41 | 1.09 | 1.17 | 1.18 | 1.17 | 1.31 | 1.32 | ***1.40*** | ***1.45*** | **Earnings per sh A** | ***1.70*** |
| 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 | .64 | 1.00 | ***1.00*** | ***1.00*** | **Div'd Decl'd per sh B ■ †** | ***1.20*** |
| 3.38 | 3.03 | 4.14 | 7.61 | 4.02 | 3.43 | 2.65 | 1.64 | 2.83 | 3.97 | 5.46 | 6.28 | 4.07 | 2.63 | 2.44 | 3.22 | ***3.95*** | ***3.95*** | **Cap'l Spending per sh** | ***2.25*** |
| 13.06 | 13.43 | 13.48 | 13.65 | 13.58 | 14.59 | 15.17 | 14.76 | 15.08 | 15.49 | 16.04 | 15.56 | 15.75 | 15.82 | 16.53 | 16.90 | ***17.35*** | ***18.00*** | **Book Value per sh C** | ***19.50*** |
| 16.78 | 17.11 | 17.37 | 17.60 | 19.76 | 22.57 | 24.98 | 25.70 | 26.08 | 30.25 | 33.61 | 33.98 | 38.11 | 41.58 | 41.98 | 42.48 | ***43.00*** | ***45.00*** | **Common Shs Outst'g D** | ***46.50*** |
| 13.9 | 14.0 | 21.7 | 17.7 | 33.9 | 16.2 | 15.8 | 24.8 | 24.5 | 15.9 | 21.7 | 17.3 | 14.3 | 16.8 | 15.8 | 15.8 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| .80 | .73 | 1.24 | 1.15 | 1.74 | .88 | .90 | 1.31 | 1.30 | .86 | 1.15 | 1.04 | .95 | 1.07 | .99 | 1.01 | | | **Relative P/E Ratio** | ***.85*** |
| 7.1% | 6.0% | 5.2% | 5.4% | 6.4% | 6.6% | 6.3% | 6.0% | 5.7% | 5.7% | 5.4% | 6.3% | 7.6% | 6.5% | 3.1% | 4.8% | | | **Avg Ann'l Div'd Yield** | ***5.5%*** |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 325.5 | 325.5 | 386.2 | 413.5 | 490.2 | 518.2 | 497.2 | 541.3 | 576.9 | 557.1 | ***595*** | ***635*** | **Revenues ($mill)** | ***750*** |
| 29.5 | 21.8 | 23.8 | 39.9 | 33.2 | 39.7 | 41.3 | 47.4 | 55.0 | 55.7 | ***60.0*** | ***65.0*** | **Net Profit ($mill)** | ***80.0*** |
| 34.5% | 34.1% | 33.4% | 35.4% | 30.3% | 32.5% | 32.5% | 39.2% | 38.4% | 38.0% | ***37.5%*** | ***37.5%*** | **Income Tax Rate** | ***38.0%*** |
| 1.0% | 1.0% | 2.4% | 10.7% | 23.1% | 31.5% | 34.2% | 21.5% | .9% | 3.5% | ***7.0%*** | ***6.0%*** | **AFUDC % to Net Profit** | ***3.0%*** |
| 52.0% | 51.3% | 51.0% | 49.7% | 50.1% | 53.6% | 51.6% | 51.3% | 49.9% | 49.1% | ***53.0%*** | ***51.0%*** | **Long-Term Debt Ratio** | ***51.0%*** |
| 48.0% | 48.7% | 49.0% | 50.3% | 49.9% | 46.4% | 48.4% | 48.7% | 50.1% | 50.9% | ***47.0%*** | ***49.0%*** | **Common Equity Ratio** | ***49.0%*** |
| 789.2 | 779.1 | 803.3 | 931.0 | 1081.1 | 1140.4 | 1240.3 | 1350.7 | 1386.2 | 1409.4 | ***1590*** | ***1650*** | **Total Capital ($mill)** | ***1850*** |
| 833.9 | 857.0 | 896.0 | 1031.0 | 1178.9 | 1342.8 | 1459.0 | 1519.1 | 1563.7 | 1657.6 | ***1755*** | ***1855*** | **Net Plant ($mill)** | ***2000*** |
| 5.7% | 4.7% | 4.7% | 5.9% | 4.7% | 5.2% | 5.2% | 5.1% | 5.5% | 5.4% | ***5.0%*** | ***5.0%*** | **Return on Total Cap'l** | ***5.5%*** |
| 7.8% | 5.8% | 6.0% | 8.5% | 6.2% | 7.5% | 6.9% | 7.2% | 7.9% | 7.8% | ***8.0%*** | ***8.0%*** | **Return on Shr. Equity** | ***8.5%*** |
| 7.8% | 5.8% | 6.0% | 8.5% | 6.2% | 7.5% | 6.9% | 7.2% | 7.9% | 7.8% | ***8.0%*** | ***8.0%*** | **Return on Com Equity E** | ***8.5%*** |
| .1% | NMF | NMF | .8% | NMF | NMF | NMF | NMF | 4.1% | 1.9% | ***2.5%*** | ***2.5%*** | **Retained to Com Eq** | ***2.5%*** |
| 99% | NMF | NMF | 90% | 117% | 109% | 109% | 110% | 49% | 76% | ***70%*** | ***69%*** | **All Div'ds to Net Prof** | ***72%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $744.0 mill. **Due in 5 Yrs** $26.9 mill.
**LT Debt** $743.5 mill. **LT Interest** $41.7 mill.
Incl. $4.3 mill. capitalized leases.
(LT interest earned: 3.3x)
**Leases, Uncapitalized** Annual rentals $.8 mill.
**Pension Assets-12/12** $160.2 mill.
**Oblig.** $248.0 mill.
**Pfd Stock** None

**Common Stock** 42,854,223 shs.
**as of 7/30/13**

**MARKET CAP: $925 million (Small Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +6.1 | -2.3 | -3.2 |
| Avg. Industrial Use (MWH) | 2813 | 2865 | 2913 |
| Avg. Industrial Rev/KWH (¢) | 6.92 | 7.72 | 7.66 |
| Capacity at Peak (Mw) | 1409 | 1392 | 1391 |
| Peak Load, Summer (Mw) | 1199 | 1198 | 1142 |
| Annual Load Factor (%) | 53.2 | 52.0 | 52.2 |
| % Change Customers (avg.) | +.4 | -1.5 | +.6 |
| Fixed Charge Cov. (%) | 248 | 307 | 314 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -.5% | -1.5% | *3.5%* |
| "Cash Flow" | 1.5% | 3.0% | *3.5%* |
| Earnings | 2.0% | 2.0% | *5.0%* |
| Dividends | -2.5% | -5.5% | *3.5%* |
| Book Value | 1.5% | 1.0% | *3.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 139.9 | 114.5 | 154.1 | 132.8 | 541.3 |
| **2011** | 150.7 | 129.1 | 164.3 | 132.8 | 576.9 |
| **2012** | 137.2 | 131.6 | 159.2 | 129.1 | 557.1 |
| **2013** | 151.1 | 136.6 | ***165*** | ***142.3*** | ***595*** |
| **2014** | ***160*** | ***145*** | ***175*** | ***155*** | ***635*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .22 | .18 | .55 | .20 | 1.17 |
| **2011** | .29 | .22 | .60 | .21 | 1.31 |
| **2012** | .23 | .25 | .60 | .23 | 1.32 |
| **2013** | .30 | .27 | ***.61*** | ***.22*** | ***1.40*** |
| **2014** | ***.32*** | ***.28*** | ***.62*** | ***.23*** | ***1.45*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .32 | .32 | .32 | .32 | 1.28 |
| **2010** | .32 | .32 | .32 | .32 | 1.28 |
| **2011** | .32 | .32 | - - | - - | .64 |
| **2012** | .25 | .25 | .25 | .25 | 1.00 |
| **2013** | .25 | .25 | .25 | | |

**BUSINESS:** The Empire District Electric Company supplies electricity to 167,000 customers in a 10,000 sq. mi. area in Missouri (89% of '12 retail elec. revs.), Kansas (5%), Oklahoma (3%), & Arkansas (3%). Acquired Missouri Gas (43,000 customers) 6/06. Supplies water service (4,000 customers) and has a small fiber-optics operation. Electric revenue breakdown: residential, 43%; commercial, 30%; industrial, 15%; other, 12%. Generating sources: coal, 48%; gas, 25%; hydro, 1%; purchased, 26%. Fuel costs: 35% of revenues. '12 reported deprec. rate: 2.9%. Has about 750 employees. Chairman: D. Randy Laney. President & CEO: Bradley P. Beecher. Inc.: KS. Address: 602 S. Joplin Ave., P.O. Box 127, Joplin, MO 64802-0127. Tel.: 417-625-5100. Internet: www.empiredistrict.com.

**Empire District Electric will probably post higher earnings in 2013.** More-favorable winter weather patterns helped in the first quarter. A $27.5 million (6.8%) electric rate hike in Missouri took effect at the start of April. This has helped the utility offset the fact that the summer weather conditions have not been unusually hot, as they were in 2012. The utility's service area is making an admirable recovery from the tornado that hit Joplin, Missouri severely in May of 2011. As of July 15th, the customer count was down about 350 from the level before the tornado. Our 2013 earnings estimate is near the upper end of the company's targeted range of $1.26-$1.43 a share. The stock carries our top rank for Timeliness.

**We estimate that profits will advance 4% in 2014.** Empire District Electric will benefit from a full year of the rate increase in 2014 and the ongoing recovery in Joplin. Our earnings forecast remains $1.45 a share.

**The utility is planning a project at one of its gas-fired generating units.** Empire District Electric estimates that it will spend $165 million-$175 million to convert Riverton Unit 12 from a simple-cycle turbine to a combined-cycle facility, thereby expanding its generating capacity by 100 megawatts. Any financing that the company does will be made with the goal of maintaining a capital structure that is close to a 50/50 split between debt and equity. We estimate that Empire District Electric will issue some common stock in late 2014. The project is scheduled for completion in the first half of 2016.

**Finances are in good shape.** The common-equity ratio is healthy, and the fixed-charge coverage was above the industry average of 299% last year. The one drawback is that returns on equity are mediocre, and we project just slight improvement in the company's ROE in the coming years.

**The dividend yield of Empire District Electric stock is above the industry average.** However, we project that, even over the 3- to 5-year period, the dividend won't return to its level before the tornado. Total return potential over that time frame, like that of most utility equities, is unexciting.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted earnings. Excl. loss from disc. ops.: '06, 2¢. '10 EPS don't add due to change in shs., '11 & '12 due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in mid-Mar., June, Sept. and Dec. Div'ds suspended 3Q '11, reinstated 1Q '12. ■ Div'd reinvestment plan avail. (3% disc.). † Shareholder investment plan avail. **(C)** Incl. intang. In '12: $6.85/sh. **(D)** In mill. **(E)** Rate base: Deprec. orig. cost. Rate allowed on com. eq. in MO in '13: none specified; earned on avg. com. eq., '12: 7.9%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 40 |
| **Earnings Predictability** | 85 |

# EL PASO ELECTRIC NYSE-EE

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 38.85 | 16.2 (Trailing: 16.4, Median: 15.0) | 0.90 | 2.8% |

VALUE LINE

**TIMELINESS** 3 Raised 6/21/13
**SAFETY** 2 Raised 5/11/07
TECHNICAL 2 Raised 7/19/13
**BETA** .70 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (+15%) | *7%* |
| Low | 30 | (-25%) | *-3%* |

### Insider Decisions

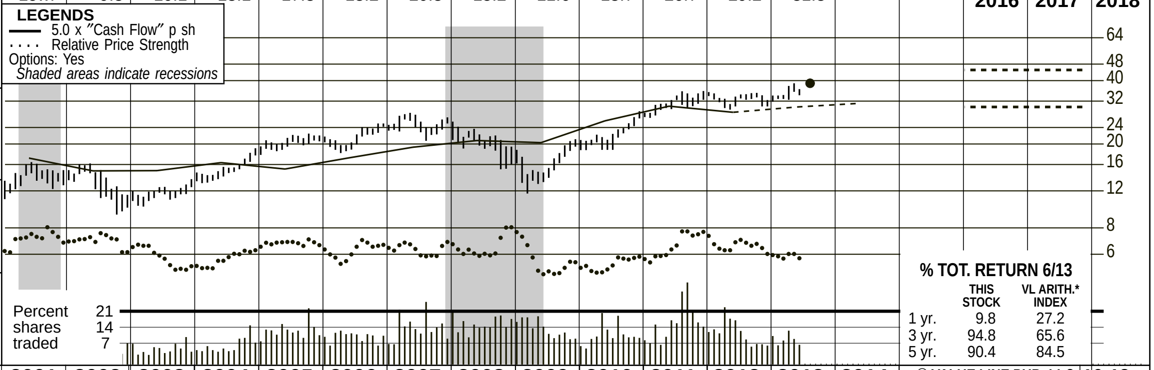
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 79 | 82 | 88 |
| to Sell | 74 | 70 | 75 |
| Hld's(000) | 38643 | 39332 | 39379 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 16.2 | 13.6 | 19.1 | 22.4 | 25.0 | 28.2 | 25.5 | 21.1 | 28.7 | 35.7 | 35.3 | 39.1 |
| Low: | 9.3 | 10.1 | 13.1 | 17.8 | 18.2 | 20.8 | 15.2 | 11.6 | 18.7 | 26.7 | 29.2 | 31.8 |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 9.8 | 27.2 |
| 3 yr. | 94.8 | 65.6 |
| 5 yr. | 90.4 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.86 | 9.99 | 9.96 | 13.70 | 15.40 | 13.91 | 13.97 | 14.95 | 16.70 | 17.75 | 19.43 | 23.15 | 18.85 | 20.61 | 22.97 | 21.26 | **21.85** | **22.20** | **Revenues per sh** | **26.25** |
| 1.86 | 2.34 | 2.79 | 3.21 | 3.43 | 2.99 | 3.00 | 3.27 | 3.05 | 3.44 | 3.86 | 4.16 | 4.07 | 5.15 | 6.05 | 5.66 | **6.00** | **6.25** | **"Cash Flow" per sh** | **7.50** |
| .61 | .70 | .86 | 1.09 | 1.27 | .57 | .64 | .69 | .76 | 1.27 | 1.63 | 1.73 | 1.50 | 2.07 | 2.48 | 2.26 | **2.40** | **2.45** | **Earnings per sh** A | **2.75** |
| - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | .66 | .97 | **1.05** | **1.11** | **Div'd Decl'd per sh** B | **1.30** |
| 1.25 | 1.08 | 1.28 | 1.70 | 1.85 | 1.75 | 2.03 | 1.94 | 2.28 | 2.73 | 4.63 | 5.36 | 5.95 | 5.27 | 5.90 | 6.70 | **8.20** | **9.75** | **Cap'l Spending per sh** | **6.25** |
| 6.13 | 6.92 | 7.36 | 8.05 | 9.01 | 9.20 | 10.51 | 11.23 | 11.56 | 12.60 | 14.76 | 15.47 | 16.45 | 19.04 | 19.03 | 20.57 | **21.85** | **23.10** | **Book Value per sh** C | **26.75** |
| 60.26 | 60.27 | 57.26 | 51.20 | 49.99 | 49.61 | 47.56 | 47.40 | 48.14 | 46.00 | 45.15 | 44.88 | 43.92 | 42.57 | 39.96 | 40.11 | **40.30** | **40.50** | **Common Shs Outst'g** D | **40.00** |
| 10.9 | 12.3 | 9.9 | 10.6 | 11.0 | 23.0 | 18.3 | 22.0 | 26.7 | 16.9 | 15.3 | 11.9 | 10.8 | 10.7 | 12.6 | 14.5 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | **13.5** |
| .63 | .64 | .56 | .69 | .56 | 1.26 | 1.04 | 1.16 | 1.42 | .91 | .81 | .72 | .72 | .68 | .79 | .92 | | | **Relative P/E Ratio** | **.90** |
| - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | 2.1% | 3.0% | | | **Avg Ann'l Div'd Yield** | **3.5%** |
| | | | | | | 664.4 | 708.6 | 803.9 | 816.5 | 877.4 | 1038.9 | 828.0 | 877.3 | 918.0 | 852.9 | **880** | **900** | **Revenues ($mill)** | **1050** |
| | | | | | | 31.3 | 33.4 | 36.6 | 61.4 | 74.8 | 77.6 | 66.9 | 90.3 | 103.5 | 90.8 | **95.0** | **100** | **Net Profit ($mill)** | **110** |
| | | | | | | 39.3% | 21.6% | 33.7% | 29.8% | 31.6% | 32.8% | 33.1% | 36.1% | 34.2% | 34.1% | **33.5%** | **32.5%** | **Income Tax Rate** | **34.0%** |
| | | | | | | 17.8% | 10.3% | 15.8% | 8.0% | 15.9% | 20.4% | 24.3% | 22.1% | 17.6% | 22.4% | **25.0%** | **28.0%** | **AFUDC % to Net Profit** | **22.0%** |
| | | | | | | 54.9% | 41.6% | 52.3% | 51.5% | 49.6% | 53.8% | 52.7% | 51.2% | 51.8% | 54.8% | **56.0%** | **56.0%** | **Long-Term Debt Ratio** | **56.5%** |
| | | | | | | 45.1% | 58.4% | 47.7% | 48.5% | 50.4% | 46.2% | 47.3% | 48.8% | 48.2% | 45.2% | **44.0%** | **44.0%** | **Common Equity Ratio** | **43.5%** |
| | | | | | | 1108.5 | 911.8 | 1167.5 | 1195.8 | 1321.6 | 1503.9 | 1527.7 | 1660.1 | 1576.7 | 1824.5 | **2005** | **2120** | **Total Capital ($mill)** | **2475** |
| | | | | | | 1298.0 | 1283.0 | 1291.7 | 1332.2 | 1450.6 | 1595.6 | 1756.0 | 1865.8 | 1947.1 | 2102.3 | **2290** | **2530** | **Net Plant ($mill)** | **2825** |
| | | | | | | 5.1% | 6.4% | 4.9% | 6.6% | 7.1% | 6.7% | 6.0% | 7.0% | 8.3% | 6.5% | **6.5%** | **6.0%** | **Return on Total Cap'l** | **6.0%** |
| | | | | | | 6.3% | 6.3% | 6.6% | 10.6% | 11.2% | 11.2% | 9.3% | 11.1% | 13.6% | 11.0% | **11.0%** | **10.5%** | **Return on Shr. Equity** | **10.5%** |
| | | | | | | 6.3% | 6.3% | 6.6% | 10.6% | 11.2% | 11.2% | 9.3% | 11.1% | 13.6% | 11.0% | **11.0%** | **10.5%** | **Return on Com Equity** E | **10.5%** |
| | | | | | | 6.3% | 6.3% | 6.6% | 10.6% | 11.2% | 11.2% | 9.3% | 11.1% | 10.0% | 6.3% | **6.5%** | **6.0%** | **Retained to Com Eq** | **5.5%** |
| | | | | | | - - | - - | - - | - - | - - | - - | - - | - - | 26% | 43% | **43%** | **45%** | **All Div'ds to Net Prof** | **47%** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1024.6 mill. **Due in 5 Yrs** $123.4 mill.
**LT Debt** $999.6 mill. **LT Interest** $55.6 mill.
(LT interest earned: 3.2x)

**Leases, Uncapitalized** Annual rentals $1.1 mill.
**Pension Assets-12/12** $220.6 mill. **Oblig.** $320.9 mill.

**Pfd Stock** None

**Common Stock** 40,211,757 shs.
**as of 4/30/13**

**MARKET CAP: $1.6 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.4 | +3.1 | +.7 |
| Avg. Indust. Use (MWH) | 22192 | 21921 | 21659 |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | 1643 | 1785 | 1765 |
| Peak Load, Summer (Mw) | 1616 | 1714 | 1688 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +1.9 | +.9 | +1.0 |
| Fixed Charge Cov. (%) | 331 | 346 | 302 |

| **ANNUAL RATES of change (per sh)** | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 4.0% | 4.0% | *3.5%* |
| "Cash Flow" | 6.0% | 10.5% | *5.0%* |
| Earnings | 9.0% | 13.0% | *3.0%* |
| Dividends | - - | - - | *NMF* |
| Book Value | 8.5% | 8.5% | *5.5%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 204.2 | 211.4 | 280.3 | 181.4 | 877.3 |
| **2011** | 176.1 | 242.6 | 307.6 | 191.7 | 918.0 |
| **2012** | 168.6 | 228.3 | 267.2 | 188.8 | 852.9 |
| **2013** | 177.3 | ***235*** | ***275*** | ***192.7*** | ***880*** |
| **2014** | ***180*** | ***240*** | ***285*** | ***195*** | ***900*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .26 | .49 | 1.15 | .17 | 2.07 |
| **2011** | .16 | .78 | 1.40 | .13 | 2.48 |
| **2012** | .08 | .77 | 1.29 | .12 | 2.26 |
| **2013** | .19 | ***.74*** | ***1.34*** | ***.13*** | ***2.40*** |
| **2014** | ***.20*** | ***.75*** | ***1.35*** | ***.15*** | ***2.45*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | - - | - - | - - | - - | - - |
| **2010** | - - | - - | - - | - - | - - |
| **2011** | - - | .22 | .22 | .22 | .66 |
| **2012** | .22 | .25 | .25 | .25 | .97 |
| **2013** | .25 | .265 | | | |

**BUSINESS:** El Paso Electric Company (EPE) provides electric service to 384,000 customers in an area of approximately 10,000 square miles in the Rio Grande valley in western Texas (68% of revenues) and southern New Mexico (19% of revenues), including El Paso, Texas and Las Cruces, New Mexico. Wholesale is 13% of revenues. Electric revenue breakdown by customer class not available. Generating sources: nuclear, 46%; gas, 32%; coal, 6%; purchased, 16%. Fuel costs: 29% of revenues. '12 reported depreciation rate: 2.6%. Has about 1,000 employees. CEO: Thomas V. Shockley. President: J. Frank Bates. Incorporated: Texas. Address: Stanton Tower, 100 North Stanton, El Paso, Texas 79901. Telephone: 915-543-5711. Internet: www.epelectric.com.

**El Paso Electric is adding generating capacity.** In the second quarter, an 87-megawatt gas-fired peaking plant began operating. The cost was about $95 million. From 2014 through 2017, the utility plans to add an 88-mw gas-fired peaker each year in eastern El Paso. The total cost of the four units is projected at $298 million. Debt issuances are likely over that time frame in order to finance the utility's rising construction budget. The new plants will not only help meet customer demand for power, but will offset the retirement of older units with a total capacity of 149 mw in 2014 and 2016.

**The company's earnings will probably advance in 2013.** EPE is experiencing respectable expansion in its service territory, although the decelerating rate of customer growth so far this year is an issue that bears watching. Also, the Allowance for Funds Used During Construction, a noncash credit to income, should be higher this year. Our profit estimate, which we have raised by a nickel a share, is at the midpoint of EPE's targeted range of $2.20-$2.60. We look for just modest bottom-line growth in 2014, and think share net will fall just short of the record 2011 tally. The company has not yet disclosed earnings guidance for next year.

**The board of directors raised the dividend in the second quarter.** The directors boosted the quarterly disbursement by $0.015 a share (6%). That was a bit below what we had estimated, but was an above-average increase nonetheless. EPE is targeting a payout ratio of 45%, which is low for a utility.

**It will be a while before the utility files its next general rate cases.** EPE is now earning an adequate return on equity. The company's current plans are to put forth applications in Texas and New Mexico in 2015, with new tariffs taking effect in 2016.

**This stock's dividend yield is almost a percentage point below the industry average.** Total return potential to 2016-2018 is unexciting, as well, with the recent price above the midpoint of our Target Price Range. All told, although the company's prospects are good, there are more-attractive selections available for income-oriented investors.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted earnings. Excl. nonrecurring gains (losses): '97, (5¢); '98, 6¢; '99, (38¢); '01, (4¢); '03, 81¢; '04, 4¢; '05, (2¢); '06, 13¢; '10, 24¢. '11 earnings don't add to full-year total due to rounding. Next earnings report due early Aug.
**(B)** Initial dividend declared 4/11; payment dates in late March, June, Sept., and Dec.
**(C)** Incl. deferred charges. In '12: $101.6 mill., $2.53/sh.
**(D)** In millions.
**(E)** Rate allowed on common equity in '12: none specified; earned on average common equity, '12: 11.4%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 100 |
| **Earnings Predictability** | 80 |

# EDISON INTERNAT'L NYSE-EIX

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 49.70 | 14.8 (Trailing: 10.3) (Median: 12.0) | 0.82 | 2.8% | VALUE LINE |

**TIMELINESS** 3 Raised 3/8/13

**SAFETY** 2 Raised 5/3/13

TECHNICAL 3 Lowered 7/26/13

**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 19.6 | 22.1 | 32.5 | 49.2 | 47.2 | 60.3 | 55.7 | 36.7 | 39.4 | 41.6 | 48.0 | 54.2 |
| Low: | 7.8 | 10.6 | 21.2 | 30.4 | 37.9 | 42.8 | 26.7 | 23.1 | 30.4 | 32.6 | 39.6 | 44.9 |

**2016-18 PROJECTIONS**

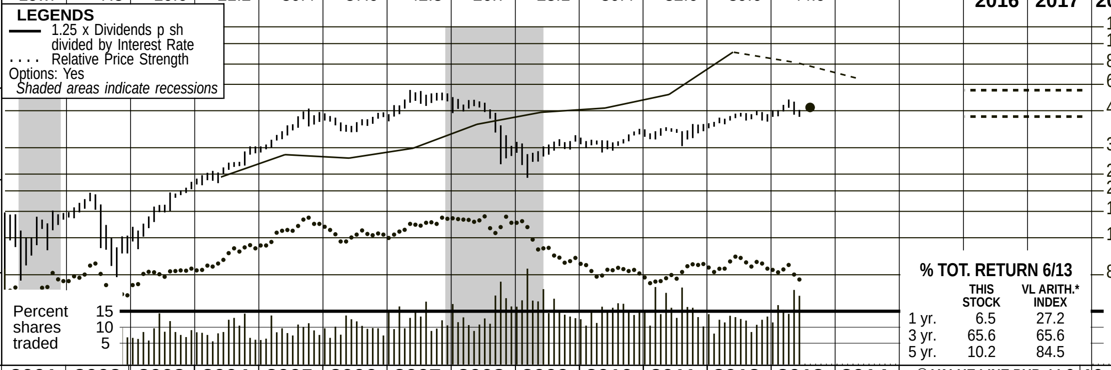
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+20%) | *8%* |
| Low | 45 | (-10%) | *1%* |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 1 |
| to Sell | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 1 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 175 | 181 | 224 |
| to Sell | 183 | 198 | 185 |
| Hld's(000) | 254007 | 253202 | 260823 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 6.5 | 27.2 |
| 3 yr. | 65.6 | 65.6 |
| 5 yr. | 10.2 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.58 | 29.12 | 27.85 | 35.96 | 35.10 | 35.26 | 37.25 | 31.30 | 36.38 | 38.74 | 40.25 | 43.31 | 37.98 | 38.09 | 39.16 | 36.41 | **37.30** | **40.35** | Revenues per sh | **48.00** |
| 5.49 | 6.65 | 7.20 | d.52 | 4.35 | 4.79 | 5.88 | 3.79 | 6.99 | 7.25 | 7.60 | 8.08 | 7.96 | 8.41 | 9.03 | 9.63 | **8.70** | **9.20** | "Cash Flow" per sh | **10.75** |
| 1.75 | 1.86 | 2.03 | d5.84 | 1.30 | 1.82 | 2.38 | .69 | 3.34 | 3.28 | 3.32 | 3.68 | 3.24 | 3.35 | 3.23 | 4.55 | **3.35** | **3.50** | Earnings per sh [A] | **4.00** |
| 1.00 | 1.04 | 1.08 | .83 | - - | - - | - - | .80 | 1.02 | 1.10 | 1.18 | 1.23 | 1.25 | 1.27 | 1.29 | 1.31 | **1.36** | **1.46** | Div'd Decl'd per sh [B] ■ | **1.80** |
| 2.08 | 2.75 | 3.55 | 4.57 | 2.86 | 4.88 | 3.95 | 5.32 | 5.73 | 7.78 | 8.67 | 8.67 | 10.07 | 13.94 | 14.76 | 12.73 | **12.90** | **12.30** | Cap'l Spending per sh | **13.25** |
| 14.71 | 14.55 | 15.01 | 7.43 | 10.04 | 13.62 | 16.52 | 18.57 | 20.30 | 23.66 | 25.92 | 29.21 | 30.20 | 32.44 | 30.86 | 28.95 | **29.80** | **31.75** | Book Value per sh [C] | **37.50** |
| 375.76 | 350.55 | 347.21 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | **325.81** | **325.81** | Common Shs Outst'g [D] | **325.81** |
| 13.7 | 15.1 | 12.9 | - - | 10.0 | 7.8 | 7.0 | NMF | 11.7 | 13.0 | 16.0 | 12.4 | 9.7 | 10.3 | 11.8 | 9.7 | ***Bold figures are Value Line estimates*** | | Avg Ann'l P/E Ratio | **13.0** |
| .79 | .79 | .74 | - - | .51 | .43 | .40 | NMF | .62 | .70 | .85 | .75 | .65 | .66 | .74 | .62 | | | Relative P/E Ratio | **.85** |
| 4.2% | 3.7% | 4.1% | 3.9% | - - | - - | - - | 3.1% | 2.6% | 2.6% | 2.2% | 2.7% | 4.0% | 3.7% | 3.4% | 3.0% | | | Avg Ann'l Div'd Yield | **3.5%** |
| | | | | | | 12135 | 10199 | 11852 | 12622 | 13113 | 14112 | 12374 | 12409 | 12760 | 11862 | **12150** | **13150** | Revenues ($mill) | **15650** |
| | | | | | | 738.0 | 220.0 | 1132.0 | 1134.0 | 1151.0 | 1266.0 | 1115.0 | 1153.0 | 1112.0 | 1594.0 | **1210** | **1265** | Net Profit ($mill) | **1420** |
| | | | | | | 22.4% | - - | 26.0% | 31.4% | 27.3% | 30.7% | 33.0% | 32.1% | 25.7% | 14.3% | **35.0%** | **35.0%** | Income Tax Rate | **35.0%** |
| | | | | | | 3.7% | 11.4% | 4.9% | 5.1% | 8.2% | 8.9% | 10.5% | 16.9% | 14.8% | 8.5% | **12.0%** | **11.0%** | AFUDC % to Net Profit | **10.0%** |
| | | | | | | 68.1% | 60.5% | 54.6% | 51.3% | 49.1% | 51.2% | 49.3% | 51.8% | 55.3% | 45.2% | **47.5%** | **48.0%** | Long-Term Debt Ratio | **47.5%** |
| | | | | | | 31.1% | 37.8% | 40.9% | 43.5% | 46.0% | 44.5% | 46.5% | 44.3% | 40.6% | 46.2% | **44.0%** | **43.5%** | Common Equity Ratio | **45.0%** |
| | | | | | | 17299 | 15995 | 16167 | 17725 | 18375 | 21374 | 21185 | 23861 | 24773 | 20422 | **22075** | **23825** | Total Capital ($mill) | **27400** |
| | | | | | | 12587 | 13475 | 14469 | 15913 | 17403 | 18969 | 21966 | 24778 | 32116 | 30273 | **30775** | **32925** | Net Plant ($mill) | **39600** |
| | | | | | | 7.2% | 4.2% | 9.4% | 8.6% | 8.3% | 7.4% | 6.9% | 6.3% | 6.0% | 8.9% | **6.5%** | **6.5%** | Return on Total Cap'l | **6.5%** |
| | | | | | | 13.4% | 3.5% | 15.4% | 13.1% | 12.3% | 12.1% | 10.4% | 10.0% | 10.0% | 14.2% | **10.5%** | **10.0%** | Return on Shr. Equity | **10.0%** |
| | | | | | | 13.6% | 3.5% | 16.7% | 14.0% | 13.0% | 12.8% | 10.8% | 10.4% | 10.5% | 15.9% | **11.5%** | **11.0%** | Return on Com Equity [E] | **10.5%** |
| | | | | | | 13.6% | NMF | 12.2% | 10.1% | 9.2% | 8.6% | 6.7% | 6.5% | 6.3% | 11.4% | **7.0%** | **6.5%** | Retained to Com Eq | **6.0%** |
| | | | | | | 1% | NMF | 29% | 31% | 33% | 35% | 41% | 40% | 43% | 32% | **45%** | **46%** | All Div'ds to Net Prof | **50%** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $10049 mill. **Due in 5 Yrs** $2720.0 mill.
**LT Debt** $8829.0 mill. **LT Interest** $433.0 mill.
(LT interest earned: 5.1x)
**Leases, Uncapitalized** Annual rentals $1.03 bill.
**Pension Assets-12/12** $3.54 bill. **Oblig.** $4.95 bill.
**Pfd Stock** $1754 mill. **Pfd Div'd** $103.0 mill.
4,800,198 shs. 4.08%-4.78%, $25 par, call. $25.50-$28.75/sh.; 8,500,000 shs. 4.32%-6.125%, non-cum., call. $100; 1,250,000 shs. 6.5%, cum., $100 liq. value; 350,000 shs. 6.25%, $1000 liq. value; 190,004 shs. 5.625%, $2500 liq. value.
**Common Stock** 325,811,206 shs. **as of 4/26/13**
**MARKET CAP: $16 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -2.7 | +.9 | +2.6 |
| Avg. Indust. Use (MWH) | 710 | 736 | 763 |
| Avg. Indust. Revs. per KWH (¢) | 7.38 | 7.09 | 7.50 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 22771 | 22374 | 21981 |
| Annual Load Factor (%) | 50.7 | 50.7 | 52.7 |
| % Change Customers (yr-end) | +.5 | +.4 | +.4 |
| Fixed Charge Cov. (%) | 240 | 209 | 308 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | .5% | -.5% | *4.0%* |
| "Cash Flow" | 12.0% | 4.5% | *3.0%* |
| Earnings | - - | 2.5% | *1.5%* |
| Dividends | - - | 3.0% | *5.5%* |
| Book Value | 11.5% | 5.5% | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 2810 | 2742 | 3788 | 3069 | 12409 |
| **2011** | 2782 | 2983 | 3981 | 3014 | 12760 |
| **2012** | 2415 | 2653 | 3734 | 3060 | 11862 |
| **2013** | 2632 | **2868** | **3900** | **2750** | **12150** |
| **2014** | **2900** | **3100** | **4150** | **3000** | **13150** |

| Cal-endar | EARNINGS PER SHARE [A] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .70 | .62 | 1.46 | .57 | 3.35 |
| **2011** | .62 | .54 | 1.31 | .76 | 3.23 |
| **2012** | .54 | .55 | 1.09 | 2.39 | 4.55 |
| **2013** | .78 | **.65** | **1.17** | **.75** | **3.35** |
| **2014** | **.80** | **.70** | **1.20** | **.80** | **3.50** |

| Cal-endar | QUARTERLY DIVIDENDS PAID [B] ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .31 | .31 | .31 | .31 | 1.24 |
| **2010** | .315 | .315 | .315 | .315 | 1.26 |
| **2011** | .32 | .32 | .32 | .32 | 1.28 |
| **2012** | .325 | .325 | .325 | .325 | 1.30 |
| **2013** | .3375 | .3375 | .3375 | | |

**BUSINESS:** Edison International (formerly SCECorp) is a holding company for Southern California Edison (SCE), which supplies electricity to 4.9 million customers in a 50,000 sq. mi. area in central, coastal, and southern California (excl. Los Angeles and San Diego). Discontinued Edison Mission Energy (independent power producer) in '12. Electric revenue breakdown: residential, 44%; commercial, 43%; industrial, 6%; other, 7%. Generating sources: gas, 9%; nuclear, 7%; coal, 6%; hydro, 3%; purchased, 75%. Fuel costs: 35% of revs. '12 reported deprec. rate: 4.3%. Has 16,600 employees. Chairman, President & CEO: Theodore F. Craver, Jr. Inc.: CA. Address: 2244 Walnut Grove Ave., P.O. Box 976, Rosemead, CA 91770. Tel.: 626-302-2222. Internet: www.edison.com.

**Edison International's utility subsidiary is closing the San Onofre nuclear station.** Southern California Edison owns 78.21% of the two units. They have been out of service since January of 2012 after SCE found a leak in a tube inside a steam generator, and the utility determined that it was unlikely that even the unit that is in better condition would be able to be restarted by the end of 2013. Restarting the facility would have required the approval of the Nuclear Regulatory Commission, and keeping the plant ready for restart was costing about $30 million a month. The closing will force the company to take a charge (estimated at $300 million-$425 million after taxes) against second-quarter results, which we will *exclude* from our presentation as a nonrecurring item. Part of this will be cash for refunds to customers. The announcement did not have a big effect on the share price, but the stock had been weak in recent weeks, perhaps in anticipation of a closing. Management had indicated that this was a possibility. It is not yet known how much of the costs are recoverable through insurance, warranties, or litigation. The company has filed suit against Mitsubishi, the designer and manufacturer of the steam generators.

**The plant closing will lower ongoing earnings by $0.20 a share this year.** Most of this amount is due to the removal of San Onofre from SCE's rate base, although it is possible that the state commission might still allow the utility a partial return on its asset. As a result, the company reduced its earnings guidance from $3.45-$3.65 a share to $3.25-$3.45. We have cut our estimate by $0.15 a share, to $3.35, and have lowered our 2014 forecast by $0.20 a share, to $3.50.

**Earnings were headed down in 2013, anyway.** SCE's allowed return on equity was lowered at the start of the year. Also, the tally in the fourth quarter of 2012 was inflated by a $0.71-a-share gain for the reversal of taxes that were paid in previous years.

**We think this stock is overvalued.** The dividend yield of less than 3% isn't appealing, by utility standards. Shareholders can expect respectable dividend growth over the 3- to 5-year period, but not enough to produce an attractive total return.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '02, $1.48; '03, (12¢); '04, $2.12; '09, (64¢); '10, 54¢; '11, ($3.33); 2Q '13, *($1.10)*; gain (loss) from discont. ops.: '12, ($5.11); '13, 4¢. '10 & '12 EPS don't add due to rounding. Next earnings report due early Nov. **(B)** Div'ds paid late Jan., Apr., July, & Oct. ■ Div'd reinvestment plan avail. **(C)** Incl. deferred charges. In '12: $19.71/sh. **(D)** In mill. **(E)** Rate base: net orig. cost. Rate allowed on com. eq. in '13: 10.45%; earned on avg. com. eq., '12: 14.0%. Regulatory Climate: Above Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 85 |

# ENTERGY CORP. NYSE-ETR

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 63.27 | 16.9 (Trailing: 11.8) (Median: 14.0) | 0.96 | 5.2% | VALUE LINE |

| | | |
|---|---|---|
| **TIMELINESS** | 2 | Raised 7/19/13 |
| **SAFETY** | 3 | Lowered 3/22/13 |
| TECHNICAL | 1 | Raised 9/20/13 |

**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 85 | (+35%) | *12%* |
| Low | 60 | (-5%) | *4%* |

**Insider Decisions**

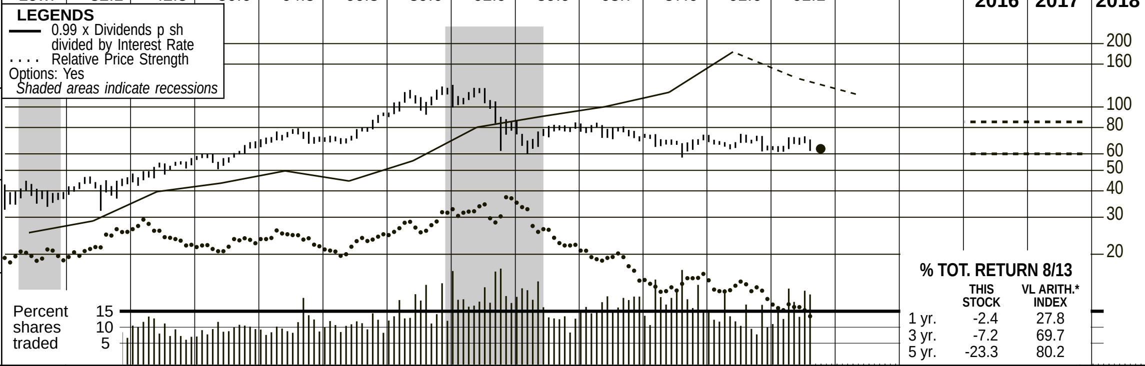
| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| to Sell | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 211 | 219 | 209 |
| to Sell | 213 | 209 | 225 |
| Hld's(000) | 146852 | 148910 | 147524 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 46.8 | 57.2 | 68.7 | 79.2 | 94.0 | 125.0 | 127.5 | 86.6 | 84.3 | 74.5 | 74.5 | 72.6 |
| Low: | 32.1 | 42.3 | 50.6 | 64.5 | 66.8 | 89.6 | 61.9 | 59.9 | 68.7 | 57.6 | 61.6 | 61.1 |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -2.4 | 27.8 |
| 3 yr. | -7.2 | 69.7 |
| 5 yr. | -23.3 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38.89 | 46.57 | 35.51 | 45.61 | 43.59 | 37.34 | 40.17 | 46.69 | 46.61 | 53.94 | 59.47 | 69.15 | 56.82 | 64.27 | 63.67 | 57.94 | ***61.60*** | ***62.45*** | Revenues per sh | ***72.75*** |
| 6.20 | 6.11 | 5.06 | 6.49 | 6.41 | 7.62 | 7.43 | 8.33 | 8.18 | 10.69 | 11.73 | 12.89 | 13.29 | 16.54 | 17.53 | 15.98 | ***14.65*** | ***15.30*** | "Cash Flow" per sh | ***17.75*** |
| 2.25 | 2.22 | 2.25 | 2.97 | 3.08 | 3.68 | 3.69 | 3.93 | 4.40 | 5.36 | 5.60 | 6.20 | 6.30 | 6.66 | 7.55 | 6.02 | ***3.90*** | ***4.20*** | Earnings per sh A | ***5.25*** |
| 1.80 | 1.50 | 1.20 | 1.22 | 1.28 | 1.34 | 1.60 | 1.89 | 2.16 | 2.16 | 2.58 | 3.00 | 3.00 | 3.24 | 3.32 | 3.32 | ***3.32*** | ***3.32*** | Div'd Decl'd per sh B ■ † | ***3.40*** |
| 3.45 | 4.63 | 4.84 | 6.80 | 6.25 | 6.88 | 6.85 | 6.51 | 6.72 | 9.44 | 10.29 | 13.92 | 12.99 | 13.33 | 15.21 | 18.18 | ***13.25*** | ***11.75*** | Cap'l Spending per sh | ***13.25*** |
| 27.23 | 28.79 | 28.81 | 31.89 | 33.78 | 35.24 | 38.02 | 38.26 | 35.71 | 40.45 | 40.71 | 42.07 | 45.54 | 47.53 | 50.81 | 51.73 | ***51.25*** | ***52.15*** | Book Value per sh C | ***57.00*** |
| 245.84 | 246.83 | 247.08 | 219.60 | 220.73 | 222.42 | 228.90 | 216.83 | 216.83 | 202.67 | 193.12 | 189.36 | 189.12 | 178.75 | 176.36 | 177.81 | ***178.50*** | ***178.50*** | Common Shs Outst'g D | ***172.00*** |
| 11.6 | 12.9 | 13.2 | 10.1 | 12.5 | 11.5 | 13.8 | 15.1 | 16.3 | 14.3 | 19.3 | 16.6 | 12.0 | 11.6 | 9.1 | 11.2 | ***Bold figures are Value Line estimates*** | | Avg Ann'l P/E Ratio | ***14.0*** |
| .67 | .67 | .75 | .66 | .64 | .63 | .79 | .80 | .87 | .77 | 1.02 | 1.00 | .80 | .74 | .57 | .71 | | | Relative P/E Ratio | ***.95*** |
| 6.9% | 5.2% | 4.1% | 4.1% | 3.3% | 3.2% | 3.1% | 3.2% | 3.0% | 2.8% | 2.4% | 2.9% | 4.0% | 4.2% | 4.9% | 4.9% | | | Avg Ann'l Div'd Yield | ***4.7%*** |
| | | | | | | 9195.0 | 10124 | 10106 | 10932 | 11484 | 13094 | 10746 | 11488 | 11229 | 10302 | ***11000*** | ***11150*** | Revenues ($mill) | ***12500*** |
| | | | | | | 874.2 | 933.1 | 943.1 | 1160.9 | 1160.0 | 1240.5 | 1251.1 | 1270.3 | 1367.4 | 1091.9 | ***715*** | ***775*** | Net Profit ($mill) | ***945*** |
| | | | | | | 35.9% | 28.2% | 37.2% | 27.6% | 30.7% | 32.7% | 33.6% | 32.7% | 17.3% | 13.0% | ***34.0%*** | ***34.0%*** | Income Tax Rate | ***34.0%*** |
| | | | | | | 8.7% | 7.0% | 8.0% | 5.5% | 5.8% | 5.6% | 7.4% | 7.4% | 8.9% | 11.9% | ***11.0%*** | ***11.0%*** | AFUDC % to Net Profit | ***10.0%*** |
| | | | | | | 44.8% | 44.7% | 51.9% | 51.2% | 54.3% | 58.2% | 55.3% | 56.3% | 52.2% | 55.8% | ***56.5%*** | ***57.0%*** | Long-Term Debt Ratio | ***59.0%*** |
| | | | | | | 53.2% | 52.9% | 45.5% | 46.7% | 43.9% | 40.2% | 43.1% | 42.1% | 46.4% | 42.9% | ***42.0%*** | ***42.0%*** | Common Equity Ratio | ***40.0%*** |
| | | | | | | 16361 | 15696 | 17013 | 17539 | 17902 | 19795 | 19985 | 20166 | 19324 | 21432 | ***21675*** | ***22250*** | Total Capital ($mill) | ***24500*** |
| | | | | | | 18299 | 18696 | 19197 | 19438 | 20974 | 22429 | 23389 | 23848 | 25609 | 27299 | ***27625*** | ***27775*** | Net Plant ($mill) | ***28400*** |
| | | | | | | 6.8% | 7.4% | 6.8% | 8.0% | 7.9% | 7.5% | 7.6% | 7.7% | 8.5% | 6.4% | ***4.5%*** | ***5.0%*** | Return on Total Cap'l | ***5.5%*** |
| | | | | | | 9.7% | 10.8% | 11.5% | 13.6% | 14.2% | 15.0% | 14.0% | 14.4% | 14.8% | 11.5% | ***7.5%*** | ***8.0%*** | Return on Shr. Equity | ***9.5%*** |
| | | | | | | 9.8% | 11.0% | 11.9% | 13.8% | 14.4% | 15.3% | 14.3% | 14.7% | 15.0% | 11.6% | ***7.5%*** | ***8.0%*** | Return on Com Equity E | ***9.5%*** |
| | | | | | | 5.6% | 5.8% | 6.0% | 8.3% | 8.0% | 8.1% | 7.6% | 7.6% | 8.4% | 5.2% | ***1.0%*** | ***1.5%*** | Retained to Com Eq | ***3.5%*** |
| | | | | | | 44% | 48% | 51% | 41% | 46% | 48% | 48% | 49% | 45% | 56% | ***86%*** | ***79%*** | All Div'ds to Net Prof | ***64%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $13747 mill. **Due in 5 Yrs** $5065.7 mill.
**LT Debt** $12128 mill. **LT Interest** $545.8 mill.
Incl. $927.4 mill. of securitization bonds.
(LT interest earned: 3.1x)
**Leases, Uncapitalized** Annual rentals $94.4 mill.
**Pension Assets-12/12** $3.83 bill. **Oblig.** $6.10 bill.
**Pfd Stock** $280.5 mill. **Pfd Div'd** $20.0 mill.
6,115,105 shs. $4.20 to $7.88, $100 par; 1,000,000 shs. 11.50%, all without sinking fund.
**Common Stock** 178,282,400 shs.
**as of 7/31/13**
**MARKET CAP: $11 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +8.4 | +1.1 | -1.5 |
| Avg. Indust. Use (MWH) | 936 | 991 | 975 |
| Avg. Indust. Revs. per KWH(¢) | 5.70 | 5.65 | 4.94 |
| Capacity at Peak (Mw) | 24310 | 23979 | 23407 |
| Peak Load, Summer (Mw) | 21799 | 22387 | 21866 |
| Annual Load Factor (%) | 62.0 | 60.0 | 60.0 |
| % Change Customers (yr-end) | +.9 | +.5 | +.8 |
| Fixed Charge Cov. (%) | 342 | 339 | 254 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 4.0% | 3.0% | *2.5%* |
| "Cash Flow" | 9.5% | 10.5% | *1.0%* |
| Earnings | 7.5% | 5.5% | *-4.0%* |
| Dividends | 10.0% | 7.5% | *.5%* |
| Book Value | 4.0% | 5.0% | *2.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 2760 | 2863 | 3332 | 2533 | 11488 |
| **2011** | 2541 | 2803 | 3396 | 2489 | 11229 |
| **2012** | 2384 | 2519 | 2963 | 2436 | 10302 |
| **2013** | 2609 | 2738 | ***3053*** | ***2600*** | ***11000*** |
| **2014** | ***2650*** | ***2750*** | ***3100*** | ***2650*** | ***11150*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1.12 | 1.65 | 2.62 | 1.26 | 6.66 |
| **2011** | 1.38 | 1.76 | 3.53 | .88 | 7.55 |
| **2012** | .40 | 2.06 | 1.89 | 1.67 | 6.02 |
| **2013** | .90 | .92 | ***1.43*** | ***.65*** | ***3.90*** |
| **2014** | ***.75*** | ***1.00*** | ***1.60*** | ***.85*** | ***4.20*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .75 | .75 | .75 | .75 | 3.00 |
| **2010** | .75 | .83 | .83 | .83 | 3.24 |
| **2011** | .83 | .83 | .83 | .83 | 3.32 |
| **2012** | .83 | .83 | .83 | .83 | 3.32 |
| **2013** | .83 | .83 | .83 | | |

**BUSINESS:** Entergy Corporation supplies electricity to 2.8 million customers through subsidiaries in Arkansas, Louisiana, Mississippi, Texas, and New Orleans (regulated separately from Louisiana). Distributes gas to 194,000 customers in Louisiana. Has a nonutility nuclear subsidiary that owns six units. Electric revenue breakdown: residential, 38%; commercial, 26%; industrial, 28%; other, 8%. Generating sources: nuclear, 33%; gas, 27%; coal, 11%; purchased, 29%. Fuel costs: 32% of revenues. '12 reported depreciation rate: 2.5%. Has 14,600 employees. Chairman & CEO: Leo Denault. Incorporated: Delaware. Address: 639 Loyola Avenue, P.O. Box 61000, New Orleans, Louisiana 70161. Telephone: 504-576-4000. Internet: www.entergy.com.

**The proposed sale of Entergy's transmission assets to ITC Holdings has run into trouble.** Entergy would receive $1.775 billion in cash, which it would use for debt reduction. In addition, ITC would issue enough stock to Entergy shareholders so that they would own 50.1% of ITC. The transaction has been approved by the Federal Energy Regulatory Commission, but five other jurisdictions (Texas, Louisiana, New Orleans, Arkansas, and Mississippi) must also give their approval. Most of the commissions' staffs have expressed opposition to the asset sale, and the companies have withdrawn their filing in Texas. They are still deciding whether to put forth another application. Even if they do so, there is no assurance that this will mollify the regulators' concerns. The sale agreement expires at yearend.

**Our estimates and projections are based on Entergy's current configuration.** The asset sale would be dilutive to earnings, but the company wants to do the deal because transmission is capital-intensive and makes up less than 10% of its assets. Regardless, earnings are almost certainly going to wind up much lower this year, with only modest improvement in 2014. Low power prices are hurting Entergy's nonregulated operations, the company is incurring up-front expenses associated with a cost-management program, and the tax rate will likely be normal.

**Entergy plans to close the Vermont Yankee nuclear unit in the fourth quarter of 2014.** However, the reason for the move is low wholesale power prices that have made Vermont Yankee uneconomic. Entergy will take a $181 million aftertax charge in the third quarter, which we will *exclude* as a nonrecurring item, and will incur $55 million-$60 million (pretax) in related costs through the end of 2014, which we will include in our earnings presentation.

**This timely stock's dividend yield is about a percentage point above the utility average.** This reflects the market and political (i.e., opposition to the Indian Point nuclear plant in New York) risks that Entergy faces. We think the dividend will hold at the current level, but we expect little or no growth in the payout over the 3- to 5-year period.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecur. gains (losses): '97, ($1.22); '98, 78¢; '01, 15¢; '02, ($1.04); '03, 33¢ net; '05, (21¢); '12, ($1.26); 3Q '13, *($1.01)*. '10 EPS don't add due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in early Mar., June, Sept. and Dec. ■ Div'd reinvestment plan available. † Shareholder investment plan available. **(C)** Incl. deferred charges. In '12: $35.74/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Allowed return on equity (blended): 10.4%; earned on avg. com. eq., '12: 11.6%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 40 |
| **Earnings Predictability** | 85 |

# EXELON CORP. NYSE-EXC

**RECENT PRICE** 31.06 | **P/E RATIO** 13.2 (Trailing: 16.1 Median: 14.0) | **RELATIVE P/E RATIO** 0.75 | **DIV'D YLD** 4.0% | **VALUE LINE**

**TIMELINESS** 2 Raised 7/5/13

**SAFETY** 3 Lowered 11/23/12

**TECHNICAL** 4 Lowered 8/23/13

**BETA** .80 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 35 | (+15%) | *7%* |
| Low | 25 | (-20%) | *-1%* |

### Insider Decisions

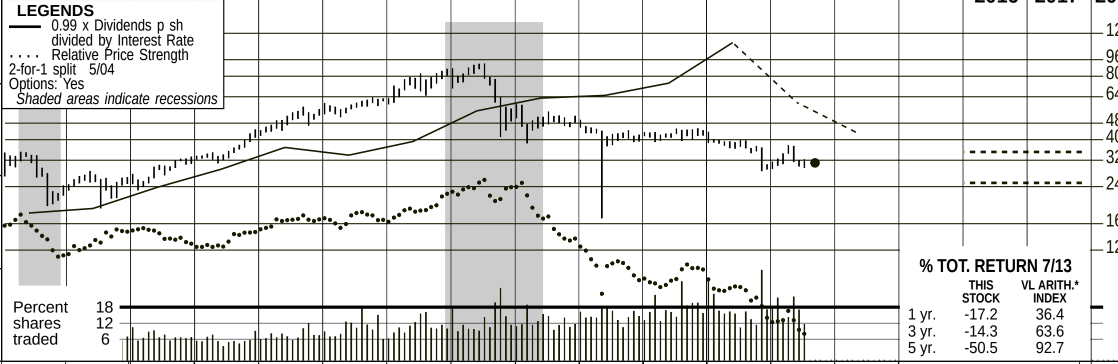
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 0 | 1 | 1 | 12 | 3 | 0 | 0 | 2 |
| to Sell | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 377 | 325 | 294 |
| to Sell | 360 | 429 | 390 |
| Hld's(000) | 506621 | 525038 | 547139 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 28.5 | 33.3 | 44.9 | 57.5 | 63.6 | 86.8 | 92.1 | 59.0 | 49.9 | 45.4 | 43.7 | 37.8 | |
| Low: | 18.9 | 23.0 | 30.9 | 41.8 | 51.1 | 58.7 | 41.2 | 38.4 | 17.0 | 39.1 | 28.4 | 29.1 | |

**Target Price Range**
2016 | 2017 | 2018



### % TOT. RETURN 7/13

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -17.2 | 36.4 |
| 3 yr. | -14.3 | 63.6 |
| 5 yr. | -50.5 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | - - | 19.40 | 11.75 | 23.58 | 23.13 | 23.89 | 21.85 | 23.06 | 23.37 | 28.62 | 28.66 | 26.24 | 28.16 | 28.54 | 27.47 | ***29.40*** | ***29.75*** | **Revenues per sh** | ***31.50*** |
| - - | - - | 3.55 | 1.84 | 5.06 | 5.03 | 5.02 | 5.68 | 6.19 | 6.71 | 7.43 | 7.64 | 8.24 | 8.32 | 7.24 | 6.60 | ***6.95*** | ***7.05*** | **"Cash Flow" per sh** | ***7.75*** |
| - - | - - | 1.86 | 1.39 | 2.20 | 2.40 | 2.44 | 2.75 | 3.21 | 3.50 | 4.03 | 4.10 | 4.29 | 3.87 | 3.75 | 1.92 | ***2.10*** | ***2.05*** | **Earnings per sh A** | ***2.25*** |
| - - | - - | - - | - - | .91 | .88 | .96 | 1.26 | 1.60 | 1.64 | 1.82 | 2.05 | 2.10 | 2.10 | 2.10 | 2.10 | ***1.46*** | ***1.24*** | **Div'd Decl'd per sh B ■** | ***1.30*** |
| - - | - - | - - | 1.18 | 3.18 | 3.33 | 2.95 | 2.89 | 3.25 | 3.61 | 4.05 | 4.74 | 4.96 | 5.02 | 6.10 | 6.77 | ***6.45*** | ***5.65*** | **Cap'l Spending per sh** | ***6.75*** |
| - - | - - | - - | 11.31 | 12.82 | 11.97 | 12.84 | 14.19 | 13.70 | 14.89 | 15.34 | 16.79 | 19.15 | 20.48 | 21.70 | 25.07 | ***25.40*** | ***26.20*** | **Book Value per sh C** | ***28.75*** |
| - - | - - | 630.20 | 638.01 | 642.01 | 646.63 | 662.00 | 664.20 | 666.00 | 670.00 | 661.00 | 658.00 | 660.00 | 662.00 | 663.00 | 855.00 | ***857.00*** | ***859.00*** | **Common Shs Outst'g D** | ***865.00*** |
| - - | - - | - - | 22.4 | 13.2 | 10.5 | 11.8 | 13.0 | 15.4 | 16.5 | 18.2 | 18.0 | 11.5 | 11.0 | 11.3 | 19.1 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***13.5*** |
| - - | - - | - - | 1.46 | .68 | .57 | .67 | .69 | .82 | .89 | .97 | 1.08 | .77 | .70 | .71 | 1.22 | | | **Relative P/E Ratio** | ***.90*** |
| - - | - - | - - | - - | 3.1% | 3.5% | 3.4% | 3.5% | 3.2% | 2.8% | 2.5% | 2.8% | 4.3% | 4.9% | 5.0% | 5.7% | | | **Avg Ann'l Div'd Yield** | ***4.2%*** |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15812 | 14515 | 15357 | 15655 | 18916 | 18859 | 17318 | 18644 | 18924 | 23489 | ***25200*** | ***25550*** | **Revenues ($mill)** | ***27250*** |
| 1641.0 | 1844.0 | 2162.0 | 2370.0 | 2730.0 | 2721.0 | 2844.0 | 2567.0 | 2499.0 | 1579.0 | ***1805*** | ***1770*** | **Net Profit ($mill)** | ***2065*** |
| 32.9% | 27.5% | 30.4% | 33.7% | 34.6% | 32.6% | 38.8% | 39.2% | 36.8% | 32.4% | ***33.5%*** | ***33.5%*** | **Income Tax Rate** | ***33.5%*** |
| 1.9% | .9% | 1.0% | 1.6% | 1.8% | 1.3% | 2.3% | 2.1% | 3.0% | 5.8% | ***5.0%*** | ***5.0%*** | **AFUDC % to Net Profit** | ***5.0%*** |
| 61.1% | 56.1% | 56.1% | 54.2% | 53.9% | 53.1% | 47.2% | 46.8% | 45.7% | 45.8% | ***44.5%*** | ***44.5%*** | **Long-Term Debt Ratio** | ***45.5%*** |
| 38.5% | 43.5% | 43.5% | 45.4% | 45.7% | 46.6% | 52.4% | 52.9% | 54.0% | 53.5% | ***55.0%*** | ***55.0%*** | **Common Equity Ratio** | ***54.0%*** |
| 22079 | 21658 | 20972 | 21971 | 22189 | 23726 | 24112 | 25651 | 26661 | 40057 | ***39450*** | ***41000*** | **Total Capital ($mill)** | ***46100*** |
| 20630 | 21482 | 21981 | 22775 | 24153 | 25813 | 27341 | 29941 | 32570 | 45186 | ***47050*** | ***48100*** | **Net Plant ($mill)** | ***52300*** |
| 9.2% | 10.4% | 12.1% | 12.5% | 14.1% | 13.1% | 13.3% | 11.4% | 10.6% | 5.1% | ***6.0%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.0%*** |
| 19.1% | 19.4% | 23.5% | 23.6% | 26.7% | 24.4% | 22.3% | 18.8% | 17.3% | 7.3% | ***8.0%*** | ***8.0%*** | **Return on Shr. Equity** | ***8.0%*** |
| 18.8% | 19.5% | 23.6% | 23.7% | 26.9% | 24.6% | 22.5% | 18.9% | 17.3% | 7.3% | ***8.0%*** | ***8.0%*** | **Return on Com Equity E** | ***8.0%*** |
| 11.5% | 10.7% | 11.9% | 13.0% | 15.3% | 12.5% | 11.5% | 8.7% | 7.7% | NMF | ***2.5%*** | ***3.0%*** | **Retained to Com Eq** | ***3.5%*** |
| 40% | 45% | 50% | 45% | 43% | 49% | 49% | 54% | 56% | NMF | ***70%*** | ***61%*** | **All Div'ds to Net Prof** | ***55%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $19962 mill. **Due in 5 Yrs** $7089 mill.
**LT Debt** $17355 mill. **LT Interest** $972.0 mill.
Includes $648 mill. nonrecourse transition bonds.
(LT interest earned: 3.4x)
**Leases, Uncapitalized** Annual rentals $88.0 mill.
**Pension Assets-12/12** $13.4 bill.
**Oblig.** $16.8 bill.
**Pfd Stock** $280.0 mill. **Pfd Div'd** $17.0 mill.
Includes $280 mill. in preferred securities of subsidiaries.
**Common Stock** 855,849,302 shs.

**MARKET CAP: $27 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.8 | -2.0 | +18.9 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NMF | NMF | NMF |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load (Mw) | 30778 | 32736 | 32150 |
| Nuclear Capacity Factor (%) | 93.9 | 93.3 | 92.7 |
| % Change Customers (yr-end) | +.4 | +.3 | +23.6 |
| Fixed Charge Cov. (%) | 546 | 569 | 293 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 3.5% | 2.5% | *2.0%* |
| "Cash Flow" | 6.5% | 1.5% | *1.0%* |
| Earnings | 5.0% | -2.5% | *-5.5%* |
| Dividends | 13.5% | 4.5% | *-7.5%* |
| Book Value | 6.5% | 9.0% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 4461 | 4398 | 5291 | 4494 | 18644 |
| **2011** | 5052 | 4587 | 5295 | 3990 | 18924 |
| **2012** | 4686 | 5954 | 6565 | 6284 | 23489 |
| **2013** | 6082 | 6141 | ***6677*** | ***6300*** | ***25200*** |
| **2014** | ***6750*** | ***6050*** | ***6500*** | ***6250*** | ***25550*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1.13 | .67 | 1.27 | .79 | 3.87 |
| **2011** | 1.01 | .93 | .90 | .91 | 3.75 |
| **2012** | .54 | .33 | .57 | .48 | 1.92 |
| **2013** | .30 | .57 | ***.73*** | ***.50*** | ***2.10*** |
| **2014** | ***.55*** | ***.45*** | ***.60*** | ***.45*** | ***2.05*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .525 | .525 | .525 | .525 | 2.10 |
| **2010** | .525 | .525 | .525 | .525 | 2.10 |
| **2011** | .525 | .525 | .525 | .525 | 2.10 |
| **2012** | .525 | .525 | .525 | .525 | 2.10 |
| **2013** | .525 | .31 | | | |

**BUSINESS:** Exelon Corporation is a holding company for Commonwealth Edison (3.8 mill. elec. customers in IL), PECO Energy, (1.6 mill. elec., 499,000 gas customers in PA), & Baltimore Gas and Electric (1.2 mill. elec., 656,000 gas customers in MD). Has nonregulated generating & energy-marketing ops. Acq'd Constellation Energy 3/12. Elec. rev. breakdown: res'l, 59%; small comm'l & ind'l, 24%; large comm'l & ind'l, 7%; other, 10%. Generating sources: nuclear, 82%; other, 7%; purch., 11%. Fuel costs: 43% of revs. '12 depr. rates: 2.8%-3.2% elec., 2.0% gas. Has 26,100 empls. Chairman: Mayo A. Shattuck III. Pres. & CEO: Christopher M. Crane. Inc.: PA. Address: 10 S. Dearborn St., P.O. Box 805379, Chicago, IL 60680-5379. Tel.: 312-394-7398. Internet: www.exeloncorp.com.

**Exelon's earnings will likely remain well below the level of just two years ago for a while.** The main culprit is declining margins at both the nonregulated generating business and the retail energy services operation that came with the acquisition of Constellation Energy last year. Weak market conditions prompted Exelon to cancel two planned nuclear uprates; this hurt earnings by $0.08 a share in the June quarter. As a result of the company's weakening earning power, the board of directors slashed the dividend earlier this year. We do expect some earnings growth in 2013, due to declining merger-related expenses and rising merger-related cost reductions, but the Constellation purchase has not been fruitful, so far. We no longer expect profits to improve in 2014 due to the prospect of lower margins than the expectation of three months ago. In fact, it is questionable whether higher income from the regulated operations and increased merger-related cost reductions will be enough to offset the profit squeeze at the nonregulated businesses.

**Rate cases are pending in Illinois and Maryland.** In Illinois, Commonwealth Edison is seeking a rate hike of $359 million under a formula rate application that was amended to reflect a change in regulatory law. New tariffs are expected to take effect at the start of 2014. In Maryland, Baltimore Gas and Electric filed for electric and gas rate increases of $101.5 million and $29.7 million, respectively, based on a return on equity of 10.5% (electric) and 10.35% (gas). New rates are expected to go into effect in December of 2013.

**Exelon has reached an agreement with Electricité de France.** This will likely close in the first half of 2014. Exelon would operate EDF's co-owned nuclear assets in the United States, which would provide an estimated $50 million-$70 million cost reduction for the companies. In 2016, EDF would have the right to sell its stake to Exelon at "fair market value."

**This stock is timely, but income-oriented investors should be wary.** The yield is not much higher than the utility average, despite the risks associated with Exelon's nonregulated activities and the absence of near-term dividend growth potential from the reduced level.

*Paul E. Debbas, CFA* *August 23, 2013*

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(A) Diluted egs. Excl. nonrec. losses: '02, 18¢; '03, $1.06; '05, $1.85; '06, $1.15; '09, 20¢; '12, 50¢; '13, 31¢; gains from disc. ops.: '07, 2¢; '08, 3¢. '10 EPS don't add due to rounding, '12 due to change in shs. Next egs. report due early Nov. **(B)** Div'ds historically paid in early Mar., June, Sept., & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. def'd chgs. In '11: $11.26/sh. **(D)** In mill., adj. for split. **(E)** Rate allowed on com. eq. in IL in '11: 10.5%; in MD in '13: 9.75% elec., 9.6% gas; earn. on avg. com. eq., '11: 17.9%. Reg. Clim.: PA, Avg.; IL, MD, Below Avg.

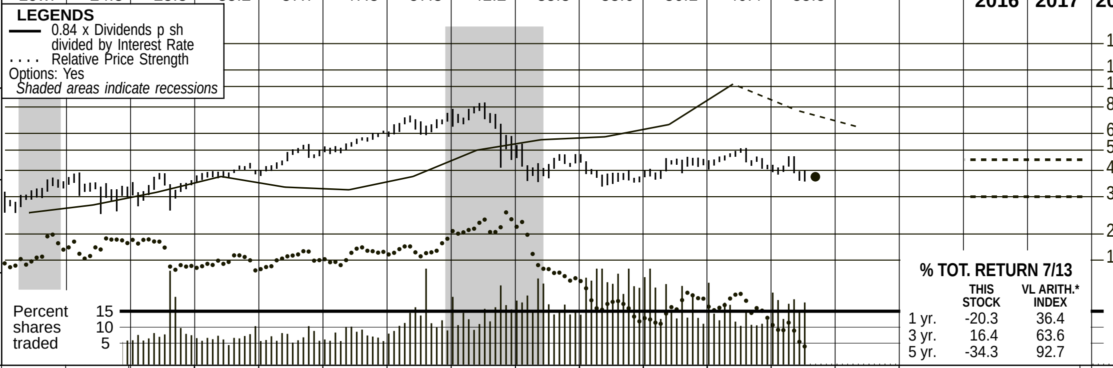
| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 30 |
| **Earnings Predictability** | 70 |

# FIRSTENERGY NYSE-FE

**RECENT PRICE** 37.34 **P/E RATIO** 13.4 (Trailing: 21.3 Median: 15.0) **RELATIVE P/E RATIO** 0.76 **DIV'D YLD** 5.9-4.3% **VALUE LINE**

**TIMELINESS** 2 Raised 8/23/13
**SAFETY** 3 Lowered 2/22/13
TECHNICAL 4 Lowered 8/23/13
**BETA** .80 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 39.1 | 38.9 | 43.4 | 53.4 | 61.7 | 75.0 | 84.0 | 53.6 | 47.8 | 46.5 | 51.1 | 46.8 |
| Low: | 24.8 | 25.8 | 35.2 | 37.7 | 47.8 | 57.8 | 41.2 | 35.3 | 33.6 | 36.1 | 40.4 | 35.5 |



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -20.3 | 36.4 |
| 3 yr. | 16.4 | 63.6 |
| 5 yr. | -34.3 | 92.7 |

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (+20%) | *10%* |
| Low | 30 | (-20%) | *1%* |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 2 | 0 | 11 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 6 | 0 | 8 | 0 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 204 | 231 | 212 |
| to Sell | 227 | 215 | 232 |
| Hld's(000) | 289354 | 294106 | 297691 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.26 | 24.72 | 27.19 | 31.31 | 26.88 | 40.83 | 37.31 | 37.76 | 36.35 | 36.03 | 42.00 | 44.70 | 41.70 | 43.76 | 38.87 | 36.57 | ***35.30*** | ***35.60*** | **Revenues per sh** | ***36.25*** |
| 3.66 | 5.33 | 6.89 | 7.28 | 5.48 | 6.45 | 4.79 | 7.60 | 7.55 | 7.22 | 8.34 | 9.04 | 8.80 | 8.50 | 5.75 | 6.05 | ***6.35*** | ***6.65*** | **"Cash Flow" per sh** | ***6.75*** |
| 1.94 | 1.95 | 2.50 | 2.69 | 2.84 | 2.54 | 1.47 | 2.77 | 2.84 | 3.82 | 4.22 | 4.38 | 3.32 | 3.25 | 1.88 | 2.13 | ***2.55*** | ***2.75*** | **Earnings per sh** A | ***2.50*** |
| 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.91 | 1.71 | 1.85 | 2.05 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | ***2.20*** | ***2.20*** | **Div'd Decl'd per sh** B ■ | ***2.20*** |
| .89 | 2.75 | 2.69 | 2.74 | 2.86 | 3.35 | 2.60 | 2.57 | 3.66 | 4.12 | 5.36 | 9.47 | 7.23 | 6.44 | 5.45 | 7.09 | ***6.40*** | ***5.85*** | **Cap'l Spending per sh** | ***6.00*** |
| 18.07 | 18.77 | 19.63 | 20.72 | 24.86 | 23.92 | 25.13 | 26.04 | 27.86 | 28.30 | 29.45 | 27.17 | 28.08 | 28.03 | 31.75 | 31.29 | ***30.80*** | ***31.45*** | **Book Value per sh** C | ***33.00*** |
| 230.21 | 237.07 | 232.45 | 224.53 | 297.64 | 297.64 | 329.84 | 329.84 | 329.84 | 319.21 | 304.84 | 304.84 | 304.84 | 304.84 | 418.22 | 418.22 | ***419.00*** | ***421.50*** | **Common Shs Outst'g** D | ***429.00*** |
| 11.8 | 15.4 | 11.3 | 9.2 | 10.9 | 13.0 | 22.5 | 14.1 | 16.1 | 14.2 | 15.6 | 15.6 | 13.0 | 11.7 | 22.4 | 21.1 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***14.5*** |
| .68 | .80 | .64 | .60 | .56 | .71 | 1.28 | .74 | .86 | .77 | .83 | .94 | .87 | .74 | 1.41 | 1.34 | | | **Relative P/E Ratio** | ***.95*** |
| 6.6% | 5.0% | 5.3% | 6.1% | 4.8% | 4.6% | 4.5% | 4.9% | 3.7% | 3.4% | 3.1% | 3.2% | 5.1% | 5.8% | 5.2% | 4.9% | | | **Avg Ann'l Div'd Yield** | ***6.0%*** |
| | | | | | | 12307 | 12453 | 11989 | 11501 | 12802 | 13627 | 12712 | 13339 | 16258 | 15294 | ***14800*** | ***15000*** | **Revenues ($mill)** | ***15500*** |
| | | | | | | 490.8 | 932.6 | 951.0 | 1265.0 | 1309.0 | 1342.0 | 1015.0 | 991.0 | 752.0 | 891.0 | ***1070*** | ***1220*** | **Net Profit ($mill)** | ***1080*** |
| | | | | | | 43.9% | 42.2% | 42.1% | 38.6% | 40.3% | 36.7% | 19.6% | 38.6% | 41.3% | 41.1% | ***41.0%*** | ***41.0%*** | **Income Tax Rate** | ***41.0%*** |
| | | | | | | 6.5% | 2.7% | 2.0% | 2.1% | 2.4% | 3.9% | 12.8% | 16.6% | 9.3% | 8.1% | ***6.0%*** | ***5.0%*** | **AFUDC % to Net Profit** | ***6.0%*** |
| | | | | | | 53.1% | 52.8% | 46.5% | 48.6% | 49.7% | 52.4% | 58.2% | 59.5% | 54.2% | 53.7% | ***55.0%*** | ***54.0%*** | **Long-Term Debt Ratio** | ***57.0%*** |
| | | | | | | 45.0% | 45.4% | 52.4% | 51.4% | 50.3% | 47.7% | 41.8% | 40.5% | 45.8% | 46.3% | ***45.0%*** | ***46.0%*** | **Common Equity Ratio** | ***43.0%*** |
| | | | | | | 18414 | 18938 | 17527 | 17570 | 17846 | 17383 | 20467 | 21124 | 28996 | 28263 | ***28675*** | ***30325*** | **Total Capital ($mill)** | ***32800*** |
| | | | | | | 13269 | 13478 | 13998 | 14667 | 15383 | 17723 | 19164 | 19788 | 30337 | 32903 | ***33575*** | ***35300*** | **Net Plant ($mill)** | ***37000*** |
| | | | | | | 4.6% | 6.5% | 7.1% | 9.0% | 9.0% | 9.7% | 6.9% | 6.3% | 4.0% | 4.9% | ***5.0%*** | ***5.5%*** | **Return on Total Cap'l** | ***5.0%*** |
| | | | | | | 5.7% | 10.4% | 10.1% | 14.0% | 14.6% | 16.2% | 11.9% | 11.6% | 5.7% | 6.8% | ***8.5%*** | ***9.0%*** | **Return on Shr. Equity** | ***7.5%*** |
| | | | | | | 5.4% | 10.6% | 10.2% | 13.9% | 14.6% | 16.2% | 11.9% | 11.6% | 5.7% | 6.8% | ***8.5%*** | ***9.0%*** | **Return on Com Equity** E | ***7.5%*** |
| | | | | | | NMF | 4.9% | 4.2% | 7.4% | 7.7% | 8.1% | 4.0% | 3.8% | NMF | NMF | ***1.0%*** | ***2.0%*** | **Retained to Com Eq** | ***1.0%*** |
| | | | | | | 101% | 55% | 59% | 47% | 47% | 50% | 66% | 68% | 117% | 103% | ***86%*** | ***77%*** | **All Div'ds to Net Prof** | ***87%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $20260 mill. **Due in 5 Yrs** $9909.0 mill.
**LT Debt** $15814 mill. **LT Interest** $862.0 mill.
Incl. $232 mill. capitalized leases.
(LT interest earned: 2.2x)

**Leases, Uncapitalized** Annual rentals $210.0 mill.
**Pension Assets-12/12** $6.67 bill. **Oblig.** $8.98 bill.

**Pfd Stock** None

**Common Stock** 418,216,437 shs.
**as of 5/6/13**
**MARKET CAP: $16 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +5.6 | +.1 | +3.5 |
| Avg. Indust. Use (MWH) | NMF | NMF | NMF |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 253 | 206 | 236 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 2.0% | 1.0% | *-1.5%* |
| "Cash Flow" | .5% | -2.5% | *Nil* |
| Earnings | -1.0% | -8.0% | *.5%* |
| Dividends | 4.0% | 3.5% | *Nil* |
| Book Value | 2.5% | 1.0% | *1.5%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 3299 | 3128 | 3693 | 3219 | 13339 |
| **2011** | 3576 | 4060 | 4719 | 3903 | 16258 |
| **2012** | 3986 | 3757 | 4051 | 3500 | 15294 |
| **2013** | 3729 | 3519 | ***4052*** | ***3500*** | ***14800*** |
| **2014** | ***3800*** | ***3700*** | ***4000*** | ***3500*** | ***15000*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .59 | .87 | 1.19 | .61 | 3.25 |
| **2011** | .15 | .48 | 1.27 | d.09 | 1.88 |
| **2012** | .78 | .52 | 1.05 | d.23 | 2.13 |
| **2013** | .47 | .46 | ***.87*** | ***.75*** | ***2.55*** |
| **2014** | ***.70*** | ***.55*** | ***.80*** | ***.70*** | ***2.75*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .55 | .55 | .55 | .55 | 2.20 |
| **2010** | .55 | .55 | .55 | .55 | 2.20 |
| **2011** | .55 | .55 | .55 | .55 | 2.20 |
| **2012** | .55 | .55 | .55 | .55 | 2.20 |
| **2013** | .55 | .55 | .55 | | |

**BUSINESS:** FirstEnergy Corp. is a holding company for Ohio Edison, Pennsylvania Power, Cleveland Electric, Toledo Edison, Metropolitan Edison, Penelec, Jersey Central Power & Light, West Penn Power, Potomac Edison, & Mon Power. Provides electric service to over 6 million customers in OH, PA, NJ, WV, MD, & NY. Acq'd Allegheny Energy 2/11. Electric revenue breakdown by customer class not available. Generating sources: coal, 44%; nuclear, 26%; purchased, 30%. Fuel costs: 43% of revs. '12 reported depr. rates: 2.1%-3.0%. Has 16,500 employees. Chairman: George M. Smart. President & CEO: Anthony J. Alexander. COO: Richard R. Grigg. Inc.: OH. Address: 76 South Main Street, Akron, OH 44308-1890. Tel.: 800-736-3402. Internet: www.firstenergycorp.com.

**FirstEnergy stock has performed poorly in 2013.** The main reason is Wall Street's concern about the competitive environment affecting FirstEnergy's nonregulated generating assets. In late May, an auction in the PJM (Pennsylvania-New Jersey-Maryland) region did not go well. The share price has fallen more than 10% since then, and is down 9% in 2013, which has been a good year for most stocks.

**The company is taking some measures to address the unfavorable competitive environment.** FirstEnergy had already shut some coal-fired generating facilities, but in June, it announced it will close two more plants in 2013, including a 1,710-megawatt station. As a result, the company took an $0.85-a-share charge in the second quarter, which we are treating as a nonrecurring item. The move will enable FirstEnergy to avoid $275 million of environmental upgrades that would have been needed to keep these units operating. The company also plans to reduce operating and capital costs by $150 million-$200 million a year beginning in 2014 through various measures, such as reducing the employee headcount.

**We think the dividend will hold at the current level, but we aren't certain.** The dividend yield is two percentage points above the utility average, giving FirstEnergy stock the highest yield (by far) in this industry. The company believes that the payout is supported by its regulated transmission and distribution operations. However, Jersey Central Power & Light has a rate case pending (see below), and the company might need rate relief in other jurisdictions. Since we are not willing to rule out a cut in the disbursement, we are showing a split dividend at the top of the page.

**Two key regulatory matters are pending.** JCP&L filed for a rate hike of $112 million, based on an 11.5% return on equity. An order isn't expected until 2014. In West Virginia, FirstEnergy wants to transfer a generating asset to its Monongahela Power subsidiary. The company is trying to settle this matter.

**Our ranking system favors this stock for the year ahead.** However, given the challenges FirstEnergy is facing, income-oriented investors should be cautious.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Dil. EPS. Excl. nonrec. gain (losses): '05, (28¢); '09, (3¢); '10, (68¢); '11, 33¢; '12, (29¢); '13, (85¢); gain (loss) from disc. ops.: '03, (33¢); '05, 5¢. '10-'12 EPS don't add due to rounding or chg. in shs. Next egs. due early Nov. **(B)** Div'ds paid early Mar., June, Sept. & Dec. Five div'ds decl. in '04. ■ Div'd reinvest. plan avail. **(C)** Incl. intang.: In '12: $21.09/sh. **(D)** In mill. **(E)** Rate base: Deprec. orig. cost. Rates all'd on com. eq.: 9.75%-12.9%; earned on avg. com. eq., '12: 6.7%. Reg. Clim.: OH Above Avg.; PA, NJ Avg.; MD, WV Below Avg.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 40 |
| **Earnings Predictability** | 75 |

# GREAT PLAINS EN'GY NYSE-GXP

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 21.77 | 14.0 (Trailing: 14.0 Median: 15.0) | 0.80 | 4.3% |

**VALUE LINE**

| | | | |
|---|---|---|---|
| **TIMELINESS** | 2 | Raised 6/14/13 |
| **SAFETY** | 3 | Lowered 12/26/08 |
| TECHNICAL | 3 | Lowered 8/16/13 |

**BETA** .80 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (+40%) | *12%* |
| Low | 19 | (-15%) | *2%* |

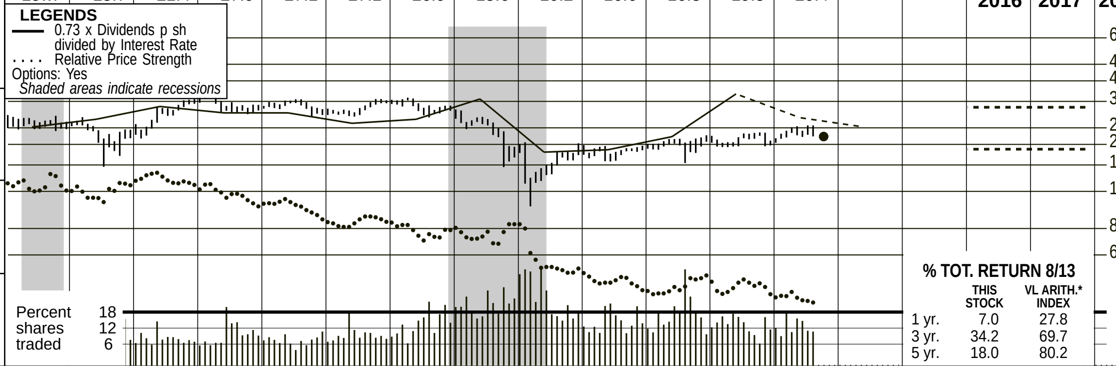
### Insider Decisions

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 128 | 136 | 131 |
| to Sell | 118 | 112 | 122 |
| Hld's(000) | 105841 | 111644 | 110897 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 27.0 | 32.8 | 35.7 | 32.8 | 32.8 | 33.4 | 29.3 | 20.5 | 19.9 | 22.1 | 22.8 | 24.7 |
| Low: | 15.7 | 21.4 | 27.9 | 27.1 | 27.1 | 26.9 | 15.6 | 10.2 | 16.6 | 16.3 | 19.5 | 20.4 |



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 7.0 | 27.8 |
| 3 yr. | 34.2 | 69.7 |
| 5 yr. | 18.0 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.47 | 15.17 | 14.50 | 18.02 | 23.61 | 26.91 | 31.04 | 33.13 | 34.85 | 33.30 | 37.89 | 14.00 | 14.51 | 16.62 | 17.03 | 15.05 | ***15.60*** | ***16.50*** | Revenues per sh | ***18.50*** |
| 3.91 | 4.21 | 3.63 | 4.63 | 4.70 | 4.40 | 4.69 | 4.75 | 4.54 | 3.86 | 4.24 | 3.09 | 3.27 | 4.12 | 3.51 | 3.45 | ***3.85*** | ***4.15*** | "Cash Flow" per sh | ***5.25*** |
| 1.69 | 1.89 | 1.26 | 2.05 | 1.59 | 2.04 | 2.27 | 2.46 | 2.18 | 1.62 | 1.86 | 1.16 | 1.03 | 1.53 | 1.25 | 1.35 | ***1.55*** | ***1.65*** | Earnings per sh A | ***2.00*** |
| 1.62 | 1.64 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | .83 | .83 | .84 | .86 | ***.88*** | ***.96*** | Div'd Decl'd per sh B ■ | ***1.20*** |
| 2.05 | 1.97 | 2.97 | 6.67 | 4.38 | 1.91 | 2.19 | 2.66 | 4.49 | 6.05 | 6.15 | 8.86 | 6.49 | 4.76 | 3.40 | 4.01 | ***4.75*** | ***4.70*** | Cap'l Spending per sh | ***4.25*** |
| 14.19 | 14.41 | 13.97 | 14.88 | 12.59 | 13.58 | 13.82 | 15.35 | 16.37 | 16.70 | 18.18 | 21.39 | 20.62 | 21.26 | 21.74 | 21.75 | ***22.40*** | ***23.05*** | Book Value per sh C | ***25.00*** |
| 61.91 | 61.91 | 61.91 | 61.91 | 61.91 | 69.20 | 69.26 | 74.37 | 74.74 | 80.35 | 86.23 | 119.26 | 135.42 | 135.71 | 136.14 | 153.53 | ***154.00*** | ***154.50*** | Common Shs Outst'g D | ***156.00*** |
| 17.0 | 15.7 | 20.0 | 12.4 | 15.9 | 11.1 | 12.2 | 12.6 | 14.0 | 18.3 | 16.3 | 20.5 | 16.0 | 12.1 | 16.1 | 15.5 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | ***12.0*** |
| .98 | .82 | 1.14 | .81 | .81 | .61 | .70 | .67 | .75 | .99 | .87 | 1.23 | 1.07 | .77 | 1.01 | .99 | | | Relative P/E Ratio | ***.80*** |
| 5.6% | 5.5% | 6.6% | 6.5% | 6.6% | 7.3% | 6.0% | 5.4% | 5.5% | 5.6% | 5.5% | 7.0% | 5.0% | 4.5% | 4.1% | 4.1% | | | Avg Ann'l Div'd Yield | ***5.0%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $3989.0 mill. **Due in 5 Yrs** $1230.3 mill.
**LT Debt** $3165.9 mill. **LT Interest** $166.5 mill.
(LT interest earned: 2.9x)

**Leases, Uncapitalized** Annual rentals $16.8 mill.
**Pension Assets-12/12** $666.4 mill.
**Oblig.** $1.13 bill.
**Pfd Stock** $39.0 mill. **Pfd Div'd** $1.6 mill.
390,000 shs. 3.80% to 4.50% (all $100 par & cum.), callable from $101 to $103.70.
**Common Stock** 153,782,529 shs.
**as of 8/5/13**
**MARKET CAP: $3.3 billion (Mid Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2149.5 | 2464.0 | 2604.9 | 2675.3 | 3267.1 | 1670.1 | 1965.0 | 2255.5 | 2318.0 | 2309.9 | ***2400*** | ***2550*** | Revenues ($mill) | ***2900*** |
| 159.0 | 178.8 | 164.2 | 127.6 | 159.2 | 119.5 | 135.6 | 211.7 | 174.4 | 199.9 | ***240*** | ***260*** | Net Profit ($mill) | ***310*** |
| 34.2% | 24.1% | 18.7% | 27.0% | 30.7% | 34.5% | 25.0% | 31.7% | 32.7% | 34.3% | ***35.0%*** | ***35.0%*** | Income Tax Rate | ***35.0%*** |
| 1.8% | 2.0% | 2.1% | 8.4% | 10.6% | 46.8% | 57.0% | 25.7% | 3.9% | 3.3% | ***4.0%*** | ***6.0%*** | AFUDC % to Net Profit | ***2.0%*** |
| 53.8% | 44.8% | 47.5% | 30.6% | 40.7% | 49.7% | 53.2% | 50.2% | 47.8% | 44.9% | ***50.0%*** | ***50.0%*** | Long-Term Debt Ratio | ***47.5%*** |
| 44.4% | 53.4% | 50.9% | 67.5% | 57.9% | 49.6% | 46.2% | 49.2% | 51.6% | 54.4% | ***49.0%*** | ***49.5%*** | Common Equity Ratio | ***52.0%*** |
| 2154.6 | 2137.1 | 2403.3 | 1988.4 | 2709.8 | 5146.2 | 6044.5 | 5867.6 | 5741.2 | 6135.8 | ***7005*** | ***7205*** | Total Capital ($mill) | ***7550*** |
| 2700.9 | 2734.5 | 2765.6 | 3066.2 | 3444.5 | 6081.3 | 6651.1 | 6892.3 | 7053.5 | 7402.1 | ***7780*** | ***8125*** | Net Plant ($mill) | ***8725*** |
| 9.0% | 10.1% | 8.2% | 7.9% | 7.5% | 3.5% | 3.9% | 5.3% | 4.8% | 4.6% | ***4.5%*** | ***5.0%*** | Return on Total Cap'l | ***5.5%*** |
| 16.0% | 15.1% | 13.0% | 9.2% | 9.9% | 4.6% | 4.8% | 7.2% | 5.8% | 5.9% | ***7.0%*** | ***7.0%*** | Return on Shr. Equity | ***8.0%*** |
| 16.4% | 15.5% | 13.3% | 9.4% | 10.1% | 4.6% | 4.8% | 7.3% | 5.8% | 5.9% | ***7.0%*** | ***7.5%*** | Return on Com Equity E | ***8.0%*** |
| 4.4% | 5.1% | 3.2% | NMF | .9% | NMF | .9% | 3.4% | 2.0% | 2.2% | ***3.0%*** | ***3.0%*** | Retained to Com Eq | ***3.0%*** |
| 73% | 68% | 76% | 104% | 91% | NMF | 81% | 54% | 66% | 63% | ***57%*** | ***58%*** | All Div'ds to Net Prof | ***61%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +5.6 | -1.7 | -1.8 |
| Avg. Indust. Use (MWH) | 1429 | 1463 | 1443 |
| Avg. Indust. Revs. per KWH (¢) | 5.89 | 6.11 | 6.23 |
| Capacity at Peak (Mw) | 6272 | 6697 | 6719 |
| Peak Load, Summer (Mw) | 5531 | 5690 | 5653 |
| Annual Load Factor (%) | 52.8 | 50.5 | 49.6 |
| % Change Customers (avg.) | +.2 | - - | +.2 |
| Fixed Charge Cov. (%) | 218 | 211 | 235 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -3.5% | -14.5% | *2.0%* |
| "Cash Flow" | -2.0% | -2.5% | *6.0%* |
| Earnings | -3.0% | -6.0% | *6.5%* |
| Dividends | -6.5% | -12.5% | *6.0%* |
| Book Value | 4.5% | 5.0% | *2.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 506.9 | 552.0 | 728.8 | 467.8 | 2255.5 |
| **2011** | 492.9 | 565.1 | 773.7 | 486.3 | 2318.0 |
| **2012** | 479.7 | 603.6 | 746.2 | 480.4 | 2309.9 |
| **2013** | 542.2 | 600.3 | ***750*** | ***507.5*** | ***2400*** |
| **2014** | ***575*** | ***625*** | ***825*** | ***525*** | ***2550*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .15 | .47 | .96 | d.04 | 1.53 |
| **2011** | .01 | .31 | .91 | .01 | 1.25 |
| **2012** | d.07 | .41 | .95 | .03 | 1.35 |
| **2013** | .17 | .41 | ***.92*** | ***.05*** | ***1.55*** |
| **2014** | ***.17*** | ***.45*** | ***.98*** | ***.05*** | ***1.65*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .2075 | .2075 | .2075 | .2075 | .83 |
| **2010** | .2075 | .2075 | .2075 | .2075 | .83 |
| **2011** | .2075 | .2075 | .2075 | .2125 | .84 |
| **2012** | .2125 | .2125 | .2125 | .2175 | .86 |
| **2013** | .2175 | .2175 | .2175 | | |

**BUSINESS:** Great Plains Energy Incorporated is a holding company for Kansas City Power & Light and two other subsidiaries, which supply electricity to 825,000 customers in western Missouri (71% of revenues) and eastern Kansas (29%). Acq'd Aquila 7/08. Sold Strategic Energy (energy-marketing subsidiary) in '08. Electric revenue breakdown: residential, 42%; commercial, 40%; industrial, 9%; other, 9%. Generating sources: coal, 75%; nuclear, 13%; gas & oil, 2%; wind, 1%; purchased, 9%. Fuel costs: 29% of revs. '12 reported deprec. rate (utility): 3.0%. Has 3,100 employees. Chairman: Michael J. Chesser. President & CEO: Terry Bassham. Inc.: Missouri. Address: 1200 Main St., Kansas City, Missouri 64105. Tel.: 816-556-2200. Internet: www.greatplainsenergy.com.

**We have trimmed our 2013 earnings estimate for Great Plains Energy by $0.05 a share.** Second-quarter profits fell a bit short of our estimate, and the weather in July was cooler than normal. Even so, earnings should still wind up well above the 2012 tally. Great Plains' utility subsidiaries are benefiting from rate increases (totaling $148.5 million) that took effect in January. Also, in early 2012 the company's 47%-owned Wolf Creek nuclear unit had an unplanned outage. The facility is operating better this year, and management has decided to maintain the status quo instead of bringing in another company to manage the plant or hiring a consultant. Our revised earnings estimate is near the midpoint of Great Plains' guidance of $1.44-$1.64 a share.

**Kansas City Power & Light's abbreviated rate case in Kansas will probably be filed in late 2013.** (The deadline for filing is December 12th.) The utility wants to recover construction work in progress associated with environmental spending for the La Cygne coal-fired facility. An order is expected in the third quarter of 2014. In Missouri, KCP&L will have to wait until the project is completed (in 2015) before seeking recovery in rates.

**Earnings should advance moderately in 2014.** We base this on rate relief, our assumption of normal weather conditions in July, and a modest recovery in the service area's economy. Our estimate remains $1.65 a share. Despite the expected profit improvement, returns on equity will probably remain subpar.

**We think the board of directors will raise the dividend in the fourth quarter.** The board evaluates the dividend each quarter, but has hiked the disbursement in the fourth period in each of the past two years. We estimate that the directors will increase the annual dividend by a nickel a share (5.7%). Even after such a large boost, the payout ratio would remain comfortably within Great Plains' targeted range of 50%-70%.

**This timely stock's yield is about average, by utility standards.** Total return potential through 2016-2018 is just a bit above the utility norm. Like most utility issues, Great Plains stock is trading within our 3- to 5-year Target Price Range.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Dil. EPS. Excl. nonrec. gains (losses): '00, 49¢; '01, ($2.01); '02, (5¢); '03, 29¢; '04, (7¢); '09, 12¢; gain (losses) on disc. ops.: '03, (13¢); '04, 10¢; '05, (3¢); '08, 35¢. '10-'12 EPS don't add due to change in shs. or rounding. Next earnings report due early Nov. **(B)** Div'ds historically paid in mid-Mar., June, Sept. & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '12: $8.40/sh. **(D)** In mill. **(E)** Rate base: Fair value. Rate all'd on com. eq. in MO in '13: 9.7%; in KS in '13: 9.5%; earned on avg. com. eq., '12: 6.7%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 10 |
| **Earnings Predictability** | 70 |

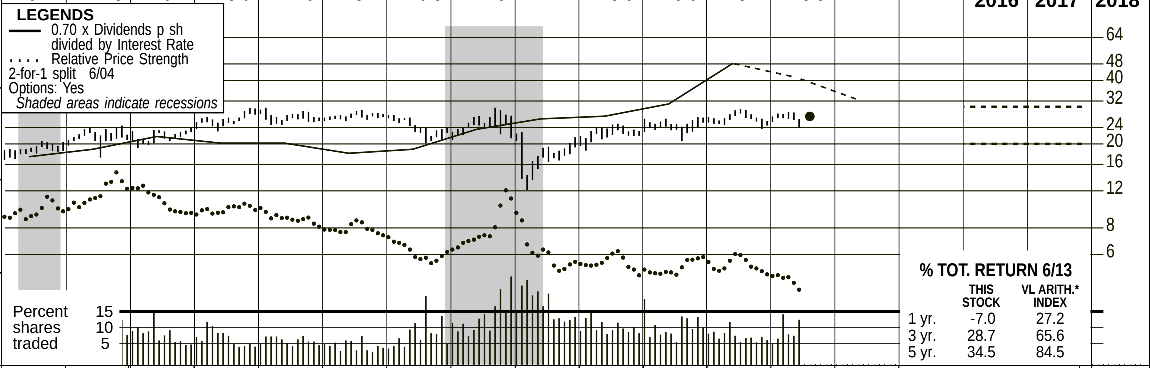
# HAWAIIAN ELECTRIC NYSE-HE

RECENT PRICE 27.00 | P/E RATIO 17.4 (Trailing: 16.7 Median: 19.0) | RELATIVE P/E RATIO 0.96 | DIV'D YLD 4.6% | **VALUE LINE**

**TIMELINESS** 3 Raised 7/5/13
**SAFETY** 2 Raised 11/2/12
TECHNICAL 1 Raised 8/2/13
**BETA** .70 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 24.5 | 24.0 | 29.5 | 29.8 | 28.9 | 27.5 | 29.8 | 22.7 | 25.0 | 26.8 | 29.2 | 28.3 |
| Low: | 17.3 | 19.1 | 23.0 | 24.6 | 25.7 | 20.3 | 21.0 | 12.1 | 18.6 | 20.6 | 23.7 | 23.8 |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -7.0 | 27.2 |
| 3 yr. | 28.7 | 65.6 |
| 5 yr. | 34.5 | 84.5 |

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (+10%) | 7% |
| Low | 20 | (-25%) | -2% |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 101 | 97 | 112 |
| to Sell | 75 | 82 | 72 |
| Hld's(000) | 33259 | 32885 | 39629 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.95 | 23.12 | 23.64 | 26.05 | 24.26 | 22.46 | 23.49 | 23.85 | 27.36 | 30.21 | 30.40 | 35.56 | 24.96 | 28.14 | 33.76 | 34.46 | 31.70 | 31.50 | Revenues per sh | 32.25 |
| 3.01 | 3.23 | 3.35 | 3.08 | 3.33 | 3.52 | 3.54 | 3.09 | 3.22 | 3.19 | 3.01 | 2.72 | 2.59 | 2.88 | 3.18 | 3.28 | 3.30 | 3.35 | "Cash Flow" per sh | 3.50 |
| 1.38 | 1.48 | 1.45 | 1.27 | 1.60 | 1.62 | 1.58 | 1.36 | 1.46 | 1.33 | 1.11 | 1.07 | .91 | 1.21 | 1.44 | 1.68 | 1.55 | 1.60 | Earnings per sh A | 1.75 |
| 1.22 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | Div'd Decl'd per sh B ■ | 1.30 |
| 2.31 | 2.60 | 2.09 | 2.04 | 1.77 | 1.74 | 2.15 | 2.66 | 2.76 | 2.58 | 2.62 | 3.12 | 3.29 | 1.92 | 2.45 | 3.32 | 3.70 | 4.65 | Cap'l Spending per sh | 4.75 |
| 12.77 | 12.87 | 13.16 | 12.72 | 13.06 | 14.21 | 14.36 | 15.01 | 15.02 | 13.44 | 15.29 | 15.35 | 15.58 | 15.67 | 15.95 | 16.28 | 17.10 | 17.95 | Book Value per sh C | 20.75 |
| 63.79 | 64.23 | 64.43 | 65.98 | 71.20 | 73.62 | 75.84 | 80.69 | 80.98 | 81.46 | 83.43 | 90.52 | 92.52 | 94.69 | 96.04 | 97.93 | 102.50 | 108.00 | Common Shs Outst'g D | 124.50 |
| 13.2 | 13.4 | 12.1 | 12.9 | 11.8 | 13.5 | 13.8 | 19.2 | 18.3 | 20.3 | 21.6 | 23.2 | 19.8 | 18.6 | 17.1 | 15.8 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | 14.5 |
| .76 | .70 | .69 | .84 | .60 | .74 | .79 | 1.01 | .97 | 1.10 | 1.15 | 1.40 | 1.32 | 1.18 | 1.07 | 1.01 | | | Relative P/E Ratio | .95 |
| 6.7% | 6.2% | 7.1% | 7.5% | 6.6% | 5.7% | 5.7% | 4.8% | 4.6% | 4.6% | 5.2% | 5.0% | 6.9% | 5.5% | 5.0% | 4.7% | | | Avg Ann'l Div'd Yield | 5.1% |
| | | | | | | 1781.3 | 1924.1 | 2215.6 | 2460.9 | 2536.4 | 3218.9 | 2309.6 | 2665.0 | 3242.3 | 3375.0 | 3250 | 3400 | Revenues ($mill) | 4000 |
| | | | | | | 120.1 | 109.6 | 120.3 | 109.9 | 93.6 | 92.2 | 84.9 | 115.4 | 140.1 | 164.9 | 160 | 170 | Net Profit ($mill) | 205 |
| | | | | | | 34.9% | 45.8% | 36.4% | 36.5% | 35.4% | 34.7% | 34.1% | 37.0% | 35.1% | 35.9% | 34.0% | 33.0% | Income Tax Rate | 28.0% |
| | | | | | | 5.1% | 7.6% | 5.9% | 8.4% | 8.3% | 14.2% | 20.6% | 7.4% | 6.0% | 6.9% | 8.0% | 17.0% | AFUDC % to Net Profit | 31.0% |
| | | | | | | 48.6% | 47.6% | 45.2% | 49.9% | 47.6% | 46.0% | 48.0% | 44.5% | 44.9% | 45.7% | 42.5% | 43.5% | Long-Term Debt Ratio | 48.0% |
| | | | | | | 49.8% | 51.0% | 53.3% | 48.6% | 51.0% | 52.7% | 50.7% | 54.3% | 53.9% | 53.1% | 56.5% | 55.5% | Common Equity Ratio | 51.5% |
| | | | | | | 2186.9 | 2375.1 | 2283.9 | 2252.7 | 2501.8 | 2635.2 | 2840.8 | 2732.9 | 2841.3 | 3001.0 | 3095 | 3500 | Total Capital ($mill) | 5025 |
| | | | | | | 2311.9 | 2422.3 | 2542.8 | 2647.5 | 2743.4 | 2907.4 | 3088.6 | 3165.9 | 3334.5 | 3594.8 | 3795 | 4100 | Net Plant ($mill) | 5375 |
| | | | | | | 7.3% | 6.0% | 6.8% | 6.4% | 5.2% | 4.7% | 4.3% | 5.6% | 6.2% | 6.7% | 6.0% | 6.0% | Return on Total Cap'l | 5.5% |
| | | | | | | 10.7% | 8.8% | 9.6% | 9.7% | 7.1% | 6.5% | 5.8% | 7.6% | 8.9% | 10.1% | 9.0% | 8.5% | Return on Shr. Equity | 8.0% |
| | | | | | | 10.8% | 8.9% | 9.7% | 9.9% | 7.2% | 6.5% | 5.8% | 7.7% | 9.0% | 10.2% | 9.0% | 8.5% | Return on Com Equity E | 8.0% |
| | | | | | | 3.9% | 1.1% | 1.5% | .7% | .8% | .5% | NMF | 1.4% | 2.1% | 4.2% | 2.0% | 2.0% | Retained to Com Eq | 2.0% |
| | | | | | | 64% | 87% | 85% | 93% | 89% | 93% | 116% | 82% | 78% | 59% | 80% | 78% | All Div'ds to Net Prof F | 78% |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1556.8 mill. **Due in 5 Yrs** $369.9 mill.
**LT Debt** $1372.9 mill. **LT Interest** $71.3 mill.
Incl. $50 mill. 6.5% oblig. pfd. sec. of trust subsid.
(LT interest earned: 4.2x)
**Pension Assets-12/12** $971.3 mill. **Oblig.** $1.59 bill.
**Pfd Stock** $34.3 mill. **Pfd Div'd** $2.0 mill.
1,114,657 shs. 4¼% to 5¼%, $20 par. call. $20 to $21; 120,000 shs. 7⅝%, $100 par. call. $100. Sinking fund ends 2018.
**Common Stock** 98,541,357 shs.
**as of 4/29/13**
**MARKET CAP: $2.7 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -1.1 | -.5 | -3.5 |
| Avg. Indust. Use (MWH) | 6352 | 6284 | 6119 |
| Avg. Indust. Revs. per KWH (¢) | 21.41 | 27.89 | 30.35 |
| Capacity at Yearend (Mw) | 2325 | 2327 | 2332 |
| Peak Load, Winter (Mw) | 1562 | 1530 | 1535 |
| Annual Load Factor (%) | 73.9 | 74.8 | 72.1 |
| % Change Customers (yr-end) | +.5 | +.3 | +.5 |
| Fixed Charge Cov. (%) | 300 | 337 | 396 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 3.0% | 2.0% | Nil |
| "Cash Flow" | -.5% | - - | 2.0% |
| Earnings | -.5% | 2.0% | 3.5% |
| Dividends | - - | - - | 1.0% |
| Book Value | 2.0% | 2.0% | 4.5% |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 619.0 | 655.7 | 694.6 | 695.7 | 2665.0 |
| 2011 | 710.6 | 794.3 | 886.4 | 851.0 | 3242.3 |
| 2012 | 814.9 | 854.3 | 867.7 | 838.1 | 3375.0 |
| 2013 | 784.1 | 785 | 900 | 780.9 | 3250 |
| 2014 | 825 | 825 | 925 | 825 | 3400 |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .29 | .31 | .35 | .26 | 1.21 |
| 2011 | .30 | .28 | .50 | .36 | 1.44 |
| 2012 | .40 | .40 | .49 | .39 | 1.68 |
| 2013 | .34 | .36 | .48 | .37 | 1.55 |
| 2014 | .37 | .38 | .48 | .37 | 1.60 |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .31 | .31 | .31 | .31 | 1.24 |
| 2010 | .31 | .31 | .31 | .31 | 1.24 |
| 2011 | .31 | .31 | .31 | .31 | 1.24 |
| 2012 | .31 | .31 | .31 | .31 | 1.24 |
| 2013 | .31 | .31 | | | |

**BUSINESS:** Hawaiian Electric Industries, Inc. is the parent company of Hawaiian Electric Company (HECO) & American Savings Bank (ASB). HECO & its subs., Maui Electric Co. (MECO) & Hawaii Electric Light Co. (HELCO), supply electricity to 448,000 customers on Oahu, Maui, Molokai, Lanai, & Hawaii. Operating companies' systems are not interconnected. Disc. int'l power sub. in '01. Elec. rev. breakdown: res'l, 31%; comm'l, 34%; large light & power, 34%; other, 1%. Generating sources: oil, 58%; purchased, 42%. Fuel costs: 60% of revs. '12 reported depr. rate (util.): 3.1%. Has 3,900 empls. Chairman: Jeffrey N. Watanabe. Pres. & CEO: Constance H. Lau. Inc.: HI. Address: 900 Richards St., P.O. Box 730, Honolulu, HI 96808-0730. Tel.: 808-543-5662. Web: www.hei.com.

**One of Hawaiian Electric Industries' utility subsidiaries was hit with an unfavorable rate order.** The Hawaii Public Utilities Commission (PUC) granted Maui Electric Company (MECO) a final rate increase of $5.3 million (1.3%), based on a 9% return on a 56.86% common-equity ratio. This was less than half of the interim tariff hike of $13.1 million, which was based on a 10% ROE. Whether MECO will appeal the order to the courts is not yet known. The PUC was concerned about subpar customer service. Customers have also been upset about rising rates, although high oil prices, much more than base rate increases, have been responsible for this. The PUC's order will hurt share earnings by an estimated $0.06 this year, so HEI lowered its 2013 earnings guidance from $1.58-$1.68 to $1.52-$1.62. We have cut our estimate by a nickel, to $1.55, and have similarly reduced our 2014 forecast to $1.60. In view of the earnings disappointment, it is little surprise that HEI stock has underperformed most electric utility equities in 2013.

**The share count is rising.** We figure that HEI will raise $45 million annually through its dividend-reinvestment program. Also, earlier this year HEI executed a forward equity sale of seven million common shares at $26.75 each. The company expects to deliver three million shares in the fourth quarter of 2013, and has until March 25, 2015 to issue the remaining shares.

**The American Savings Bank subsidiary is operating in a challenging environment.** Low interest rates have hurt its interest-rate spread. On the positive side, the bank is experiencing loan growth, and asset quality is good. Overall, though, we look for little, if any, profit growth from ASB this year.

**This stock offers a good dividend yield, but little else.** The yield is above average, even by utility standards. HEI has not been able to produce consistent earnings growth for many years, and has not raised the dividend since the late 1990s. With the recent price above the midpoint of our 2016-2018 Target Price Range and little dividend growth projected over that time frame, 3- to 5-year total return potential is low.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Dil. EPS. Excl. gains (losses) from disc. ops.: '00, (56¢); '01, (36¢); '03, (5¢); '04, 2¢; '05, (1¢); nonrec. gain (losses): '05, 11¢; '07, (9¢); '12, (25¢). Next earnings report due early Aug. **(B)** Div'ds historically paid in early Mar., June, Sept., & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '12: $9.67/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Orig. cost. Rate allowed on com. eq. in '11: HECO, 10%; in '12: HELCO, 10%; in '13: MECO, 9%; earned on avg. com. eq., '12: 10.3%. Regul. Climate: Avg. **(F)** Excl. div'ds paid through reinvest. plan.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 90 |
| Price Growth Persistence | 30 |
| Earnings Predictability | 70 |

# IDACORP, INC. NYSE-IDA

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 52.93 | 16.0 (Trailing: 14.9) (Median: 14.0) | 0.88 | 2.9% |

**VALUE LINE**

**TIMELINESS** 3 Lowered 5/14/10

**SAFETY** 2 Raised 8/2/13

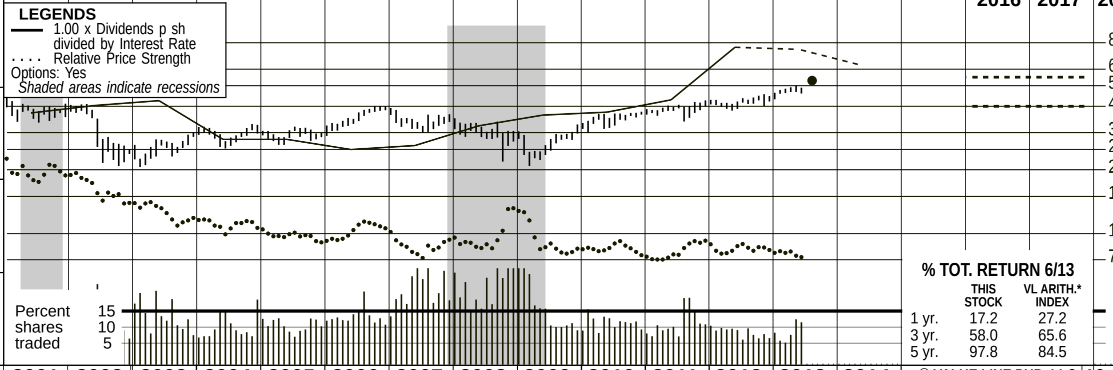
TECHNICAL 3 Lowered 8/2/13

**BETA** .70 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 41.0 | 30.2 | 32.9 | 32.1 | 40.2 | 39.2 | 35.1 | 32.8 | 37.8 | 42.7 | 45.7 | 53.0 |
| Low: | 20.9 | 20.6 | 25.3 | 26.2 | 29.0 | 30.1 | 21.9 | 20.9 | 30.0 | 33.9 | 38.2 | 43.1 |

**Target Price Range**

**2016 | 2017 | 2018**



### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 55 | (+5%) | 4% |
| Low | 40 | (-25%) | -3% |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| to Sell | 1 | 0 | 0 | 1 | 0 | 1 | 6 | 0 | 1 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 75 | 81 | 73 |
| to Sell | 80 | 72 | 84 |
| Hld's(000) | 35050 | 35073 | 35828 |

**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 17.2 | 27.2 |
| 3 yr. | 58.0 | 65.6 |
| 5 yr. | 97.8 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.90 | 29.83 | 17.50 | 27.10 | 150.10 | 24.43 | 20.41 | 20.00 | 20.15 | 21.23 | 19.51 | 20.47 | 21.92 | 20.97 | 20.55 | 21.55 | **22.50** | **22.75** | **Revenues per sh** | **25.50** |
| 4.22 | 4.69 | 4.50 | 5.63 | 5.63 | 4.08 | 3.50 | 4.12 | 3.87 | 4.58 | 4.11 | 4.27 | 5.07 | 5.23 | 5.74 | 5.84 | **5.85** | **6.05** | **"Cash Flow" per sh** | **6.55** |
| 2.32 | 2.37 | 2.43 | 3.50 | 3.35 | 1.63 | .96 | 1.90 | 1.75 | 2.35 | 1.86 | 2.18 | 2.64 | 2.95 | 3.36 | 3.37 | **3.30** | **3.40** | **Earnings per sh A** | **3.65** |
| 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.70 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.37 | **1.56** | **1.68** | **Div'd Decl'd per sh B† ■** | **1.90** |
| 2.51 | 2.37 | 2.95 | 3.73 | 4.78 | 3.53 | 3.89 | 4.73 | 4.53 | 5.16 | 6.39 | 5.19 | 5.26 | 6.85 | 6.76 | 4.78 | **4.95** | **11.30** | **Cap'l Spending per sh** | **8.80** |
| 18.93 | 19.42 | 20.02 | 21.82 | 23.15 | 23.01 | 22.54 | 23.88 | 24.04 | 25.77 | 26.79 | 27.76 | 29.17 | 31.01 | 33.19 | 35.07 | **36.55** | **38.70** | **Book Value per sh C** | **43.45** |
| 37.61 | 37.61 | 37.61 | 37.61 | 37.63 | 38.02 | 38.34 | 42.22 | 42.66 | 43.63 | 45.06 | 46.92 | 47.90 | 49.41 | 49.95 | 50.16 | **50.50** | **50.50** | **Common Shs Outst'g D** | **51.00** |
| 13.6 | 14.4 | 12.7 | 10.9 | 11.4 | 18.9 | 26.5 | 15.5 | 16.7 | 15.1 | 18.2 | 13.9 | 10.2 | 11.8 | 11.5 | 12.4 | *Bold figures are Value Line estimates* | | **Avg Ann'l P/E Ratio** | **13.0** |
| .78 | .75 | .72 | .71 | .58 | 1.03 | 1.51 | .82 | .89 | .82 | .97 | .84 | .68 | .75 | .72 | .79 | | | **Relative P/E Ratio** | **.85** |
| 5.9% | 5.4% | 6.0% | 4.9% | 4.9% | 6.0% | 6.7% | 4.1% | 4.1% | 3.4% | 3.5% | 4.0% | 4.5% | 3.4% | 3.1% | 3.3% | | | **Avg Ann'l Div'd Yield** | **4.0%** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1536.7 mill. **Due in 5 Yrs** $75.3 mill.
**LT Debt** $1535.6 mill. **LT Interest** $79.0 mill.
(LT interest earned: 3.5x)

**Pension Assets-12/12** $460.9 mill.
**Oblig.** $767.7 mill.

**Pfd Stock** None

**Common Stock** 50,232,852 shs.
**as of 4/26/13**

**MARKET CAP: $2.7 billion (Mid Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 782.7 | 844.5 | 859.5 | 926.3 | 879.4 | 960.4 | 1049.8 | 1036.0 | 1026.8 | 1080.7 | **1135** | **1150** | **Revenues ($mill)** | **1300** |
| 40.1 | 77.8 | 63.7 | 100.1 | 82.3 | 98.4 | 124.4 | 142.5 | 166.9 | 168.9 | **165** | **170** | **Net Profit ($mill)** | **185** |
| - - | - - | 16.9% | 13.3% | 14.3% | 16.3% | 15.2% | - - | NMF | 13.4% | **20.0%** | **20.0%** | **Income Tax Rate** | **30.0%** |
| 7.5% | 3.9% | 4.7% | 4.0% | 9.7% | 10.2% | 10.5% | 19.7% | 22.8% | 7.1% | **7.5%** | **8.0%** | **AFUDC % to Net Profit** | **9.5%** |
| 50.8% | 49.3% | 50.0% | 45.2% | 48.9% | 47.6% | 50.2% | 49.3% | 45.6% | 45.5% | **45.5%** | **46.0%** | **Long-Term Debt Ratio** | **47.0%** |
| 46.4% | 50.7% | 50.0% | 54.8% | 51.1% | 52.4% | 49.8% | 50.7% | 54.4% | 54.5% | **54.5%** | **54.0%** | **Common Equity Ratio** | **53.0%** |
| 1862.5 | 1987.8 | 2048.8 | 2052.8 | 2364.2 | 2485.9 | 2807.1 | 3020.4 | 3045.2 | 3225.4 | **3395** | **3605** | **Total Capital ($mill)** | **4165** |
| 2088.3 | 2209.5 | 2314.3 | 2419.1 | 2616.6 | 2758.2 | 2917.0 | 3161.4 | 3406.6 | 3536.0 | **3820** | **4125** | **Net Plant ($mill)** | **5195** |
| 3.7% | 5.3% | 4.5% | 6.2% | 4.7% | 5.3% | 5.7% | 6.0% | 6.7% | 6.5% | **6.0%** | **6.0%** | **Return on Total Cap'l** | **5.5%** |
| 4.4% | 7.7% | 6.2% | 8.9% | 6.8% | 7.6% | 8.9% | 9.3% | 10.1% | 9.6% | **9.0%** | **8.5%** | **Return on Shr. Equity** | **8.5%** |
| 4.2% | 7.2% | 6.2% | 8.9% | 6.8% | 7.6% | 8.9% | 9.3% | 10.1% | 9.6% | **9.0%** | **8.5%** | **Return on Com Equity E** | **8.5%** |
| NMF | 2.7% | 1.3% | 4.3% | 2.4% | 3.4% | 4.8% | 5.5% | 6.5% | 5.7% | **4.5%** | **4.5%** | **Retained to Com Eq** | **4.0%** |
| NMF | 65% | 80% | 51% | 64% | 55% | 46% | 41% | 36% | 41% | **48%** | **50%** | **All Div'ds to Net Prof** | **52%** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -3.1 | +1.6 | +2.6 |
| Avg. Indust. Use (MWH) | N/A | N/A | N/A |
| Avg. Indust. Revs. per KWH (¢) | 4.50 | 4.54 | 4.63 |
| Capacity at Peak (Mw) | N/A | N/A | N/A |
| Peak Load, Summer (Mw) | 2714 | 2973 | 3245 |
| Annual Load Factor (%) | N/A | N/A | N/A |
| % Change Customers (yr-end) | +.4 | +.7 | +1.1 |
| Fixed Charge Cov. (%) | 231 | 194 | 328 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -11.0% | .5% | *3.5%* |
| "Cash Flow" | 1.0% | 6.0% | *2.5%* |
| Earnings | 1.5% | 10.0% | *2.0%* |
| Dividends | -4.0% | 1.0% | *7.0%* |
| Book Value | 4.0% | 5.5% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 252.5 | 241.8 | 309.4 | 232.3 | 1036.0 |
| **2011** | 251.5 | 235.0 | 309.6 | 230.7 | 1026.8 |
| **2012** | 241.1 | 254.7 | 334.0 | 250.9 | 1080.7 |
| **2013** | 264.9 | **260** | **350** | **260.1** | **1135** |
| **2014** | **255** | **270** | **360** | **265** | **1150** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .34 | .82 | 1.39 | .40 | 2.95 |
| **2011** | .60 | .42 | 2.16 | .18 | 3.36 |
| **2012** | .50 | .71 | 1.84 | .33 | 3.37 |
| **2013** | .67 | **.60** | **1.63** | **.40** | **3.30** |
| **2014** | **.55** | **.65** | **1.70** | **.50** | **3.40** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B†■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .30 | .30 | .30 | .30 | 1.20 |
| **2010** | .30 | .30 | .30 | .30 | 1.20 |
| **2011** | .30 | .30 | .30 | .30 | 1.20 |
| **2012** | .33 | .33 | .33 | .38 | 1.37 |
| **2013** | .38 | .38 | | | |

**BUSINESS:** IDACORP, Inc. is the holding company for Idaho Power, a utility that operates 17 hydroelectric generation developments, 3 natural gas-fired plants, and partly owns three coal plants across Idaho, Oregon, Wyoming, and Nevada. Service territory covers 24,000 square miles, serving 501,000 general business customers. Sells electricity in Idaho (95% of revenues) and Oregon (5%). Revenue breakdown: residential, 40%; commercial, 22%; industrial, 14%; other, 24%. Fuel sources: hydro, 45%; thermal, 34%; purchased power, 21%. '12 depreciation rate: 2.4%. Has 2,067 employees. Chairman: Bob Tinstman. President & CEO: J. LaMont Keen. Incorporated: Idaho. Address: 1221 W. Idaho St., Boise, ID 83702. Telephone: 208-388-2200. Internet: www.idacorpinc.com.

**IDACORP posted strong year-over-year comparisons in the first quarter of 2013.** Earnings came in at $0.67 a share, on a 10% top-line advance. The company's decent operating performance stems from colder winter weather, that resulted in higher sales, and cost management efforts, as well as rate increases, particularly related to the Langley Gulch power plant. This momentum should continue going forward, as economic conditions in Idaho improve, increasing both demand and customer growth.

**Management anticipates share earnings will fall between $3.20 and $3.35 in 2013.** The utility changed its estimate slightly, and now does not expect to use any additional accumulated deferred investment tax credits (ADITCs) during the year, as Idaho Power's return on equity should exceed 9.5%. Thus, the entire amount ($45 million) will be available next year. Management did not give any color regarding the use of ADITCs post-2014. *(Note: Earnings were scheduled to be released shortly after we went to press with this Issue.)*

**The utility has given updates regarding its regulatory proceedings.** Although Idaho Power does not expect to file for a general rate case this year, the company filed for its 2013 power cost adjustment (PCA) with the Idaho Public Utility Commission (IPUC), requesting a $140.4 million increase in Idaho PCA rates. Moreover, management likely filed for its integrated resource plan (IRP). Meanwhile, Gateway West and Boardman-to-Hemingway are en route to gain the required approvals. Indeed, these major transmission projects should be primary growth vehicles down the line.

**IDACORP's 2.9% dividend yield is well below the utility industry median.** Moreover, the company holds lackluster total return potential over the next 3 to 5 years, which will likely deter income-oriented accounts. On a positive note, management anticipates a 10% dividend increase, at least, following its September review.

**Long-term price appreciation potential is limited, too, as these shares are now trading within our 2016-2018 Target Price Range.**

*Michelle Jensen* *August 2, 2013*

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**(A)** EPS diluted. Excl. nonrecurring gains (loss): '00, 22¢; '03, 26¢; '05, (24¢); '06, 17¢. Egs. may not sum to total due to rounding. Next earnings report due Oct. 31st. **(B)** Div'ds historically paid in late Feb., May, Aug., and late Nov. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred debits. In '12: $24.35/sh. **(D)** In mill. **(E)** Rate Base: Net original cost. Rate allowed on com. eq. in Idaho in '11: 9.5%-10.5%; earned on avg. system com. eq., '12: 9.6%. Regulatory Climate: Above Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 70 |
| **Earnings Predictability** | 85 |

# ITC HOLDINGS CORP. NYSE-ITC

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|---|
| 89.47 | 20.6 | (Trailing: 23.9 Median: NMF) | 1.17 | 2.0% |

**VALUE LINE**

| | | |
|---|---|---|
| **TIMELINESS** | 3 | Lowered 3/29/13 |
| **SAFETY** | 2 | Raised 6/24/11 |
| TECHNICAL | 2 | Raised 9/20/13 |

**BETA** .80 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 160 | (+80%) | *17%* |
| Low | 120 | (+35%) | *10%* |

**Insider Decisions**

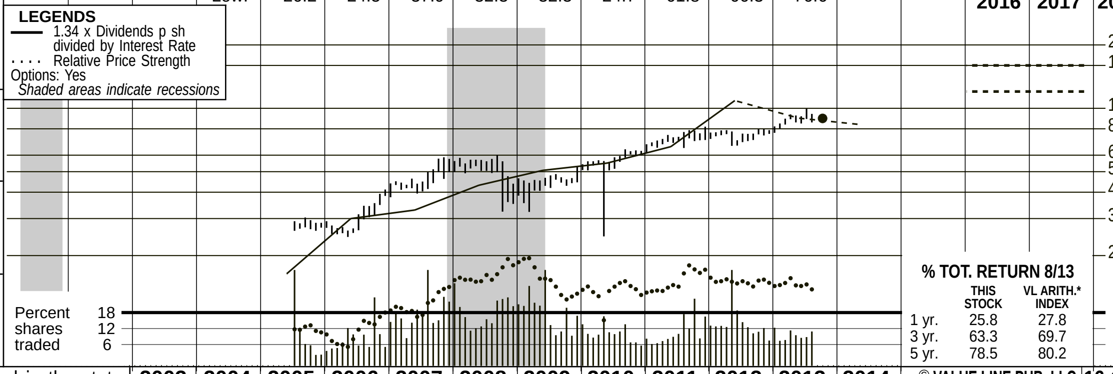
| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 115 | 136 | 111 |
| to Sell | 106 | 100 | 123 |
| Hld's(000) | 50699 | 50686 | 50480 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| High: | 30.3 | 41.2 | 58.6 | 60.0 | 52.8 | 63.9 | 81.9 | 79.8 | 99.3 |
| Low: | 26.2 | 24.5 | 37.9 | 32.3 | 32.3 | 24.7 | 61.8 | 66.3 | 76.6 |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 25.8 | 27.8 |
| 3 yr. | 63.3 | 69.7 |
| 5 yr. | 78.5 | 80.2 |

ITC Holdings was incorporated in the state of Michigan in 2002 for the purpose of acquiring ITC Transmission, which was a subsidiary of The Detroit Edison Company. The acquisition was completed in 2003. ITC Holdings went public on July 26, 2005, via an initial public offering of 12.5 million shares at $23.00 a share. The deal was underwritten by Lehman Brothers, Morgan Stanley, and Credit Suisse First Boston.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | 4.12 | 6.18 | 5.27 | 9.93 | 12.44 | 12.40 | 13.74 | 14.76 | 15.90 | ***17.55*** | ***19.35*** | **Revenues per sh** | ***26.75*** |
| - - | 1.05 | 2.04 | 1.73 | 3.29 | 4.11 | 4.33 | 4.59 | 5.20 | 5.63 | ***6.35*** | ***8.00*** | **"Cash Flow" per sh** | ***11.50*** |
| - - | .08 | 1.06 | .92 | 1.68 | 2.19 | 2.58 | 2.84 | 3.31 | 3.60 | ***4.00*** | ***5.35*** | **Earnings per sh A** | ***7.75*** |
| - - | - - | .53 | 1.08 | 1.13 | 1.19 | 1.25 | 1.31 | 1.38 | 1.46 | ***1.61*** | ***1.81*** | **Div'd Decl'd per sh B ■ †** | ***2.50*** |
| - - | 2.50 | 3.57 | 3.95 | 6.69 | 8.09 | 8.08 | 7.66 | 10.85 | 15.36 | ***15.30*** | ***16.35*** | **Cap'l Spending per sh** | ***15.75*** |
| - - | 6.41 | 7.92 | 12.55 | 13.12 | 18.71 | 20.20 | 22.03 | 24.53 | 27.08 | ***29.40*** | ***32.85*** | **Book Value per sh C** | ***46.50*** |
| - - | 30.68 | 33.23 | 42.40 | 42.92 | 49.65 | 50.08 | 50.72 | 51.32 | 52.25 | ***53.00*** | ***53.75*** | **Common Shs Outst'g D** | ***56.00*** |
| - - | - - | 26.3 | 33.0 | 27.6 | 23.2 | 17.1 | 20.0 | 21.4 | 20.7 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | ***18.0*** |
| - - | - - | 1.40 | 1.78 | 1.47 | 1.40 | 1.14 | 1.27 | 1.34 | 1.32 | ***Value Line*** | | **Relative P/E Ratio** | ***1.20*** |
| - - | - - | 1.9% | 3.5% | 2.4% | 2.3% | 2.8% | 2.3% | 1.9% | 2.0% | ***estimates*** | | **Avg Ann'l Div'd Yield** | ***1.8%*** |
| - - | 126.4 | 205.3 | 223.6 | 426.2 | 617.9 | 621.0 | 696.8 | 757.4 | 830.5 | ***930*** | ***1040*** | **Revenues ($mill)** | ***1500*** |
| - - | 2.6 | 34.7 | 33.2 | 73.3 | 109.2 | 130.9 | 145.7 | 171.7 | 187.9 | ***215*** | ***290*** | **Net Profit ($mill)** | ***445*** |
| - - | 39.0% | 35.3% | 29.2% | 33.3% | 38.1% | 37.2% | 36.1% | 35.6% | 36.6% | ***36.5%*** | ***36.5%*** | **Income Tax Rate** | ***36.5%*** |
| - - | 80.2% | 10.1% | 15.0% | 14.7% | 13.8% | 13.1% | 11.9% | 12.5% | 16.0% | ***16.0%*** | ***12.0%*** | **AFUDC % to Net Profit** | ***8.0%*** |
| - - | 71.1% | 66.3% | 70.3% | 72.4% | 70.8% | 70.6% | 69.1% | 67.8% | 63.8% | ***68.5%*** | ***66.5%*** | **Long-Term Debt Ratio** | ***59.5%*** |
| - - | 28.9% | 33.7% | 29.7% | 27.6% | 29.2% | 29.4% | 30.9% | 32.2% | 36.2% | ***31.5%*** | ***33.5%*** | **Common Equity Ratio** | ***40.5%*** |
| - - | 680.0 | 780.6 | 1794.5 | 2041.5 | 3177.3 | 3445.9 | 3614.3 | 3903.9 | 3910.2 | ***4955*** | ***5290*** | **Total Capital ($mill)** | ***6400*** |
| - - | 513.7 | 603.6 | 1197.9 | 1960.4 | 2304.4 | 2542.1 | 2872.3 | 3415.8 | 4134.6 | ***4820*** | ***5555*** | **Net Plant ($mill)** | ***7675*** |
| - - | 2.3% | 6.2% | 3.0% | 5.7% | 5.4% | 5.7% | 6.1% | 6.3% | 6.7% | ***6.0%*** | ***7.0%*** | **Return on Total Cap'l** | ***8.5%*** |
| - - | 1.3% | 13.2% | 6.2% | 13.0% | 11.8% | 12.9% | 13.0% | 13.6% | 13.3% | ***13.5%*** | ***16.5%*** | **Return on Shr. Equity** | ***17.0%*** |
| - - | 1.3% | 13.2% | 6.2% | 13.0% | 11.8% | 12.9% | 13.0% | 13.6% | 13.3% | ***13.5%*** | ***16.5%*** | **Return on Com Equity E** | ***17.0%*** |
| - - | 1.3% | 6.5% | NMF | 4.5% | 5.4% | 6.8% | 7.1% | 8.0% | 8.0% | ***8.0%*** | ***11.0%*** | **Retained to Com Eq** | ***12.0%*** |
| - - | - - | 50% | 115% | 66% | 54% | 48% | 45% | 41% | 40% | ***40%*** | ***33%*** | **All Div'ds to Net Prof** | ***31%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $3469.0 mill. **Due in 5 Yrs** $947.7 mill.
**LT Debt** $3219.0 mill. **LT Interest** $169.0 mill.
(LT interest earned: 2.9x)

**Pension Assets-12/12** $38.1 mill.
**Oblig.** $72.4 mill.

**Pfd Stock** None

**Common Stock** 52,453,855 shs.
**as of 7/19/13**
**MARKET CAP: $4.7 billion (Mid Cap)**

| **CURRENT POSITION ($MILL.)** | **2011** | **2012** | **6/30/13** |
|---|---|---|---|
| Cash Assets | 58.3 | 26.2 | 63.9 |
| Receivables | 76.9 | 72.2 | 118.9 |
| Inventory (FIFO) | 34.9 | 37.4 | 37.2 |
| Other | 31.4 | 62.4 | 56.9 |
| Current Assets | 201.5 | 198.2 | 276.9 |
| Accts Payable | 136.9 | 102.5 | 153.4 |
| Debt Due | - - | 651.9 | 250.0 |
| Other | 178.6 | 228.4 | 198.9 |
| Current Liab. | 315.5 | 982.8 | 602.3 |
| Fix Chg. Cov. | 262% | 265% | 271% |

| **ANNUAL RATES** of change (per sh) | **Past** 10 Yrs. | **Past** 5 Yrs. | **Est'd '10-'12** to '16-'18 |
|---|---|---|---|
| Revenues | - - | 15.5% | *10.5%* |
| "Cash Flow" | - - | 17.0% | *14.5%* |
| Earnings | - - | 21.5% | *15.5%* |
| Dividends | - - | 8.5% | *10.5%* |
| Book Value | - - | 17.0% | *11.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 161.3 | 168.5 | 178.0 | 189.0 | 696.8 |
| **2011** | 179.4 | 185.1 | 191.3 | 201.6 | 757.4 |
| **2012** | 196.7 | 197.4 | 214.8 | 221.6 | 830.5 |
| **2013** | 217.3 | 229.8 | ***235*** | ***247.9*** | ***930*** |
| **2014** | ***245*** | ***255*** | ***265*** | ***275*** | ***1040*** |

| **Cal-endar** | **EARNINGS PER SHARE A** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .67 | .71 | .75 | .71 | 2.84 |
| **2011** | .81 | .83 | .85 | .82 | 3.31 |
| **2012** | .88 | .81 | .98 | .92 | 3.60 |
| **2013** | .95 | .90 | ***1.05*** | ***1.10*** | ***4.00*** |
| **2014** | ***1.30*** | ***1.30*** | ***1.40*** | ***1.35*** | ***5.35*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID B ■ †** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .305 | .305 | .32 | .32 | 1.25 |
| **2010** | .32 | .32 | .335 | .335 | 1.31 |
| **2011** | .335 | .335 | .3525 | .3525 | 1.38 |
| **2012** | .3525 | .3525 | .3775 | .3775 | 1.46 |
| **2013** | .3775 | .3775 | .425 | | |

**BUSINESS:** ITC Holdings Corp. engages in the transmission of electricity in the United States. The company operates primarily as a conduit, moving power from generators to local distribution systems either through its own system or in conjunction with neighboring transmission systems. Acquired Michigan Electric Transmission Company 10/06; Interstate Power & Light's transmission assets 12/07. Has assets in Michigan, Iowa, Minnesota, Illinois, Missouri, and Kansas. Operations are regulated by the Federal Energy Regulatory Commission (FERC). '12 reported depreciation rate: 2.4%. Has about 500 employees. Chairman, President & CEO: Joseph L. Welch. Inc.: Michigan. Address: 27175 Energy Way, Novi, Michigan 48377. Tel.: 248-946-3000. Internet: www.itctransco.com.

**It has become increasingly questionable whether ITC Holdings' agreement to purchase the transmission assets of Entergy will win regulatory approval.** The agreement calls for Entergy to issue $1.775 billion of debt, which ITC would assume upon completion of the transaction. ITC would issue about $740 million of debt, which it would use for a recapitalization (probably via a special dividend), and would issue enough common stock to Entergy holders so that they would own 50.1% of ITC. The Federal Energy Regulatory Commission has approved the deal. On the other hand, the staffs of most of the commissions in the other jurisdictions that must approve the sale (Texas, Louisiana, New Orleans, Arkansas, and Mississippi) have expressed concern that the transaction isn't in the best interest of ratepayers. In fact, the companies have withdrawn their application in Texas, and are deciding whether to file another one. The companies would have to offer some concessions in order to win regulatory approval, but this would make the deal relatively less attractive for ITC. The sale agreement expires at yearend.

**ITC is incurring significant costs associated with the transaction.** These reduced earnings by $0.47 a share in the first half of 2013, and we are *including* them in our presentation. This is why our estimate is well below ITC's guidance of $4.80-$5.00 a share, which excludes these expenses. Despite the costs, earnings should advance this year because the company benefits from a regulatory mechanism that enables it to earn a return on its expected capital spending and recover most kinds of expenses. Earnings should advance substantially in 2014, assuming little or none of these costs. Note that our estimates and projections do not include the Entergy assets.

**The board of directors raised the dividend materially in the third quarter.** The increase was $0.19 a share (12.6%) yearly. ITC expects to continue boosting the dividend at a low double-digit pace.

**ITC stock isn't like most utility equities.** Its dividend yield is only about equal to the market median. Strong dividend growth over the 3- to 5-year period should produce a respectable total return.

*Paul E. Debbas, CFA* *September 20, 2013*

**(A)** Diluted earnings. '12 EPS don't add to full-year total due to rounding. Next earnings report due late Oct. **(B)** Dividends historically paid in early March, June, Sept., and Dec. ■ Dividend reinvestment plan available. † Shareholder investment plan available. **(C)** Includes intangibles. In '12: $1.2 billion, $22.93/sh. **(D)** In millions. **(E)** Rates allowed on common equity: 12.16%-13.88%. Earned on avg. com. eq., '12: 14.0%. Regulatory Climate: Above Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 95 |
| **Earnings Predictability** | 85 |

# ALLIANT ENERGY NYSE-LNT

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 48.94 | 14.7 (Trailing: 14.9 Median: 14.0) | 0.84 | 3.9% | VALUE LINE |

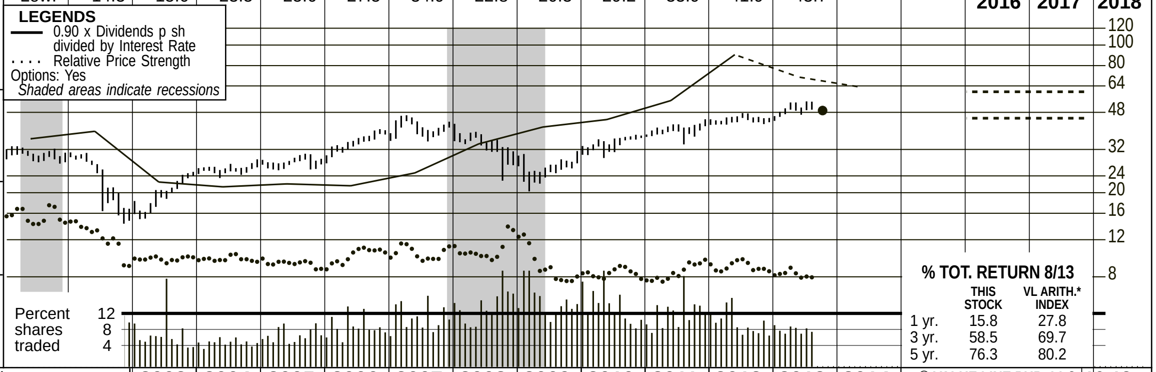
**TIMELINESS** 3 Lowered 3/29/13

**SAFETY** 2 Raised 9/28/07

TECHNICAL 3 Raised 9/13/13

**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 31.0 | 25.1 | 28.8 | 30.6 | 40.0 | 46.5 | 42.4 | 31.5 | 37.7 | 44.5 | 47.7 | 54.2 |
| Low: | 14.3 | 15.0 | 23.5 | 25.6 | 27.5 | 34.9 | 22.8 | 20.3 | 29.2 | 33.9 | 41.9 | 43.7 |



**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+25%) | *9%* |
| Low | 45 | (-10%) | *2%* |

**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 143 | 133 | 132 |
| to Sell | 135 | 142 | 136 |
| Hld's(000) | 63798 | 63301 | 64450 |

**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.8 | 27.8 |
| 3 yr. | 58.5 | 69.7 |
| 5 yr. | 76.3 | 80.2 |

Alliant Energy, formerly called Interstate Energy Corporation, was formed on April 21, 1998 through the merger of WPL Holdings, IES Industries, and Interstate Power. WPL stockholders received one share of Interstate Energy stock for each WPL share, IES stockholders received 1.14 Interstate Energy shares for each IES share, and Interstate Power stockholders received 1.11 Interstate Energy shares for each Interstate Power share.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.19 | 25.56 | 28.02 | 28.93 | 31.15 | 33.33 | 31.02 | 30.81 | 33.02 | 27.88 | ***30.00*** | ***31.20*** | **Revenues per sh** | ***38.80*** |
| 4.19 | 4.69 | 5.46 | 4.33 | 5.12 | 4.56 | 4.21 | 5.21 | 5.51 | 5.90 | ***6.65*** | ***6.85*** | **"Cash Flow" per sh** | ***7.70*** |
| 1.57 | 1.85 | 2.21 | 2.06 | 2.69 | 2.54 | 1.89 | 2.75 | 2.75 | 3.05 | ***3.35*** | ***3.50*** | **Earnings per sh A** | ***4.00*** |
| 1.00 | 1.02 | 1.05 | 1.15 | 1.27 | 1.40 | 1.50 | 1.58 | 1.70 | 1.80 | ***1.88*** | ***1.96*** | **Div'd Decl'd per sh B ■ †** | ***2.20*** |
| 7.69 | 5.55 | 4.51 | 3.42 | 4.91 | 7.96 | 10.87 | 7.82 | 6.07 | 10.43 | ***6.70*** | ***7.50*** | **Cap'l Spending per sh** | ***10.35*** |
| 21.37 | 22.13 | 20.85 | 22.83 | 24.30 | 25.56 | 25.07 | 26.09 | 27.14 | 28.25 | ***28.80*** | ***29.65*** | **Book Value per sh C** | ***34.50*** |
| 110.96 | 115.74 | 117.04 | 116.13 | 110.36 | 110.45 | 110.66 | 110.89 | 111.02 | 110.99 | ***112.00*** | ***113.00*** | **Common Shs Outst'g D** | ***116.00*** |
| 12.7 | 14.0 | 12.6 | 16.8 | 15.1 | 13.4 | 13.9 | 12.5 | 14.5 | 14.5 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| .72 | .74 | .67 | .91 | .80 | .81 | .93 | .80 | .91 | .93 | ***Value Line*** | | **Relative P/E Ratio** | ***.85*** |
| 5.0% | 3.9% | 3.8% | 3.3% | 3.1% | 4.1% | 5.7% | 4.6% | 4.3% | 4.1% | ***estimates*** | | **Avg Ann'l Div'd Yield** | ***4.2%*** |
| 3128.2 | 2958.7 | 3279.6 | 3359.4 | 3437.6 | 3681.7 | 3432.8 | 3416.1 | 3665.3 | 3094.5 | ***3360*** | ***3525*** | **Revenues ($mill)** | ***4500*** |
| 176.6 | 229.5 | 337.8 | 260.1 | 320.8 | 280.0 | 208.6 | 303.9 | 304.4 | 337.8 | ***370*** | ***380*** | **Net Profit ($mill)** | ***430*** |
| 28.9% | 26.7% | 19.0% | 43.8% | 44.4% | 33.4% | - - | 30.1% | 19.0% | 21.5% | ***20.0%*** | ***25.0%*** | **Income Tax Rate** | ***30.0%*** |
| 11.7% | 8.1% | 3.0% | 3.1% | 2.4% | - - | - - | - - | 8.8% | 6.0% | ***6.0%*** | ***6.0%*** | **AFUDC % to Net Profit** | ***6.0%*** |
| 44.8% | 45.0% | 41.6% | 31.4% | 32.4% | 36.3% | 44.3% | 46.3% | 45.7% | 48.4% | ***48.5%*** | ***48.0%*** | **Long-Term Debt Ratio** | ***46.0%*** |
| 50.0% | 50.2% | 53.1% | 62.9% | 61.9% | 58.6% | 51.2% | 49.5% | 50.9% | 48.4% | ***48.5%*** | ***49.0%*** | **Common Equity Ratio** | ***51.5%*** |
| 4738.4 | 5104.7 | 4599.1 | 4218.4 | 4329.5 | 4815.6 | 5423.0 | 5840.8 | 5921.2 | 6476.6 | ***6625*** | ***6850*** | **Total Capital ($mill)** | ***7800*** |
| 4432.6 | 5284.6 | 4866.2 | 4944.9 | 4679.9 | 5353.5 | 6203.0 | 6730.6 | 7037.1 | 7838.0 | ***8200*** | ***8500*** | **Net Plant ($mill)** | ***9500*** |
| 5.7% | 6.1% | 8.9% | 7.5% | 8.6% | 7.0% | 5.1% | 6.6% | 6.4% | 6.3% | ***7.0%*** | ***7.0%*** | **Return on Total Cap'l** | ***7.5%*** |
| 6.8% | 8.2% | 12.6% | 9.0% | 11.0% | 9.1% | 6.9% | 9.7% | 9.5% | 10.1% | ***11.0%*** | ***11.0%*** | **Return on Shr. Equity** | ***11.0%*** |
| 6.7% | 8.2% | 13.1% | 9.1% | 11.3% | 9.3% | 6.8% | 9.9% | 9.5% | 10.3% | ***11.5%*** | ***12.0%*** | **Return on Com Equity E** | ***11.5%*** |
| 2.5% | 3.8% | 8.1% | 4.0% | 5.9% | 3.8% | .9% | 3.8% | 3.3% | 3.9% | ***4.5%*** | ***5.0%*** | **Retained to Com Eq** | ***5.0%*** |
| 67% | 58% | 42% | 59% | 50% | 62% | 88% | 64% | 67% | 64% | ***60%*** | ***60%*** | **All Div'ds to Net Prof** | ***58%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $3366.0 mill. **Due in 5 Yrs** $772.6 mill.
**LT Debt** $3141.4 mill. **LT Interest** $160.0 mill.
(LT interest earned: 3.7x)

**Pension Assets-12/12** $965.6 mill. **Oblig.** $1207.5 mill.
**Pfd Stock** $200.0 mill. **Pfd Div'd** $10.2 mill.
8,000,000 shs.

**Common Stock** 110,943,669 shs.

**MARKET CAP: $5.4 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.8 | +.9 | +.3 |
| Avg. Indust. Use (MWH) | 11213 | 11504 | 11555 |
| Avg. Indust. Revs. per KWH (¢) | 6.80 | 6.51 | 6.42 |
| Capacity at Peak (Mw) | 5425 | 5734 | 5886 |
| Peak Load, Summer (Mw) | 5425 | 5734 | 5886 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.2 | +.2 | +.3 |
| Fixed Charge Cov. (%) | 341 | 302 | 332 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | - - | 1.0% | *4.0%* |
| "Cash Flow" | - - | 2.0% | *5.5%* |
| Earnings | 3.5% | 4.0% | *6.0%* |
| Dividends | -1.5% | 8.0% | *4.5%* |
| Book Value | 2.0% | 3.5% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 890.2 | 741.6 | 951.7 | 832.6 | 3416.1 |
| 2011 | 945.0 | 819.5 | 1021.6 | 879.2 | 3665.3 |
| 2012 | 765.7 | 690.3 | 887.6 | 750.9 | 3094.5 |
| 2013 | 859.6 | 718.0 | ***1025*** | ***757.4*** | ***3360*** |
| 2014 | ***900*** | ***750*** | ***1085*** | ***790*** | ***3525*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .45 | .44 | 1.31 | .55 | 2.75 |
| 2011 | .68 | .44 | 1.12 | .51 | 2.75 |
| 2012 | .50 | .58 | 1.34 | .63 | 3.05 |
| 2013 | .72 | .59 | ***1.42*** | ***.62*** | ***3.35*** |
| 2014 | ***.70*** | ***.65*** | ***1.50*** | ***.65*** | ***3.50*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■† Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .375 | .375 | .375 | .375 | 1.50 |
| 2010 | .395 | .395 | .395 | .395 | 1.58 |
| 2011 | .425 | .425 | .425 | .425 | 1.70 |
| 2012 | .45 | .45 | .45 | .45 | 1.80 |
| 2013 | .47 | .47 | .47 | | |

**BUSINESS:** Alliant Energy Corp., formerly named Interstate Energy, is a holding company formed through the merger of WPL Holdings, IES Industries, and Interstate Power. Supplies electricity, gas, and other services in Wisconsin, Iowa, and Minnesota. Elect. revs. by state: WI, 47%; IA, 50%; MN, 3%. Elect. rev.: residential, 38%; commercial, 24%; industrial, 29%; wholesale, 7%; other, 2%. Fuel sources, 2012: coal, 47%; nuclear, 18%; gas, 4%; other, 31%. Fuel costs: 50% of revs. 2012 depreciation rate: 4.2%. Estimated plant age: 11 years. Has 4,055 employees. Chairman & Chief Executive Officer: Patricia L. Kampling. Incorporated: Wisconsin. Address: 4902 N. Biltmore Lane, Madison, Wisconsin 53718. Telephone: 608-458-3311. Internet: www.alliantenergy.com.

**Alliant Energy posted fairly modest growth for the second quarter.** The company's utility operations registered solid performance for the period. The bottom line benefited from lower purchased power capacity costs related to the Riverside Energy Center, though this was partly offset by greater depreciation expense and a less favorable variation in temperature compared to the prior-year period.

**Healthy results will likely continue going forward, assuming a stable economy and normal weather.** The utilities will likely continue to benefit from modest customer growth, and efforts to control operating costs should support profitability. Overall, we look for a moderate advance in revenues and share earnings for full-year 2013. Growth will probably continue next year.

**Subsidiary Wisconsin Power and Light Company has filed its electric fuel cost plan with the Public Service Commission of Wisconsin.** The utility is seeking a 1.9% net increase in retail electric rates for 2014. It cited expected higher electric fuel costs as the reason for the request. The plan should be reviewed by yearend. Assuming approval, the new rates would take effect January 1st.

**The company has agreed to divest its Minnesota electric and natural gas distribution businesses.** The electric distribution business will be acquired by Southern Minnesota Energy Cooperative, and the natural gas business will be sold to Minnesota Energy Resources Corporation. Proceeds from the sales will total $128 million, subject to customary closing adjustments. The necessary state and federal approvals are expected to occur within six to 12 months. Following completion, Alliant will continue to operate electric generation facilities in Minnesota.

**Conservative investors may find something to like here.** The company has an excellent Financial Strength rating of A. However, this stock is only neutrally ranked for year-ahead performance. Too, total return potential appears limited at this juncture. Alliant stock earns favorable marks for Safety, Price Stability, and Earnings Predictability, and this equity offers a healthy dividend yield for income-seeking investors.

*Michael Napoli, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecur. gains (losses): '03, net 24¢; '04, (58¢); '05, ($1.05); '06, 83¢; '07, $1.09; '08, 7¢; '09, (88¢); '10, (15¢); '11, (1¢); '12, (16¢). Next egs. rpt. due in November. **(B)** Div'ds historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvest. plan avail. † Shareholder invest. plan avail. **(C)** Incl. deferred chgs. in '12: $105.3 mill., $0.95/sh. **(D)** In mill. **(E)** Rate base: Orig. cost. Regul. Clim.: WI, Above Avg.; IA, Avg.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 95 |
| **Earnings Predictability** | 75 |

# MGE ENERGY INC. NDQ-MGEE

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 51.98 | 17.2 (Trailing: 17.0) (Median: 16.0) | 0.98 | 3.1% |

**VALUE LINE**

**TIMELINESS** 4 Lowered 8/9/13

**SAFETY** 1 New 1/3/03

TECHNICAL 3 Raised 5/17/13

**BETA** .60 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+15%) | *7%* |
| Low | 50 | (-5%) | *3%* |

**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

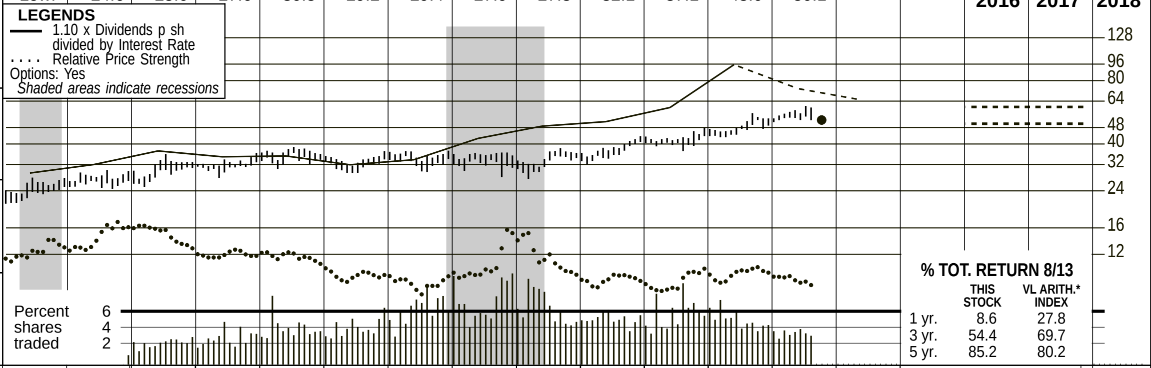
**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 51 | 56 | 51 |
| to Sell | 41 | 48 | 44 |
| Hld's(000) | 7477 | 7568 | 7701 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 30.1 | 35.8 | 36.4 | 38.8 | 37.0 | 37.2 | 36.5 | 38.2 | 43.6 | 47.8 | 56.1 | 60.7 |
| Low: | 24.6 | 25.0 | 27.6 | 30.5 | 29.2 | 29.4 | 27.9 | 27.3 | 32.1 | 37.1 | 43.0 | 50.1 |

**Target Price Range**

2016 | 2017 | 2018



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 8.6 | 27.8 |
| 3 yr. | 54.4 | 69.7 |
| 5 yr. | 85.2 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.46 | 15.53 | 16.96 | 19.50 | 19.55 | 19.75 | 21.89 | 20.84 | 25.10 | 24.20 | 24.49 | 26.02 | 23.10 | 23.04 | 23.64 | 23.42 | 24.70 | 25.10 | Revenues per sh | 29.80 |
| 3.26 | 3.59 | 3.81 | 3.89 | 3.78 | 3.33 | 2.94 | 2.88 | 3.00 | 3.52 | 3.69 | 4.02 | 3.98 | 4.14 | 4.41 | 4.46 | 4.70 | 5.10 | "Cash Flow" per sh | 6.15 |
| 1.40 | 1.38 | 1.48 | 1.67 | 1.62 | 1.69 | 1.71 | 1.77 | 1.57 | 2.06 | 2.27 | 2.38 | 2.21 | 2.50 | 2.64 | 2.79 | 3.05 | 3.15 | Earnings per sh A | 3.70 |
| 1.29 | 1.30 | 1.31 | 1.32 | 1.33 | 1.34 | 1.35 | 1.36 | 1.37 | 1.39 | 1.41 | 1.43 | 1.46 | 1.49 | 1.52 | 1.56 | 1.60 | 1.65 | Div'd Decl'd per sh B ■ | 1.86 |
| 1.35 | 1.92 | 3.16 | 4.44 | 2.47 | 4.45 | 4.52 | 4.70 | 4.19 | 4.41 | 6.21 | 4.62 | 3.53 | 2.63 | 2.82 | 4.26 | 5.35 | 5.75 | Cap'l Spending per sh | 6.80 |
| 11.25 | 11.34 | 11.49 | 12.05 | 12.67 | 12.94 | 14.34 | 16.59 | 16.81 | 17.89 | 19.49 | 20.88 | 21.71 | 22.72 | 23.84 | 25.07 | 26.60 | 28.10 | Book Value per sh E | 31.90 |
| 16.08 | 16.08 | 16.16 | 16.62 | 17.07 | 17.57 | 18.34 | 20.39 | 20.45 | 20.98 | 21.95 | 22.90 | 23.11 | 23.11 | 23.11 | 23.11 | 23.30 | 23.50 | Common Shs Outst'g C | 23.50 |
| 14.5 | 16.2 | 14.0 | 11.7 | 14.8 | 16.0 | 17.5 | 18.0 | 22.4 | 15.9 | 15.0 | 14.2 | 15.1 | 15.0 | 15.8 | 17.2 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | 15.0 |
| .84 | .84 | .80 | .76 | .76 | .87 | 1.00 | .95 | 1.19 | .86 | .80 | .85 | 1.01 | .95 | .99 | 1.10 | | | Relative P/E Ratio | 1.00 |
| 6.3% | 5.8% | 6.3% | 6.7% | 5.5% | 5.0% | 4.5% | 4.3% | 3.9% | 4.3% | 4.1% | 4.2% | 4.4% | 4.0% | 3.6% | 3.2% | | | Avg Ann'l Div'd Yield | 3.4% |
| | | | | | | 401.5 | 424.9 | 513.4 | 507.5 | 537.6 | 596.0 | 533.8 | 532.6 | 546.4 | 541.3 | 575 | 590 | Revenues ($mill) | 700 |
| | | | | | | 30.6 | 33.8 | 32.1 | 42.4 | 48.8 | 52.8 | 51.0 | 57.7 | 60.9 | 64.4 | 70.0 | 75.0 | Net Profit ($mill) | 85.0 |
| | | | | | | 39.4% | 37.9% | 38.2% | 37.9% | 36.3% | 35.5% | 35.6% | 36.9% | 37.1% | 37.7% | 38.0% | 36.0% | Income Tax Rate | 35.0% |
| | | | | | | -- | -- | -- | -- | -- | -- | -- | -- | 2.2% | 2.0% | 2.0% | 2.0% | AFUDC % to Net Profit | 2.0% |
| | | | | | | 43.5% | 37.4% | 39.3% | 38.7% | 35.2% | 36.3% | 39.0% | 38.9% | 39.6% | 38.2% | 36.5% | 36.0% | Long-Term Debt Ratio | 36.0% |
| | | | | | | 56.5% | 62.6% | 60.7% | 61.3% | 64.8% | 63.7% | 61.0% | 61.1% | 60.4% | 61.8% | 63.5% | 64.0% | Common Equity Ratio | 64.0% |
| | | | | | | 465.3 | 540.5 | 566.2 | 612.6 | 660.1 | 750.6 | 822.7 | 859.4 | 911.9 | 937.9 | 980 | 1035 | Total Capital ($mill) | 1170 |
| | | | | | | 537.5 | 607.4 | 667.7 | 728.4 | 844.0 | 901.2 | 939.8 | 968.0 | 995.6 | 1073.5 | 1150 | 1250 | Net Plant ($mill) | 1500 |
| | | | | | | 7.8% | 7.1% | 6.6% | 7.8% | 8.1% | 7.7% | 6.9% | 7.6% | 7.8% | 7.9% | 8.0% | 8.0% | Return on Total Cap'l | 8.0% |
| | | | | | | 11.6% | 10.0% | 9.3% | 11.3% | 11.4% | 11.0% | 10.2% | 11.0% | 11.1% | 11.1% | 11.5% | 11.5% | Return on Shr. Equity | 11.5% |
| | | | | | | 11.6% | 10.0% | 9.3% | 11.3% | 11.4% | 11.0% | 10.2% | 11.0% | 11.1% | 11.1% | 11.5% | 11.5% | Return on Com Equity D | 11.5% |
| | | | | | | 2.5% | 2.3% | 1.2% | 3.7% | 4.3% | 4.4% | 3.4% | 4.4% | 4.7% | 4.9% | 5.5% | 5.5% | Retained to Com Eq | 5.5% |
| | | | | | | 79% | 77% | 87% | 67% | 62% | 60% | 66% | 60% | 57% | 56% | 53% | 52% | All Div'ds to Net Prof | 51% |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $374.2 mill. **Due in 5 Yrs** $84.6 mill.
**LT Debt** $356.5 mill. **LT Interest** $19.0 mill.
(LT interest earned: 7.0x)

**Leases, Uncapitalized** Annual rentals $2.0 mill.
**Pension Assets-12/12** $212.3 mill.
**Obligation** $315.5 mill.

**Pfd Stock** None

**Common Stock** 23,113,638 shs.
**as of 7/31/13**
**MARKET CAP: $1.2 billion (Mid-Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.1 | +0.8 | -0.3 |
| Avg. Indust. Use (MWH) | 2679 | 2632 | 2472 |
| Avg. Indust. Revs. per KWH (¢) | 7.51 | 7.38 | 7.86 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 802 | 770 | 766 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (avg.) | NA | NA | NA |
| Fixed Charge Cov. (%) | 598 | 535 | 579 |

| **ANNUAL RATES of change (per sh)** | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 2.0% | -1.0% | *3.5%* |
| "Cash Flow" | 1.5% | 5.0% | *6.0%* |
| Earnings | 5.0% | 6.0% | *5.5%* |
| Dividends | 1.5% | 2.0% | *3.5%* |
| Book Value | 6.5% | 5.5% | *5.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 159.7 | 109.1 | 127.9 | 135.9 | 532.6 |
| 2011 | 164.6 | 117.3 | 133.6 | 130.9 | 546.4 |
| 2012 | 149.3 | 117.2 | 137.8 | 137.0 | 541.3 |
| 2013 | 167.2 | 128.3 | *140* | *139.5* | *575* |
| 2014 | *170* | *130* | *145* | *145* | *590* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .62 | .50 | .86 | .52 | 2.50 |
| 2011 | .77 | .55 | .91 | .41 | 2.64 |
| 2012 | .69 | .62 | 1.02 | .46 | 2.79 |
| 2013 | .98 | .60 | *.95* | *.52* | *3.05* |
| 2014 | *.95* | *.63* | *1.00* | *.57* | *3.15* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .3617 | .3617 | .3684 | .3684 | 1.46 |
| 2010 | .3684 | .3684 | .3751 | .3751 | 1.49 |
| 2011 | .3751 | .3751 | .3826 | .3826 | 1.52 |
| 2012 | .3826 | .3826 | .3951 | .3951 | 1.56 |
| 2013 | .3951 | .3951 | .4076 | | |

**BUSINESS:** MGE Energy Inc. is a holding company for Madison Gas and Electric, which provides electric service to approximately 140,000 customers in a 316-square-mile area of Dane County and gas service to 145,000 customers in 1,631 square miles in seven counties in Wisconsin. Electric revenue breakdown, '12: residential, 33%; commercial, 52%; industrial, 5%; public authorities and other, 10%. Generating sources, '12: coal, 50%; purchased power, 41%; natural gas and other, 9%. Fuel costs: 22% of revenues. '12 reported depreciation rate: 3.6%. Has 688 employees. Chairman, President & CEO: Gary J. Wolter. Incorporated: Wisconsin. Address: 133 South Blair St., Madison, WI 53788. Telephone: 608-252-7000. Internet: www.mge.com.

**MGE Energy reported moderate top-line growth for the second quarter.** This was driven by a healthy advance in regulated gas revenues. However, electric operating and maintenance expenses also increased, driven by greater costs at the Columbia generating station. Overall, earnings per share of $0.60 came in slightly below the prior-year tally.

**Solid performance will probably continue going forward.** The company's utility operations will likely further benefit from favorable demographics in its service territory. A healthy local economy should drive population growth and demand for power in and around Madison, Wisconsin. That said, we expect a difficult bottom-line comparison for the third quarter, assuming growth in operating costs and considering the impressive result generated in the prior-year period. Efforts to control expenses should pay off, down the line. Overall, we expect a nice advance in revenues and share earnings for the company for full-year 2013. Healthy growth will probably continue next year.

**MGE Energy has filed a request with the Public Service Corporation of Wisconsin (PSCW).** The company is looking to freeze electric and natural gas rates at 2013 levels for 2014. It is also asking that roughly $6.2 million pertaining to a fuel rule surplus credit be offset against higher costs. This follows an increase in rates by 3.8% for retail electric customers and by 1.0% for gas customers for 2013. Subscribers are advised to keep an eye on regulatory developments.

**The company has announced a 3% dividend increase.** Starting with the September payout, the quarterly dividend is now $0.4076 per share. Dividend growth will likely continue in the coming years.

**This stock is unfavorably ranked for year-ahead relative price performance.** Looking further out, this issue has relatively low, but fairly well-defined, total return potential for the pull to 2016-2018. On the bright side, MGE earns good marks for Safety, Financial Strength, Price Stability, and Earnings Predictability. Nevertheless, most investors can probably find more-suitable choices elsewhere at this juncture.

*Michael Napoli, CFA* *September 20, 2013*

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(A) Diluted earnings. Next earnings report due in November. (B) Dividends historically paid in mid-March, June, September, and December. ■ Dvd. reinvestment plan available. (C) In millions. (D) Rate allowed on common equity in '12: 10.3%; earned on common equity, '12: 11.1%. Regulatory Climate: Above Average. (E) Includes regulatory assets. In 2012: $229.2 mill., $9.92 per share.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 75 |
| **Earnings Predictability** | 95 |

# NEXTERA ENERGY NYSE-NEE

RECENT PRICE **85.59** P/E RATIO **16.9** (Trailing: 19.3 Median: 14.0) RELATIVE P/E RATIO **0.96** DIV'D YLD **3.2%** VALUE LINE

**TIMELINESS** 3 Lowered 10/5/12
**SAFETY** 2 Lowered 2/26/10
TECHNICAL 4 Lowered 8/16/13
**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 100 | (+15%) | *7%* |
| Low | 75 | (-10%) | *1%* |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 3 | 3 | 3 | 1 | 0 | 0 | 4 | 0 | 1 |

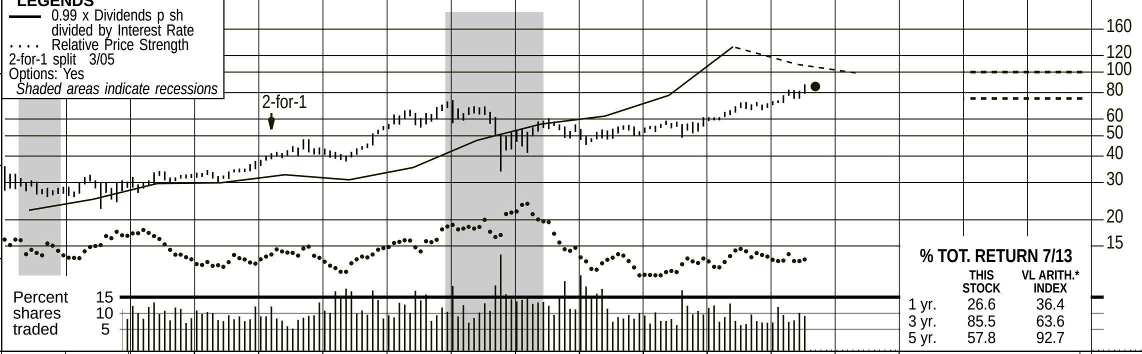
**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 342 | 333 | 371 |
| to Sell | 357 | 406 | 377 |
| Hld's(000) | 286506 | 291573 | 294719 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 32.7 | 34.0 | 38.1 | 48.1 | 55.6 | 72.8 | 73.8 | 60.6 | 56.3 | 61.2 | 72.2 | 88.4 |
| Low: | 22.5 | 26.8 | 30.1 | 35.9 | 37.8 | 53.7 | 33.8 | 41.5 | 45.3 | 49.0 | 58.6 | 69.8 |

Target Price Range
2016 2017 2018

**LEGENDS**
— 0.99 x Dividends p sh divided by Interest Rate
. . . . Relative Price Strength
2-for-1 split 3/05
Options: Yes
*Shaded areas indicate recessions*



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 26.6 | 36.4 |
| 3 yr. | 85.5 | 63.6 |
| 5 yr. | 57.8 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.52 | 18.43 | 18.03 | 20.15 | 24.10 | 22.74 | 26.13 | 28.27 | 30.00 | 38.75 | 37.47 | 40.13 | 37.82 | 36.39 | 36.88 | 33.62 | **34.15** | **35.00** | **Revenues per sh** | **38.00** |
| 4.62 | 5.39 | 4.86 | 4.94 | 5.02 | 4.51 | 5.36 | 5.60 | 6.18 | 6.77 | 6.85 | 8.03 | 8.75 | 9.62 | 9.29 | 8.69 | **10.10** | **10.60** | **"Cash Flow" per sh** | **12.25** |
| 1.79 | 1.93 | 2.04 | 2.07 | 2.31 | 2.01 | 2.45 | 2.46 | 2.32 | 3.23 | 3.27 | 4.07 | 3.97 | 4.74 | 4.82 | 4.56 | **4.95** | **5.25** | **Earnings per sh** A | **6.50** |
| .96 | 1.00 | 1.04 | 1.08 | 1.12 | 1.16 | 1.20 | 1.30 | 1.42 | 1.50 | 1.64 | 1.78 | 1.89 | 2.00 | 2.20 | 2.40 | **2.64** | **2.88** | **Div'd Decl'd per sh** B ■ † | **3.60** |
| 1.52 | 1.71 | 2.41 | 3.70 | 3.28 | 3.44 | 3.75 | 3.75 | 4.09 | 9.22 | 12.32 | 12.80 | 14.52 | 13.89 | 15.93 | 22.31 | **12.45** | **13.00** | **Cap'l Spending per sh** | **10.25** |
| 13.32 | 14.18 | 15.04 | 15.91 | 17.10 | 17.48 | 18.91 | 20.25 | 21.52 | 24.49 | 26.35 | 28.57 | 31.35 | 34.36 | 35.92 | 37.90 | **40.50** | **43.35** | **Book Value per sh** C | **52.75** |
| 363.63 | 361.42 | 357.11 | 351.53 | 351.71 | 365.51 | 368.53 | 372.24 | 394.85 | 405.40 | 407.35 | 408.92 | 413.62 | 420.86 | 416.00 | 424.00 | **429.00** | **434.00** | **Common Shs Outst'g** D | **455.00** |
| 13.5 | 16.2 | 13.0 | 12.8 | 12.5 | 14.2 | 12.6 | 13.6 | 17.9 | 13.7 | 18.9 | 14.5 | 13.4 | 10.8 | 11.5 | 14.4 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | **13.5** |
| .78 | .84 | .74 | .83 | .64 | .78 | .72 | .72 | .95 | .74 | 1.00 | .87 | .89 | .69 | .72 | .92 | ***Value Line*** | | **Relative P/E Ratio** | **.90** |
| 4.0% | 3.2% | 3.9% | 4.1% | 3.9% | 4.1% | 3.9% | 3.9% | 3.4% | 3.4% | 2.7% | 3.0% | 3.5% | 3.9% | 4.0% | 3.6% | ***estimates*** | | **Avg Ann'l Div'd Yield** | **4.1%** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $28232 mill. **Due in 5 Yrs** $11978 mill.
**LT Debt** $23514 mill. **LT Interest** $1000 mill.

(LT interest earned: 3.3x)

**Pension Assets-12/12** $3.39 bill. **Oblig.** $2.37 bill.

**Pfd Stock** None

**Common Stock** 424,662,329 shs.

**MARKET CAP: $36 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9630.0 | 10522 | 11846 | 15710 | 15263 | 16410 | 15643 | 15317 | 15341 | 14256 | **14650** | **15200** | **Revenues ($mill)** | **17250** |
| 883.4 | 887.0 | 901.0 | 1281.0 | 1312.0 | 1639.0 | 1615.0 | 1957.0 | 2021.0 | 1911.0 | **2125** | **2295** | **Net Profit ($mill)** | **2960** |
| 29.4% | 23.1% | 23.8% | 23.7% | 21.9% | 21.5% | 16.8% | 21.4% | 22.4% | 26.6% | **23.0%** | **23.0%** | **Income Tax Rate** | **25.0%** |
| - - | 4.2% | 5.4% | 3.8% | 5.7% | 6.6% | 7.9% | 4.4% | 4.4% | 10.8% | **9.0%** | **9.0%** | **AFUDC % to Net Profit** | **7.0%** |
| 55.6% | 51.6% | 48.6% | 49.1% | 51.2% | 54.2% | 55.7% | 55.5% | 58.2% | 59.1% | **59.0%** | **57.5%** | **Long-Term Debt Ratio** | **52.5%** |
| 44.4% | 48.4% | 51.4% | 50.9% | 48.8% | 45.8% | 44.3% | 44.5% | 41.8% | 40.9% | **41.0%** | **42.5%** | **Common Equity Ratio** | **47.5%** |
| 15695 | 15564 | 16538 | 19521 | 22015 | 25514 | 29267 | 32474 | 35753 | 39245 | **42325** | **44275** | **Total Capital ($mill)** | **50500** |
| 20297 | 21226 | 22463 | 24499 | 28652 | 32411 | 36078 | 39075 | 42490 | 49413 | **52550** | **55925** | **Net Plant ($mill)** | **62100** |
| 6.7% | 7.0% | 6.9% | 8.0% | 7.5% | 7.9% | 6.9% | 7.4% | 7.0% | 6.2% | **6.0%** | **6.5%** | **Return on Total Cap'l** | **7.0%** |
| 12.7% | 11.8% | 10.6% | 12.9% | 12.2% | 14.0% | 12.5% | 13.5% | 13.5% | 11.9% | **12.0%** | **12.0%** | **Return on Shr. Equity** | **12.5%** |
| 12.5% | 11.8% | 10.6% | 12.9% | 12.2% | 14.0% | 12.5% | 13.5% | 13.5% | 11.9% | **12.0%** | **12.0%** | **Return on Com Equity** E | **12.5%** |
| 6.4% | 5.6% | 4.2% | 6.9% | 6.1% | 7.9% | 6.5% | 7.8% | 7.4% | 5.6% | **6.0%** | **5.5%** | **Retained to Com Eq** | **5.5%** |
| 50% | 53% | 60% | 46% | 50% | 44% | 47% | 42% | 46% | 53% | **53%** | **54%** | **All Div'ds to Net Prof** | **55%** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.2 | -1.4 | -1.4 |
| Avg. Indust. Use (MWH) | 348 | 343 | 336 |
| Avg. Indust. Revs. per KWH (¢) | 6.85 | 7.40 | 6.87 |
| Capacity at Peak (Mw) | 25800 | 26538 | 26020 |
| Peak Load, Summer (Mw) | 22256 | 21619 | 21440 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.6 | +.6 | +.7 |
| Fixed Charge Cov. (%) | 315 | 311 | 278 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 5.0% | - - | *1.0%* |
| "Cash Flow" | 6.5% | 7.0% | *5.0%* |
| Earnings | 8.5% | 10.0% | *5.5%* |
| Dividends | 7.0% | 7.5% | *8.5%* |
| Book Value | 8.0% | 8.5% | *6.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 3622 | 3591 | 4691 | 3413 | 15317 |
| **2011** | 3134 | 3961 | 4382 | 3864 | 15341 |
| **2012** | 3371 | 3667 | 3843 | 3375 | 14256 |
| **2013** | 3279 | 3833 | ***4200*** | ***3338*** | ***14650*** |
| **2014** | ***3450*** | ***3950*** | ***4350*** | ***3450*** | ***15200*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1.36 | 1.01 | 1.74 | .63 | 4.74 |
| **2011** | .64 | 1.38 | 1.20 | 1.61 | 4.82 |
| **2012** | 1.11 | 1.45 | .98 | 1.02 | 4.56 |
| **2013** | 1.00 | 1.44 | ***1.40*** | ***1.11*** | ***4.95*** |
| **2014** | ***1.10*** | ***1.50*** | ***1.50*** | ***1.15*** | ***5.25*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .473 | .473 | .473 | .473 | 1.89 |
| **2010** | .50 | .50 | .50 | .50 | 2.00 |
| **2011** | .55 | .55 | .55 | .55 | 2.20 |
| **2012** | .60 | .60 | .60 | .60 | 2.40 |
| **2013** | .66 | .66 | | | |

**BUSINESS:** NextEra Energy, Inc. (formerly FPL Group, Inc.) is a holding company for Florida Power & Light (FPL), which provides electricity to 4.6 million customers in a 27,650-sq.-mi. area in eastern & southern Florida. NextEra Energy Resources is a nonregulated power generator with nuclear, gas, & wind ownership. Revenue breakdown: residential, 56%; commercial, 41%; industrial & other, 3%. Generating sources: gas, 73%; nuclear, 15%; coal, 4%; oil, 1%; purchased, 7%. Fuel costs: 36% of revs. '12 reported deprec. rates: FPL, 3.3%; NextEra, 4.1%. Has 14,800 employees. Chairman: Lewis Hay, III. President and CEO: James L. Robo. Inc.: Florida. Address: 700 Universe Blvd., Juno Beach, FL 33408. Tel.: 561-694-4000. Internet: www.nexteraenergy.com.

**NextEra Energy is having a good year.** Management expects 2013 earnings to wind up in the upper half of the company's targeted range of $4.70-$5.00 a share. Most of the profit growth is coming from the utility, Florida Power & Light. FPL was granted a $350 million rate increase in early 2013, and received additional rate relief in April when a project to modernize a gas plant was completed (ahead of schedule and below budget). Modest customer growth and a pickup in the service area's economy are helping, too. On the nonregulated side, NextEra is benefiting from the additions of wind projects, with more growth likely to come. In the first half of 2013, the company signed agreements for about 975 megawatts of wind capacity. The stock has risen more than 20% so far in 2013. A 10% dividend increase in the first quarter helped in this regard.

**We expect additional profit growth in 2014.** Another project to modernize a gas plant is scheduled for completion in June, which will provide more rate relief for FPL. Further growth in renewable energy is probable, as well. We have raised our earnings forecast by a nickel a share, to $5.25, which is within the company's guidance of $5.05-$5.45. Note that mark-to-market accounting gains or losses can affect NextEra's earnings. We include them in our presentation because they are an ongoing part of quarterly results.

**NextEra plans a major investment in a natural gas pipeline that will serve Florida.** The company plans to spend $1.55 billion (in a joint venture with Spectra Energy) to build a gas pipeline from Alabama to the Sunshine State. NextEra should be able to earn a healthy, federally regulated return on its investment. State and federal approvals are needed before construction can begin. The target for completion is May of 2017.

**Is a spinoff in NextEra's future?** Management is considering the spinoff of the company's contracted renewable assets into a separate entity. Such a move might well enhance shareholder value.

**NextEra stock is best suited for investors who seek dividend growth.** The trade-off is that the yield is on the low side for a utility. Total return potential to 2016-2018 is low.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Diluted EPS. Excl. nonrecurring gain (losses): '00, (5¢); '02, (60¢); '03, 5¢; '11, (24¢); '13, (81¢); gain on disc. ops.: '13, 44¢. '11 EPS don't add due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in mid-Mar., mid-June, mid-Sept., & mid-Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '12: $4.89/sh. **(D)** In millions, adj. for stock split. **(E)** Rate allowed on com. eq. in '13: 9.5%-11.5%; earned on avg. com. eq., '12: 12.4%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 75 |
| **Earnings Predictability** | 80 |

# NORTHEAST UTILITIES NYSE-NU

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|---|
| 43.49 | 16.8 | (Trailing: 17.6<br>Median: 17.0) | 0.95 | 3.5% |

VALUE LINE

| | | |
|---|---|---|
| **TIMELINESS** | 2 | Raised 7/12/13 |
| **SAFETY** | 2 | Raised 5/25/12 |
| TECHNICAL | 4 | Lowered 8/23/13 |

**BETA** .75 (1.00 = Market)

## 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+15%) | 7% |
| Low | 40 | (-10%) | 2% |

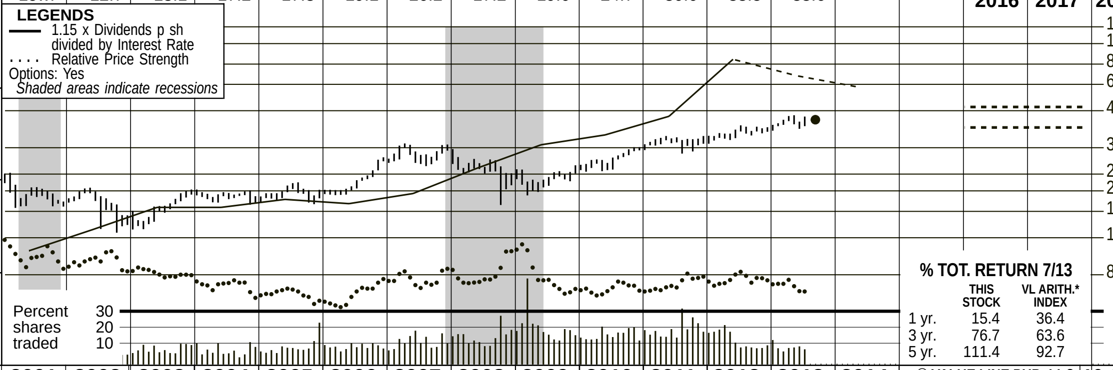
### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| to Sell | 0 | 2 | 1 | 1 | 0 | 0 | 2 | 0 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 189 | 212 | 208 |
| to Sell | 178 | 170 | 166 |
| Hld's(000) | 199126 | 204838 | 207192 |

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 20.7 | 20.3 | 20.3 | 22.0 | 28.9 | 33.6 | 31.6 | 26.5 | 32.2 | 36.5 | 40.9 | 45.7 |
| Low: | 12.7 | 13.1 | 17.2 | 17.3 | 19.1 | 26.2 | 17.2 | 19.0 | 24.7 | 30.0 | 33.5 | 38.6 |



**Target Price Range**

2016 | 2017 | 2018

**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.4 | 36.4 |
| 3 yr. | 76.7 | 63.6 |
| 5 yr. | 111.4 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.46 | 28.77 | 33.91 | 40.86 | 52.82 | 40.89 | 47.53 | 51.82 | 41.85 | 44.64 | 37.27 | 37.22 | 30.97 | 27.76 | 25.21 | 19.98 | 23.50 | 24.20 | Revenues per sh | 26.25 |
| 2.68 | 3.73 | 5.68 | 3.39 | 10.48 | 6.32 | 5.80 | 5.00 | 5.46 | 3.69 | 4.82 | 6.16 | 4.96 | 5.68 | 4.88 | 4.03 | 5.35 | 5.70 | "Cash Flow" per sh | 6.75 |
| d1.05 | d.36 | d1.14 | d.20 | 1.37 | 1.08 | 1.24 | .91 | .98 | .82 | 1.59 | 1.86 | 1.91 | 2.10 | 2.22 | 1.89 | 2.55 | 2.75 | Earnings per sh A | 3.25 |
| .25 | - - | .10 | .40 | .45 | .53 | .58 | .63 | .68 | .73 | .78 | .83 | .95 | 1.03 | 1.10 | 1.32 | 1.47 | 1.56 | Div'd Decl'd per sh B ■ | 1.80 |
| 1.85 | 1.79 | 2.50 | 2.88 | 3.40 | 3.86 | 4.31 | 4.85 | 5.89 | 5.49 | 7.14 | 8.06 | 5.17 | 5.41 | 6.08 | 4.69 | 5.15 | 5.45 | Cap'l Spending per sh | 4.75 |
| 16.34 | 15.63 | 15.80 | 15.43 | 16.27 | 17.33 | 17.73 | 17.80 | 18.46 | 18.14 | 18.65 | 19.38 | 20.37 | 21.60 | 22.65 | 29.41 | 29.80 | 30.90 | Book Value per sh C | 34.75 |
| 130.18 | 130.95 | 131.87 | 143.82 | 130.13 | 127.56 | 127.70 | 129.03 | 131.59 | 154.23 | 156.22 | 155.83 | 175.62 | 176.45 | 177.16 | 314.05 | 315.00 | 316.00 | Common Shs Outst'g D | 319.00 |
| - - | - - | - - | - - | 14.1 | 16.1 | 13.4 | 20.8 | 19.8 | 27.1 | 18.7 | 13.7 | 12.0 | 13.4 | 15.4 | 19.9 | Bold figures are Value Line estimates | | Avg Ann'l P/E Ratio | 14.0 |
| - - | - - | - - | - - | .72 | .88 | .76 | 1.10 | 1.05 | 1.46 | .99 | .82 | .80 | .85 | .97 | 1.27 | | | Relative P/E Ratio | .95 |
| 2.4% | - - | .6% | 1.9% | 2.3% | 3.0% | 3.5% | 3.3% | 3.5% | 3.3% | 2.6% | 3.2% | 4.2% | 3.6% | 3.2% | 3.5% | | | Avg Ann'l Div'd Yield | 4.0% |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6069.2 | 6686.7 | 5507.3 | 6884.4 | 5822.2 | 5800.1 | 5439.4 | 4898.2 | 4465.7 | 6273.8 | 7400 | 7650 | Revenues ($mill) | 8400 |
| 162.7 | 122.1 | 128.5 | 126.2 | 251.5 | 296.2 | 335.6 | 377.8 | 400.3 | 533.0 | 810 | 880 | Net Profit ($mill) | 1060 |
| 32.1% | 29.8% | 30.8% | - - | 30.3% | 29.7% | 34.9% | 36.6% | 29.9% | 34.0% | 35.0% | 35.0% | Income Tax Rate | 35.0% |
| 7.1% | 6.8% | 17.4% | 21.5% | 13.9% | 15.8% | 4.6% | 7.1% | 8.6% | 2.3% | 4.0% | 5.0% | AFUDC % to Net Profit | 4.0% |
| 63.9% | 64.2% | 63.2% | 58.7% | 59.2% | 60.4% | 57.2% | 55.1% | 53.4% | 43.7% | 45.5% | 45.5% | Long-Term Debt Ratio | 46.0% |
| 34.3% | 34.0% | 35.1% | 39.7% | 39.2% | 38.1% | 41.5% | 43.6% | 45.3% | 55.4% | 53.5% | 53.5% | Common Equity Ratio | 53.0% |
| 6591.6 | 6749.4 | 6923.2 | 7052.0 | 7431.1 | 7926.2 | 8629.5 | 8741.8 | 8856.0 | 16675 | 17475 | 18275 | Total Capital ($mill) | 21000 |
| 5429.9 | 5864.2 | 6417.2 | 6242.2 | 7229.9 | 8207.9 | 8840.0 | 9567.7 | 10403 | 16605 | 17500 | 18450 | Net Plant ($mill) | 20600 |
| 4.2% | 2.8% | 3.5% | 2.9% | 5.0% | 5.4% | 5.4% | 5.8% | 5.9% | 4.2% | 5.5% | 6.0% | Return on Total Cap'l | 6.0% |
| 6.8% | 5.1% | 5.0% | 4.3% | 8.3% | 9.4% | 9.1% | 9.6% | 9.7% | 5.7% | 8.5% | 9.0% | Return on Shr. Equity | 9.5% |
| 6.9% | 5.1% | 5.1% | 4.3% | 8.4% | 9.6% | 9.2% | 9.8% | 9.8% | 5.7% | 8.5% | 9.0% | Return on Com Equity E | 9.5% |
| 3.7% | 1.6% | 1.5% | .3% | 4.3% | 5.3% | 4.7% | 5.0% | 5.0% | 1.6% | 3.5% | 4.0% | Retained to Com Eq | 4.5% |
| 48% | 70% | 72% | 94% | 50% | 45% | 50% | 49% | 50% | 72% | 58% | 57% | All Div'ds to Net Prof | 55% |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $9265.5 mill. **Due in 5 Yrs** $3588.6 mill.
**LT Debt** $7031.2 mill. **LT Interest** $309.4 mill.
Incl. $19.6 mill. of rate reduction bonds.
(LT interest earned: 3.8x)
**Leases, Uncapitalized** Annual rentals $22.4 mill.
**Pension Assets-12/12** $3.41 bill. **Oblig.** $5.02 bill.
**Pfd Stock** $155.6 mill. **Pfd Div'd** $7.6 mill.
Incl. 2,324,000 shs $1.90-$3.28 rates ($50 par) not subject to mandatory redemption.
**Common Stock** 314,621,345 shs.
**as of 4/30/13**
**MARKET CAP: $14 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +1.7 | -1.2 | +47.0 |
| Avg. Indust. Use (MWH) | 627 | 624 | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.5 | +.4 | +59.8 |
| Fixed Charge Cov. (%) | 284 | 291 | 320 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -6.0% | -10.0% | 1.5% |
| "Cash Flow" | -3.0% | 1.0% | 5.5% |
| Earnings | 10.5% | 13.0% | 8.0% |
| Dividends | 9.5% | 9.5% | 8.0% |
| Book Value | 4.0% | 6.0% | 6.0% |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 1340 | 1111 | 1243 | 1204 | 4898.2 |
| 2011 | 1235 | 1048 | 1115 | 1068 | 4465.7 |
| 2012 | 1100 | 1629 | 1861 | 1684 | 6273.8 |
| 2013 | 1995 | 1636 | 2019 | 1750 | 7400 |
| 2014 | 2075 | 1700 | 2075 | 1800 | 7650 |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .49 | .41 | .57 | .64 | 2.10 |
| 2011 | .64 | .44 | .51 | .64 | 2.22 |
| 2012 | .56 | .15 | .66 | .55 | 1.89 |
| 2013 | .72 | .54 | .74 | .55 | 2.55 |
| 2014 | .76 | .61 | .77 | .61 | 2.75 |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .2375 | .2375 | .2375 | .2375 | .95 |
| 2010 | .25625 | .25625 | .25625 | .25625 | 1.02 |
| 2011 | .275 | .275 | .275 | .275 | 1.10 |
| 2012 | .294 | .343 | .343 | .343 | 1.32 |
| 2013 | .3675 | .3675 | | | |

**BUSINESS:** Northeast Utilities is the parent of utilities that have 3.1 mill. elec., 487,000 gas customers. Connecticut Light & Power (CL&P) serves most of CT; Public Service Co. of New Hampshire (PSNH) supplies power to three fourths of NH's population; Western Massachusetts Electric Co. (WMECO) serves western MA; NSTAR supplies power to parts of eastern MA & gas to central & eastern MA. Acq'd NSTAR 4/12. Elec. rev. breakdown: res'l, 53%; comm'l, 30%; ind'l, 6%; other, 11%. Generating sources not avail. Fuel costs: 33% of revs. '12 reported depr. rates: 2.5%-3.3%. Has 8,700 empls. Chairman: Charles W. Shivery. Pres. & CEO: Thomas J. May. Inc.: MA. Address: One Federal St., Building 111-4, Springfield, MA 01105. Tel.: 413-785-5871. Internet: www.nu.com.

**Northeast Utilities is on track to post much higher earnings this year.** The comparison isn't exactly apples to apples, since the company booked significant expenses associated with its merger with NSTAR in 2012, but the transaction has worked out well, so far. NU is on track to achieve (or beat) its target of a 3% reduction in operating and maintenance costs. The company is benefiting from lower interest rates, too—in fact, its interest payments on almost $2 billion of debt that it issued since the merger closed are *lower* than those on over $900 million of borrowings that it retired. Furthermore, NU's significant transmission investment is boosting the company's profits, especially since its allowed return on equity for transmission is well above its allowed ROE for the rest of its business. Finally, NU has benefited from more favorable weather patterns this year. The winter returned to normal after an unusually mild 2012, and a hot July has prompted us to raise our 2013 earnings estimate by a nickel a share, to $2.55. This is within management's targeted range of $2.45-$2.60.

**We expect further bottom-line growth in 2014, mainly due to additional transmission investment.** Also, the service area's economy is showing signs of improvement. We have raised our estimate by $0.05 a share, to $2.75.

**Investors should be aware of some threats to the company's allowed ROEs.** The Federal Energy Regulatory Commission is examining NU's allowed ROEs after complaints from some affected parties in New England. This matter probably won't be resolved until mid- to late 2014. Next year, Connecticut Light & Power is required to file a rate case, so a cut in its allowed ROE of 9.4% is possible. We are not assuming any change in allowed ROEs in our estimates and projections, but if such a reduction occurs, it wouldn't affect earnings until 2015.

**This timely stock has a dividend yield that is slightly below average for a utility.** With the recent price near the midpoint of our 2016-2018 Target Price Range, total return potential is low, despite our expectation of healthy dividend growth.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '02, 10¢; '03, (32¢); '04, (7¢); '05, ($1.36); '08, (19¢); '10, 9¢. '10 & '11 EPS don't add due to rounding, '12 due to chg. in shs. Next earnings report due early Nov. **(B)** Div'ds historically paid late Mar., June, Sept., & Dec. ■ Div'd reinvestment plan avail. **(C)** Incl. def'd chgs. In '12: $27.55/sh. **(D)** In mill. **(E)** Rate allowed on com. eq. in MA: '11, 9.6%; in CT: (elec.) '10, 9.4% (gas) '11, 8.83%; in NH: '10, 9.67%; earn. on avg. com. eq., '12: 7.3%. Reg. Clim.: CT, Below Avg.; NH, Avg.; MA, Above Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 85 |
| **Earnings Predictability** | 65 |

# NV ENERGY, INC. NYSE-NVE

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 23.65 | 18.2 (Trailing: 17.0)<br>(Median: 17.0) | 1.01 | 3.3% | |

**TIMELINESS** – Suspended 6/7/13

**SAFETY** 3 Raised 2/10/06

TECHNICAL – Suspended 6/7/13

**BETA** .85 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (+25%) | *9%* |
| Low | 19 | (-20%) | *-1%* |

### Insider Decisions

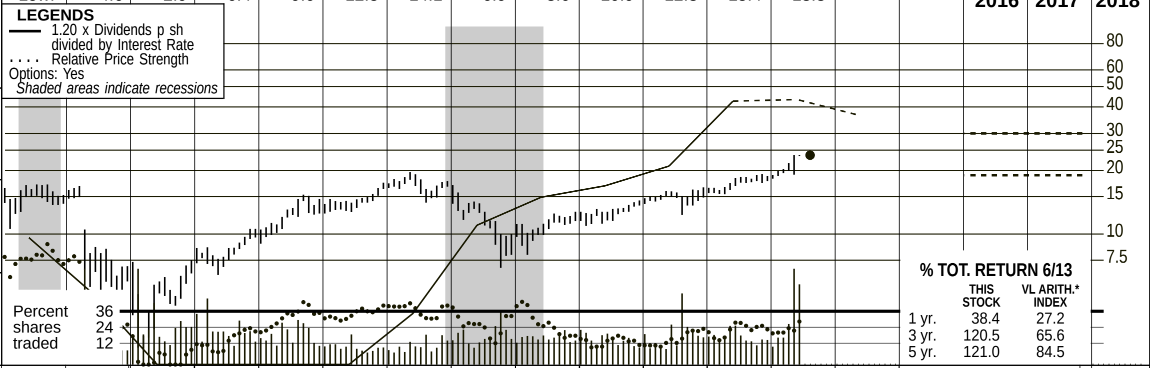
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 148 | 134 | 150 |
| to Sell | 118 | 136 | 116 |
| Hld's(000) | 200667 | 203066 | 202006 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 16.8 | 7.5 | 10.6 | 15.4 | 17.5 | 19.6 | 17.0 | 12.8 | 14.4 | 16.6 | 19.2 | 23.7 |
| Low: | 4.6 | 2.9 | 6.4 | 9.0 | 12.5 | 14.1 | 6.9 | 8.0 | 10.9 | 12.3 | 15.4 | 18.3 |

**Target Price Range**
2016 | 2017 | 2018



**LEGENDS**
— 1.20 x Dividends p sh divided by Interest Rate
. . . . Relative Price Strength
Options: Yes
*Shaded areas indicate recessions*

**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 38.4 | 27.2 |
| 3 yr. | 120.5 | 65.6 |
| 5 yr. | 121.0 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.86 | 17.04 | 16.69 | 29.75 | 44.94 | 29.28 | 23.79 | 24.04 | 15.09 | 15.18 | 15.41 | 15.06 | 15.27 | 13.94 | 12.47 | 12.67 | ***12.55*** | ***13.00*** | **Revenues per sh** | ***14.25*** |
| 3.04 | 3.12 | 2.10 | 1.45 | 1.94 | d1.27 | 2.75 | 4.65 | 2.42 | 2.89 | 2.91 | 2.02 | 3.45 | 3.48 | 2.91 | 3.67 | ***3.70*** | ***3.95*** | **"Cash Flow" per sh** | ***4.50*** |
| 1.65 | 1.64 | .83 | d.63 | .34 | d3.00 | d1.15 | .40 | .44 | 1.14 | .89 | .89 | .78 | .96 | .69 | 1.35 | ***1.30*** | ***1.35*** | **Earnings per sh A** | ***1.60*** |
| 1.60 | 1.45 | 1.17 | 1.00 | .40 | .20 | - - | - - | - - | - - | .16 | .34 | .41 | .45 | .49 | .64 | ***.76*** | ***.82*** | **Div'd Decl'd per sh B ■** | ***1.05*** |
| 4.41 | 6.31 | 3.95 | 4.58 | 3.28 | 3.91 | 3.19 | 3.68 | 3.42 | 4.46 | 5.12 | 4.54 | 3.69 | 2.79 | 2.68 | 2.16 | ***2.20*** | ***1.85*** | **Cap'l Spending per sh** | ***2.00*** |
| 16.54 | 16.86 | 18.83 | 17.33 | 16.60 | 12.99 | 12.24 | 12.76 | 10.26 | 11.86 | 12.82 | 13.36 | 13.73 | 14.24 | 14.43 | 15.13 | ***15.70*** | ***16.25*** | **Book Value per sh C** | ***18.00*** |
| 50.40 | 51.27 | 78.43 | 78.48 | 102.11 | 102.18 | 117.24 | 117.47 | 200.79 | 221.03 | 233.74 | 234.32 | 234.83 | 235.32 | 236.00 | 235.08 | ***235.00*** | ***235.00*** | **Common Shs Outst'g D** | ***235.00*** |
| 12.9 | 15.2 | 25.7 | - - | NMF | - - | - - | 20.9 | 27.5 | 12.6 | 19.1 | 13.3 | 13.9 | 13.2 | 21.7 | 12.8 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***14.5*** |
| .74 | .79 | 1.46 | - - | NMF | - - | - - | 1.10 | 1.46 | .68 | 1.01 | .80 | .93 | .84 | 1.36 | .82 | | | **Relative P/E Ratio** | ***.95*** |
| 7.5% | 5.8% | 5.5% | 6.5% | 2.7% | 2.2% | - - | - - | - - | - - | .9% | 2.9% | 3.8% | 3.6% | 3.3% | 3.7% | | | **Avg Ann'l Div'd Yield** | ***4.5%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $5022.6 mill. **Due in 5 Yrs** $1601.9 mill.
**LT Debt** $4541.2 mill. **LT Interest** $264.0 mill.
Incl. $44.3 mill. capitalized leases.
(LT interest earned: 2.7x)

**Leases, Uncapitalized** Annual rentals $17.4 mill.
**Pension Assets-12/12** $841.5 mill. **Oblig.** $935.5 mill.
**Pfd Stock** None

**Common Stock** 235,447,475 shs.
**as of 5/7/13**
**MARKET CAP: $5.6 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2789.2 | 2823.8 | 3030.2 | 3356.0 | 3601.0 | 3528.1 | 3585.8 | 3280.2 | 2943.3 | 2979.2 | ***2950*** | ***3050*** | **Revenues ($mill)** | ***3350*** |
| d129.4 | 75.3 | 86.2 | 238.9 | 197.3 | 208.9 | 182.9 | 227.0 | 163.4 | 321.9 | ***305*** | ***320*** | **Net Profit ($mill)** | ***380*** |
| - - | 34.5% | 33.4% | 34.1% | 30.7% | 31.3% | 29.2% | 33.4% | 34.7% | 34.1% | ***33.0%*** | ***33.0%*** | **Income Tax Rate** | ***33.0%*** |
| - - | 19.3% | 52.2% | 14.8% | 29.3% | 32.5% | 24.3% | 22.7% | 12.0% | 5.2% | ***4.0%*** | ***4.0%*** | **AFUDC % to Net Profit** | ***4.0%*** |
| 70.7% | 72.5% | 64.4% | 60.4% | 58.0% | 62.7% | 62.2% | 59.5% | 59.5% | 56.8% | ***55.0%*** | ***53.5%*** | **Long-Term Debt Ratio** | ***46.5%*** |
| 28.3% | 26.6% | 34.8% | 39.6% | 42.0% | 37.3% | 37.8% | 40.5% | 40.5% | 43.2% | ***45.0%*** | ***46.5%*** | **Common Equity Ratio** | ***53.5%*** |
| 5065.1 | 5629.9 | 5927.3 | 6623.8 | 7134.4 | 8398.2 | 8527.3 | 8274.9 | 8415.0 | 8227.2 | ***8155*** | ***8190*** | **Total Capital ($mill)** | ***7875*** |
| 4642.7 | 4926.9 | 5397.6 | 6087.0 | 7011.0 | 8310.3 | 8665.6 | 8929.7 | 9227.1 | 9426.0 | ***9525*** | ***9515*** | **Net Plant ($mill)** | ***9400*** |
| .4% | 4.1% | 4.0% | 5.8% | 4.7% | 4.3% | 4.1% | 4.8% | 3.7% | 5.7% | ***5.5%*** | ***5.5%*** | **Return on Total Cap'l** | ***6.5%*** |
| NMF | 4.9% | 4.1% | 9.1% | 6.6% | 6.7% | 5.7% | 6.8% | 4.8% | 9.1% | ***8.5%*** | ***8.5%*** | **Return on Shr. Equity** | ***9.0%*** |
| NMF | 4.8% | 4.0% | 9.0% | 6.6% | 6.7% | 5.7% | 6.8% | 4.8% | 9.1% | ***8.5%*** | ***8.5%*** | **Return on Com Equity E** | ***9.0%*** |
| NMF | 4.8% | 4.0% | 9.0% | 5.4% | 4.1% | 2.7% | 3.6% | 1.4% | 4.8% | ***3.5%*** | ***3.5%*** | **Retained to Com Eq** | ***3.0%*** |
| NMF | 5% | 5% | 1% | 18% | 38% | 53% | 47% | 71% | 47% | ***59%*** | ***60%*** | **All Div'ds to Net Prof** | ***65%*** |

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -1.4 | -1.9 | +3.6 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 7215 | 7052 | 7437 |
| Annual Load Factor (%) F | 43.0 | 44.7 | 44.2 |
| % Change Customers (yr-end) | +.3 | -2.8 | +.9 |
| Fixed Charge Cov. (%) | 181 | 181 | 256 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -9.5% | -3.0% | *1.5%* |
| "Cash Flow" | 17.0% | 4.0% | *5.0%* |
| Earnings | - - | 4.0% | *8.0%* |
| Dividends | - - | - - | *12.0%* |
| Book Value | -.5% | 4.5% | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 714.5 | 782.7 | 1128.0 | 655.0 | 3280.2 |
| **2011** | 641.0 | 674.9 | 1017.8 | 609.6 | 2943.3 |
| **2012** | 611.4 | 740.7 | 1026.5 | 600.6 | 2979.2 |
| **2013** | 584.2 | ***700*** | ***1050*** | ***615.8*** | ***2950*** |
| **2014** | ***625*** | ***725*** | ***1075*** | ***625*** | ***3050*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | d.01 | .16 | .75 | .06 | .96 |
| **2011** | .01 | .05 | .73 | d.11 | .69 |
| **2012** | .05 | .29 | .94 | .07 | 1.35 |
| **2013** | .09 | ***.25*** | ***.90*** | ***.06*** | ***1.30*** |
| **2014** | ***.10*** | ***.26*** | ***.92*** | ***.07*** | ***1.35*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .10 | .10 | .10 | .11 | .41 |
| **2010** | .11 | .11 | .11 | .12 | .45 |
| **2011** | .12 | .12 | .12 | .13 | .49 |
| **2012** | .13 | .17 | .17 | .17 | .64 |
| **2013** | .19 | .19 | | | |

**BUSINESS:** NV Energy, Inc. (formerly Sierra Pacific Resources) is a holding company formed through the 7/99 merger of Sierra Pacific (now NV Energy North) and Nevada Power (now NV Energy South). Sells electricity in west central & southern Nevada & eastern California; provides gas to Reno & Sparks, NV & environs. Customers: 1.2 mill. elec., 153,000 gas. Elec. rev. breakdown: res'l, 45%; comm'l, 25%; ind'l, 27%; other, 3%. Generating sources: gas, 59%; coal, 10%; purchased, 31%. Fuel costs: 38% of revs. '12 reported deprec. rates: South, 3.2%; North, 2.9%. Has 2,700 employees. Chairman: Philip G. Satre. President & CEO: Michael W. Yackira. Inc.: NV. Address: 6226 West Sahara Ave., Las Vegas, NV 89146. Tel.: 702-402-5000. Internet: www.nvenergy.com.

**NV Energy has agreed to be acquired by MidAmerican Energy,** a subsidiary of Berkshire Hathaway. NV Energy stockholders would receive $23.75 in cash for each of their shares. The offer is generous, at about 18 times earnings, and is 23% above the price of NV Energy stock before the deal was announced. The transaction requires the approval of NV Energy stockholders, the Public Utilities Commission of Nevada (PUCN), and the Federal Energy Regulatory Commission. The companies are targeting the first quarter of 2014 for completion of the deal, but this is an ambitious time frame. Due to the takeover agreement, we have suspended the Timeliness rank of NV Energy stock.

**We advise NV Energy stockholders to sell their shares on the open market.** The recent price is just slightly below the buyout price. Thus, NV Energy holders have little to gain by retaining their shares, and by selling, they avoid downside risk in case the deal falls through.

**NV Energy has filed with the PUCN for approval to merge its two utility subsidiaries into one entity.** The company is building a transmission line that will connect the two utilities. This move is unrelated to the MidAmerican takeover agreement. The company expects a decision by the end of November. If the merger is approved, the combined utility will file a general rate case on June 2, 2014.

**NV Energy North has filed a rate application.** The utility is seeking an electric rate *decrease* of $9.4 million (1.4%) and a gas tariff increase of $10.2 million (11.4%). The filing was required, and the company asked for lower electric rates because it has reallocated some debt between the electric and gas businesses, and has reduced operating and maintenance expenses. NV Energy requested allowed returns on equity of 10.4% (electric) and 10.35% (gas), on a 47% common-equity ratio. An order is expected in time for new tariffs to take effect at the start of 2014.

**Our earnings estimates require an explanation.** If the company books merger-related costs as incurred, we will *include* them in our presentation. The decline we estimate in 2013 stems from our assumption of a return to normal weather patterns after a hot summer in 2012.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. gains (losses) from disc. ops.: '00, 8¢; '01, 31¢; '03, (5¢); '04, (3¢); nonrec. gain (loss): '04, (21¢); '06, 20¢. '11 EPS don't add due to rounding. Next earnings report due early Nov. **(B)** Div'd reinstated 7/07. Div'ds historically paid mid-Mar., June, Sept., & Dec. ■ Div'd reinv. plan avail. **(C)** Incl. intang. In '12: $6.77/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. for NV Energy North in '08: 10.6%; NV Energy South in '12: 10%; earned on avg. com. eq., '12: 9.2%. Reg. Climate: Avg. **(F)** NV Energy South only.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 90 |
| **Earnings Predictability** | 60 |

# NORTHWESTERN NYSE-NWE

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|---|
| 43.21 | 16.6 | (Trailing: 17.6 Median: NMF) | 0.92 | 3.6% | VALUE LINE |

**TIMELINESS** 3 Raised 5/3/13

**SAFETY** 3 New 5/4/12

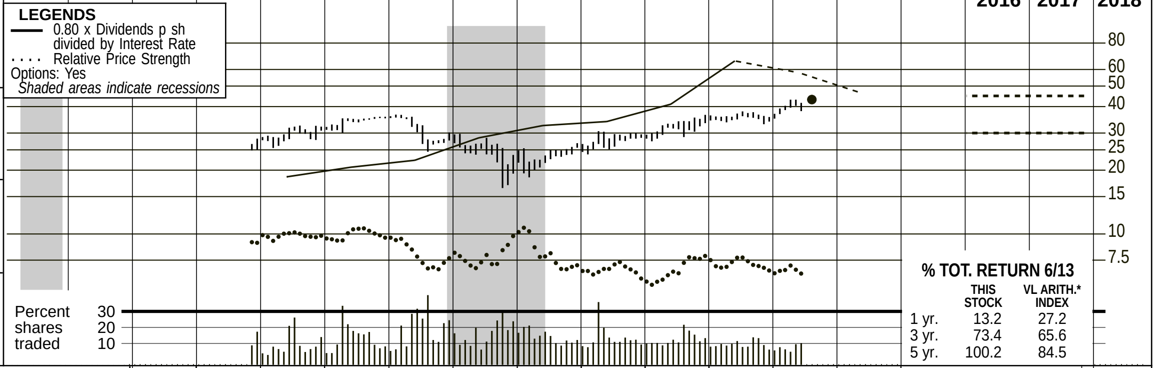
TECHNICAL 2 Raised 7/19/13

**BETA** .70 (1.00 = Market)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|
| High: | 28.2 | 32.5 | 35.8 | 36.7 | 29.7 | 26.8 | 30.6 | 36.6 | 38.0 | 43.5 |
| Low: | 24.8 | 25.5 | 30.1 | 24.5 | 16.5 | 18.5 | 23.8 | 27.4 | 33.0 | 35.1 |

**Target Price Range**

2016 | 2017 | 2018



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 13.2 | 27.2 |
| 3 yr. | 73.4 | 65.6 |
| 5 yr. | 100.2 | 84.5 |

## 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (+5%) | 5% |
| Low | 30 | (-30%) | -4% |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 88 | 79 | 79 |
| to Sell | 84 | 81 | 87 |
| Hld's(000) | 33742 | 33784 | 35117 |

NorthWestern Corporation filed for protection under Chapter 11 of the Federal Bankruptcy Code on September 14, 2003. On November 1, 2004, the company emerged from a bankruptcy reorganization. All old common shares were canceled and 35,500,000 new shares (along with 4,620,333 warrants) were issued. The stock initially traded on NASDAQ under the symbol NWEC and moved to the NYSE under the symbol NWE in May of 2008.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | 29.18 | 32.57 | 31.49 | 30.79 | 35.09 | 31.72 | 30.66 | 30.80 | 28.76 | *29.35* | *30.75* | Revenues per sh | *34.50* |
| - - | 3.20 | 4.00 | 3.62 | 3.70 | 4.40 | 4.62 | 4.76 | 5.42 | 5.18 | *5.55* | *5.70* | "Cash Flow" per sh | *6.50* |
| - - | d14.32 | 1.71 | 1.31 | 1.44 | 1.77 | 2.02 | 2.14 | 2.53 | 2.26 | *2.60* | *2.65* | Earnings per sh A | *3.00* |
| - - | - - | 1.00 | 1.24 | 1.28 | 1.32 | 1.34 | 1.36 | 1.44 | 1.48 | *1.52* | *1.56* | Div'd Decl'd per sh B ■ † | *1.80* |
| - - | 2.25 | 2.26 | 2.81 | 3.00 | 3.47 | 5.26 | 6.30 | 5.20 | 5.89 | *6.80* | *6.50* | Cap'l Spending per sh | *5.00* |
| - - | 19.92 | 20.60 | 20.65 | 21.12 | 21.25 | 21.86 | 22.64 | 23.68 | 25.09 | *26.65* | *27.95* | Book Value per sh C | *31.25* |
| - - | 35.60 | 35.79 | 35.97 | 38.97 | 35.93 | 36.00 | 36.23 | 36.28 | 37.22 | *38.30* | *39.00* | Common Shs Outst'g D | *39.00* |
| - - | - - | 17.1 | 26.0 | 21.7 | 13.9 | 11.5 | 12.9 | 12.6 | 15.7 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *12.5* |
| - - | - - | .91 | 1.40 | 1.15 | .84 | .77 | .82 | .79 | 1.00 | | | Relative P/E Ratio | *.85* |
| - - | - - | 3.4% | 3.6% | 4.1% | 5.4% | 5.7% | 4.9% | 4.5% | 4.2% | | | Avg Ann'l Div'd Yield | *4.8%* |
| - - | 1039.0 | 1165.8 | 1132.7 | 1200.1 | 1260.8 | 1141.9 | 1110.7 | 1117.3 | 1070.3 | *1125* | *1200* | Revenues ($mill) | *1350* |
| - - | 41.1 | 61.5 | 49.2 | 53.2 | 67.6 | 73.4 | 77.4 | 92.6 | 83.7 | *100* | *105* | Net Profit ($mill) | *115* |
| - - | - - | 38.5% | 40.3% | 37.8% | 37.3% | 17.2% | 25.0% | 9.8% | 9.6% | *12.0%* | *16.5%* | Income Tax Rate | *21.0%* |
| - - | 2.9% | 2.1% | 3.3% | 2.5% | 2.3% | 7.2% | 22.7% | 5.4% | 15.2% | *15.0%* | *10.0%* | AFUDC % to Net Profit | *4.0%* |
| - - | 51.8% | 44.3% | 49.9% | 50.1% | 46.8% | 56.4% | 57.2% | 52.2% | 53.8% | *51.5%* | *50.0%* | Long-Term Debt Ratio | *45.5%* |
| - - | 48.2% | 55.7% | 50.1% | 49.9% | 53.2% | 43.6% | 42.8% | 47.8% | 46.2% | *48.5%* | *50.0%* | Common Equity Ratio | *54.5%* |
| - - | 1472.9 | 1324.0 | 1482.2 | 1648.4 | 1434.3 | 1803.9 | 1916.4 | 1797.1 | 2020.7 | *2105* | *2175* | Total Capital ($mill) | *2250* |
| - - | 1379.1 | 1409.2 | 1491.9 | 1770.9 | 1839.7 | 1964.1 | 2118.0 | 2213.3 | 2435.6 | *2585* | *2720* | Net Plant ($mill) | *2950* |
| - - | 5.7% | 7.0% | 5.2% | 5.0% | 7.0% | 6.0% | 6.0% | 7.1% | 5.5% | *6.0%* | *6.0%* | Return on Total Cap'l | *6.5%* |
| - - | 5.8% | 8.3% | 6.6% | 6.5% | 8.9% | 9.3% | 9.4% | 10.8% | 9.0% | *9.5%* | *9.5%* | Return on Shr. Equity | *9.5%* |
| - - | 5.8% | 8.3% | 6.6% | 6.5% | 8.9% | 9.3% | 9.4% | 10.8% | 9.0% | *9.5%* | *9.5%* | Return on Com Equity E | *9.5%* |
| - - | 5.8% | 3.5% | .7% | .7% | 2.3% | 3.2% | 3.5% | 4.7% | 3.2% | *4.0%* | *4.0%* | Retained to Com Eq | *3.5%* |
| - - | - - | 58% | 90% | 89% | 74% | 66% | 63% | 56% | 65% | *58%* | *58%* | All Div'ds to Net Prof | *61%* |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1138.8 mill. **Due in 5 Yrs** $202.9 mill.
**LT Debt** $1086.2 mill. **LT Interest** $58.6 mill.
Incl. $31.1 mill. capitalized leases.
(LT interest earned: 2.5x)

**Leases, Uncapitalized** Annual rentals $1.8 mill.
**Pension Assets-12/12** $472.9 mill.
**Oblig.** $609.6 mill.
**Pfd Stock** None

**Common Stock** 37,884,938 shs.
**as of 4/19/13**
**MARKET CAP: $1.6 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -1.0 | +2.3 | +.3 |
| Avg. Indust. Use (MWH) | 38676 | 39347 | 38865 |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | NA | 2014 | 2108 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.7 | +.6 | +.8 |
| Fixed Charge Cov. (%) | 212 | 237 | 210 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | - - | -1.0% | *2.5%* |
| "Cash Flow" | - - | 6.5% | *4.0%* |
| Earnings | - - | 9.0% | *4.5%* |
| Dividends | - - | 4.0% | *4.0%* |
| Book Value | - - | 2.5% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 334.2 | 244.1 | 240.8 | 291.6 | 1110.7 |
| 2011 | 338.3 | 251.8 | 244.0 | 283.2 | 1117.3 |
| 2012 | 309.1 | 244.6 | 235.8 | 280.8 | 1070.3 |
| 2013 | 313.0 | 260.2 | *246.8* | *305* | *1125* |
| 2014 | *345* | *270* | *265* | *320* | *1200* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .79 | .32 | .40 | .63 | 2.14 |
| 2011 | .89 | .30 | .41 | .93 | 2.53 |
| 2012 | .88 | .31 | .30 | .78 | 2.26 |
| 2013 | 1.01 | .37 | *.42* | *.80* | *2.60* |
| 2014 | *.95* | *.38* | *.47* | *.85* | *2.65* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .335 | .335 | .335 | .335 | 1.34 |
| 2010 | .34 | .34 | .34 | .34 | 1.36 |
| 2011 | .36 | .36 | .36 | .36 | 1.44 |
| 2012 | .37 | .37 | .37 | .37 | 1.48 |
| 2013 | .38 | .38 | | | |

**BUSINESS:** NorthWestern Corporation (doing business as NorthWestern Energy) supplies electricity & gas in the Upper Midwest and Northwest, serving 404,000 electric customers in Montana and South Dakota and 270,000 gas customers in Montana (84% of gross margin), South Dakota (14%), and Nebraska (2%). Electric revenue breakdown: residential, 41%; commercial, 50%; industrial, 5%; other, 4%. Generating sources are not provided by company. Fuel costs: 41% of revenues. '12 reported depreciation rate: 3.3%. Has 1,400 employees. Chairman: Dr. E. Linn Draper Jr. President & CEO: Robert C. Rowe. Incorporated: Delaware. Address: 3010 West 69th Street, Sioux Falls, South Dakota 57108. Telephone: 605-978-2900. Internet: www.northwesternenergy.com.

**NorthWestern's gas rates were raised in Montana.** The state regulators approved a settlement calling for an increase in the utility's tariffs of $11.5 million, based on a 9.8% return on equity.

**Earnings are likely to make a strong recovery this year, followed by further improvement in 2014.** The aforementioned rate relief will help each year. Also, the first-quarter results benefited from more-favorable weather patterns. The service area's economy is growing moderately. Our 2013 estimate is at the top end of NorthWestern's targeted range of $2.45-$2.60 a share.

**The utility has completed a gas-fired peaking unit.** The 60-megawatt facility was built at a cost of $55 million, slightly below the original budget. NorthWestern will file a rate case in South Dakota in order to place the new unit in the rate base, but not before 2014. Separately, an electric rate case in Montana is also under consideration.

**The company is awaiting a ruling from the Federal Energy Regulatory Commission on a regulatory matter.** This concerns the allocation of costs of a 150-mw gas-fired plant between Montana customers and wholesale customers. NorthWestern believes that 20% of the costs should be allocated to its wholesale customers, but a FERC administrative law judge recommended a much smaller proportion. As a result, NorthWestern had to take a $0.12-a-share charge in the third quarter of 2012, which we *included* in our presentation. We aren't assuming any change, but if some or all of this charge is reversed, we would include this, as well.

**NorthWestern is issuing common stock.** The company has a $100 million program through which it may sell common equity from time to time. As of the end of the June quarter, NorthWestern had issued $72.3 million. The timing and amount of additional issuances are undetermined.

**This stock doesn't have a lot of appeal, even for income-oriented accounts.** The dividend yield is a cut below the utility average. With the recent price near the upper end of our 2016-2018 Target Price Range, total return potential is minuscule.

*Paul E. Debbas, CFA* *August 2, 2013*

**(A)** Diluted EPS. Excl. gain (loss) on disc. ops.: '05, (6¢); '06, 1¢; nonrec. gain: '12, 39¢ net. '12 EPS don't add due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in late Mar., June, Sept. & Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. def'd charges. In '12: $19.43/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in MT in '11 (elec.): 10.25%; in '13 (gas): 9.8%; in SD in '11: none spec.; in NE in '07: 10.4%; earned on avg. com. eq., '12: 9.8%. Regul. Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 90 |

# OGE ENERGY CORP. NYSE-OGE

**RECENT PRICE** 35.33 **P/E RATIO** 18.8 (Trailing: 20.7 Median: 14.0) **RELATIVE P/E RATIO** 1.07 **DIV'D YLD** 2.6% **VALUE LINE**

**TIMELINESS** 5 Lowered 9/13/13
**SAFETY** 2 Raised 7/1/05
TECHNICAL 2 Raised 9/20/13
**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 12.1 | 12.2 | 13.5 | 15.3 | 20.3 | 20.7 | 18.1 | 18.9 | 23.1 | 28.6 | 30.1 | 39.6 |
| Low: | 6.9 | 8.0 | 11.4 | 12.2 | 13.2 | 14.6 | 9.8 | 9.9 | 16.9 | 20.3 | 25.1 | 27.7 |

**2016-18 PROJECTIONS**

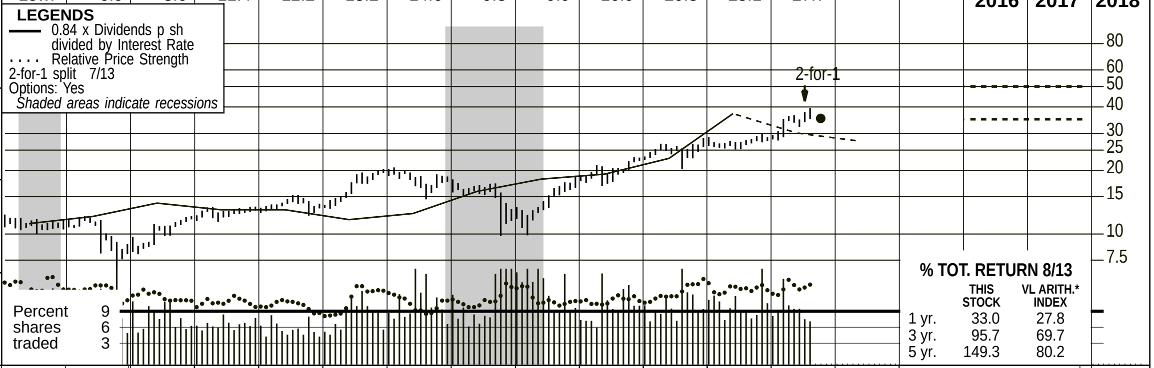
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+40%) | *12%* |
| Low | 35 | (Nil) | *3%* |

**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 153 | 138 | 148 |
| to Sell | 125 | 139 | 133 |
| Hld's(000) | 107578 | 111708 | 112658 |


**LEGENDS**
— 0.84 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 7/13
Options: Yes
*Shaded areas indicate recessions*

**Target Price Range**

| 2016 | 2017 | 2018 |
|---|---|---|

**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 33.0 | 27.8 |
| 3 yr. | 95.7 | 69.7 |
| 5 yr. | 149.3 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.11 | 10.01 | 13.95 | 21.17 | 20.40 | 19.26 | 21.62 | 27.37 | 32.83 | 21.96 | 20.68 | 21.77 | 14.79 | 19.04 | 19.96 | 18.58 | **15.10** | **12.75** | Revenues per sh | **14.25** |
| 1.69 | 1.95 | 2.03 | 2.07 | 1.81 | 1.87 | 1.82 | 1.87 | 1.94 | 2.23 | 2.39 | 2.40 | 2.69 | 3.01 | 3.31 | 3.69 | **3.45** | **3.35** | "Cash Flow" per sh | **3.75** |
| .81 | 1.02 | .97 | .95 | .65 | .72 | .87 | .89 | .92 | 1.23 | 1.32 | 1.25 | 1.33 | 1.50 | 1.73 | 1.79 | **1.80** | **2.00** | Earnings per sh A | **2.25** |
| .67 | .67 | .67 | .67 | .67 | .67 | .67 | .67 | .67 | .67 | .68 | .70 | .71 | .73 | .76 | .80 | **.86** | **.95** | Div'd Decl'd per sh B ■ | **1.25** |
| 1.01 | .93 | 1.16 | 1.15 | 1.44 | 1.49 | 1.04 | 1.51 | 1.65 | 2.67 | 3.04 | 4.01 | 4.37 | 4.36 | 6.48 | 5.85 | **4.15** | **2.70** | Cap'l Spending per sh | **1.75** |
| 6.10 | 6.46 | 6.55 | 6.83 | 6.67 | 6.27 | 6.87 | 7.14 | 7.59 | 8.79 | 9.16 | 10.14 | 10.52 | 11.73 | 13.06 | 14.00 | **14.95** | **16.00** | Book Value per sh C | **19.25** |
| 161.54 | 161.60 | 155.73 | 155.84 | 155.98 | 157.00 | 174.80 | 180.00 | 181.20 | 182.40 | 183.60 | 187.00 | 194.00 | 195.20 | 196.20 | 197.60 | **199.00** | **200.00** | Common Shs Outst'g D | **203.00** |
| 14.0 | 13.3 | 12.1 | 10.6 | 17.4 | 14.1 | 11.8 | 14.1 | 14.9 | 13.7 | 13.8 | 12.4 | 10.8 | 13.3 | 14.4 | 15.2 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | **18.5** |
| .81 | .69 | .69 | .69 | .89 | .77 | .67 | .74 | .79 | .74 | .73 | .75 | .72 | .85 | .90 | .97 | | | Relative P/E Ratio | **1.25** |
| 5.9% | 4.9% | 5.7% | 6.6% | 5.9% | 6.6% | 6.5% | 5.3% | 4.9% | 4.0% | 3.8% | 4.5% | 5.0% | 3.7% | 3.1% | 2.9% | | | Avg Ann'l Div'd Yield | **3.0%** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $2878.9 mill. **Due in 5 Yrs** $1264.5 mill.
**LT Debt** $2400.2 mill. **LT Interest** $138.5 mill.
(LT interest earned: 4.1x)

**Leases, Uncapitalized** Annual rentals $10.7 mill.

**Pension Assets-12/12** $626.0 mill. **Oblig.** $747.1 mill.

**Pfd Stock** None

**Common Stock** 198,353,947 shs. **as of 7/15/13**
**MARKET CAP: $7.0 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3779.0 | 4926.6 | 5948.2 | 4005.6 | 3797.6 | 4070.7 | 2869.7 | 3716.9 | 3915.9 | 3671.2 | **3000** | **2550** | Revenues ($mill) | **2900** |
| 141.8 | 157.8 | 166.1 | 226.1 | 244.2 | 231.4 | 258.3 | 295.3 | 342.9 | 355.0 | **360** | **400** | Net Profit ($mill) | **475** |
| 35.4% | 34.5% | 30.2% | 34.8% | 32.3% | 30.4% | 31.7% | 34.9% | 30.7% | 26.0% | **29.0%** | **28.0%** | Income Tax Rate | **28.0%** |
| .4% | 1.1% | 1.3% | 3.8% | 1.6% | 1.7% | 9.1% | 5.7% | 9.0% | 2.7% | **3.0%** | **3.0%** | AFUDC % to Net Profit | **2.0%** |
| 54.4% | 52.6% | 49.5% | 45.6% | 44.4% | 53.3% | 50.6% | 50.8% | 51.6% | 50.7% | **44.5%** | **44.5%** | Long-Term Debt Ratio | **43.5%** |
| 45.6% | 47.4% | 50.5% | 54.4% | 55.6% | 46.7% | 49.4% | 49.2% | 48.4% | 49.3% | **55.5%** | **55.5%** | Common Equity Ratio | **56.5%** |
| 2637.7 | 2709.7 | 2726.6 | 2950.1 | 3025.5 | 4058.6 | 4129.7 | 4652.5 | 5300.4 | 5615.8 | **5370** | **5745** | Total Capital ($mill) | **6900** |
| 3309.5 | 3581.0 | 3567.4 | 3867.5 | 4246.3 | 5249.8 | 5911.6 | 6464.4 | 7474.0 | 8344.8 | **6950** | **7215** | Net Plant ($mill) | **7450** |
| 7.1% | 7.4% | 7.6% | 9.1% | 9.5% | 7.0% | 7.9% | 7.8% | 7.8% | 7.7% | **8.0%** | **8.0%** | Return on Total Cap'l | **8.0%** |
| 11.8% | 12.3% | 12.1% | 14.1% | 14.5% | 12.2% | 12.7% | 12.9% | 13.4% | 12.8% | **12.0%** | **12.5%** | Return on Shr. Equity | **12.0%** |
| 11.8% | 12.3% | 12.1% | 14.1% | 14.5% | 12.2% | 12.7% | 12.9% | 13.4% | 12.8% | **12.0%** | **12.5%** | Return on Com Equity E | **12.0%** |
| 3.6% | 3.4% | 3.4% | 6.6% | 7.1% | 5.4% | 6.0% | 6.7% | 7.7% | 7.2% | **6.5%** | **6.5%** | Retained to Com Eq | **5.5%** |
| 70% | 73% | 72% | 53% | 51% | 55% | 53% | 48% | 43% | 44% | **47%** | **47%** | All Div'ds to Net Prof | **53%** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +6.6 | +3.4 | -1.8 |
| Avg. Indust. Use (MWH) | 729 | 752 | 776 |
| Avg. Indust. Revs. per KWH (¢) | 5.44 | 5.37 | 5.07 |
| Capacity at Peak (Mw) | 7029 | 7115 | 7139 |
| Peak Load, Summer (Mw) | 6626 | 7057 | 7000 |
| Annual Load Factor (%) | 53.8 | 52.2 | 51.6 |
| % Change Customers (yr-end) | +.8 | +.8 | +1.1 |
| Fixed Charge Cov. (%) | 409 | 427 | 404 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -.5% | -5.5% | *NMF* |
| "Cash Flow" | 5.5% | 9.0% | *2.0%* |
| Earnings | 8.0% | 7.5% | *5.0%* |
| Dividends | 1.5% | 2.5% | *8.5%* |
| Book Value | 7.0% | 8.5% | *7.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 875.8 | 887.2 | 1125.4 | 828.5 | 3716.9 |
| 2011 | 840.5 | 978.1 | 1212.1 | 885.2 | 3915.9 |
| 2012 | 840.7 | 855.0 | 1113.4 | 862.1 | 3671.2 |
| 2013 | 901.4 | 734.2 | **850** | **514.4** | **3000** |
| 2014 | **500** | **650** | **875** | **525** | **2550** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .13 | .39 | .83 | .15 | 1.50 |
| 2011 | .13 | .52 | .90 | .18 | 1.73 |
| 2012 | .19 | .47 | .94 | .19 | 1.79 |
| 2013 | .12 | .46 | **1.02** | **.20** | **1.80** |
| 2014 | **.20** | **.50** | **1.10** | **.20** | **2.00** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .1775 | .1775 | .1775 | .1775 | .71 |
| 2010 | .18125 | .18125 | .18125 | .18125 | .73 |
| 2011 | .1875 | .1875 | .1875 | .1875 | .75 |
| 2012 | .19625 | .19625 | .19625 | .19625 | .79 |
| 2013 | .20875 | .20875 | .20875 | | |

**BUSINESS:** OGE Energy Corp. is a holding company for Oklahoma Gas and Electric Company (OG&E), which supplies electricity to 801,000 customers in Oklahoma (88% of electric revenues) and western Arkansas (9%); wholesale is (3%). Owns 28.5% of Enable Midstream Partners. Acquired Transok 6/99. Electric revenue breakdown: residential, 43%; commercial, 25%; industrial, 18%; other, 14%. Generating sources: coal, 44%; gas, 35%; wind, 5%; purchased, 16%. Fuel costs: 52% of revenues. '12 reported depreciation rate (utility): 3.0%. Has 3,400 employees. Chairman, President & CEO: Peter B. Delaney. Inc.: Oklahoma. Address: 321 North Harvey, P.O. Box 321, Oklahoma City, Oklahoma 73101-0321. Tel.: 405-553-3000. Internet: www.oge.com.

**OGE Energy and CenterPoint Energy are planning an initial public offering of their midstream gas master limited partnership.** The new MLP, 28.5%-owned by OGE and with nearly $11 billion in assets, has been named Enable Midstream Partners. Enable plans to make its S-1 filing with the SEC in the late third quarter or the fourth quarter of 2013. Until this happens, the MLP is limited in how much information it may disclose. Based on this timing, Enable's IPO would likely occur in the fourth quarter of 2013 or the first quarter of 2014.

**The transaction was accretive to OGE's earnings.** We estimate the annual benefit is $0.05-$0.10 a share. OGE's former Enogex subsidiary was deconsolidated from its financial statements as of May 1st, and Enable's contribution is now recorded as equity income. We think profits will climb in 2014 after a flattish showing in 2013. This year, the companies are incurring costs associated with the formation of Enable, and natural gas liquids prices have weakened. The stock is untimely.

**We look for a dividend hike at the board meeting in the fourth quarter.** The payout ratio is well below OGE's target of 60%. We think the directors will move toward this goal gradually, rather than through one huge increase. Our estimate is for a 10.2% raise.

**Oklahoma Gas and Electric is involved in a dispute with the U.S. Environmental Protection Agency.** A U.S. Circuit Court of Appeals ruled in favor of the EPA, which has ordered the utility to add pollution control equipment to some of its coal-fired facilities. OG&E has asked the entire Circuit Court for a rehearing. If the company's appeals are ultimately unsuccessful, the capital spending needed for compliance might well exceed $1 billion. OG&E would probably be able to recover this spending in rates, but any regulatory risk would be unwelcome.

**Wall Street has reacted favorably to the formation of Enable.** The share price has risen more than 25% in 2013. The dividend yield isn't much higher than the market median. Although we have raised our sights for the 3- to 5-year period, total return potential is unspectacular.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecurring losses: '02, 20¢; '03, 7¢; '04, 3¢; gains on discontinued operations: '02, 6¢; '05, 25¢; '06, 20¢. Next earnings report due early November. **(B)** Div'ds historically paid in late Jan., Apr., July, & Oct. ■ Div'd reinvestment plan available. **(C)** Incl. deferred charges. In '12: $3.43/sh. **(D)** In millions, adj. for split. **(E)** Rate base: Net original cost. Rate allowed on com. eq. in Oklahoma in '12: 10.2%; in Arkansas in '11: 9.95%; earned on avg. com. eq., '11: 13.1%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 100 |
| **Earnings Predictability** | 100 |

# OTTER TAIL CORP. NDQ-OTTR

**RECENT PRICE** 27.24 **P/E RATIO** 20.0 (Trailing: 22.3 Median: 22.0) **RELATIVE P/E RATIO** 1.14 **DIV'D YLD** 4.4% **VALUE LINE**

| | | |
|---|---|---|
| **TIMELINESS** | 2 | Lowered 8/16/13 |
| **SAFETY** | 3 | Lowered 12/24/10 |
| TECHNICAL | 3 | Raised 9/13/13 |

**BETA** .90 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 35 | (+30%) | *10%* |
| Low | 25 | (-10%) | *3%* |

**Insider Decisions**

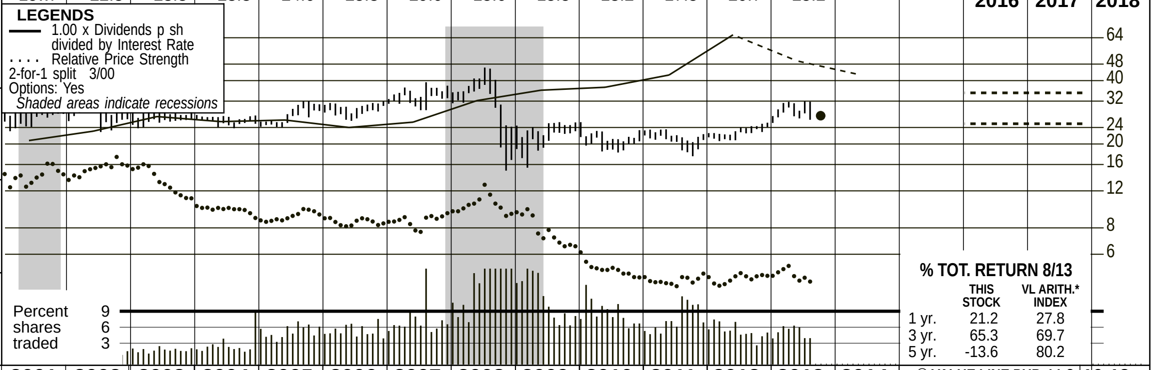
| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 48 | 58 | 56 |
| to Sell | 31 | 44 | 49 |
| Hld's(000) | 10604 | 11561 | 11763 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 34.9 | 28.9 | 27.5 | 32.0 | 31.9 | 39.4 | 46.2 | 25.4 | 25.4 | 23.5 | 25.3 | 31.9 |
| Low: | 22.8 | 23.8 | 23.8 | 24.0 | 25.8 | 29.0 | 15.0 | 15.5 | 18.2 | 17.5 | 20.7 | 25.2 |

**Target Price Range**
2016 | 2017 | 2018



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 21.2 | 27.8 |
| 3 yr. | 65.3 | 69.7 |
| 5 yr. | -13.6 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.80 | 18.14 | 19.48 | 23.45 | 26.53 | 27.75 | 29.28 | 30.45 | 35.59 | 37.43 | 41.50 | 37.06 | 29.03 | 31.08 | 29.86 | 23.76 | **23.85** | **25.15** | **Revenues per sh** | **32.50** |
| 2.95 | 2.75 | 2.91 | 3.21 | 3.40 | 3.44 | 3.30 | 2.88 | 3.35 | 3.39 | 3.55 | 2.81 | 2.76 | 2.60 | 2.36 | 2.71 | **3.00** | **3.40** | **"Cash Flow" per sh** | **4.75** |
| 1.29 | 1.29 | 1.45 | 1.60 | 1.68 | 1.79 | 1.51 | 1.50 | 1.78 | 1.69 | 1.78 | 1.09 | .71 | .38 | .45 | 1.05 | **1.35** | **1.50** | **Earnings per sh A** | **2.00** |
| .93 | .96 | .99 | 1.02 | 1.04 | 1.06 | 1.08 | 1.10 | 1.12 | 1.15 | 1.17 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19 | **1.19** | **1.19** | **Div'd Decl'd per sh B ■** | **1.30** |
| 1.79 | 1.23 | 1.37 | 1.85 | 2.17 | 2.95 | 1.97 | 1.72 | 2.04 | 2.35 | 5.43 | 7.51 | 4.95 | 2.38 | 2.04 | 3.20 | **3.00** | **4.05** | **Cap'l Spending per sh** | **5.00** |
| 8.96 | 9.47 | 10.30 | 10.87 | 11.33 | 12.25 | 12.98 | 14.81 | 15.80 | 16.67 | 17.55 | 19.14 | 18.78 | 17.57 | 15.83 | 14.43 | **15.05** | **16.20** | **Book Value per sh C** | **18.00** |
| 23.46 | 23.76 | 23.85 | 23.85 | 24.65 | 25.59 | 25.72 | 28.98 | 29.40 | 29.52 | 29.85 | 35.38 | 35.81 | 36.00 | 36.10 | 36.17 | **36.50** | **37.00** | **Common Shs Outst'g D** | **40.00** |
| 12.8 | 14.4 | 13.9 | 13.5 | 16.4 | 16.0 | 17.8 | 17.3 | 15.4 | 17.3 | 19.0 | 30.1 | 31.2 | NMF | 47.5 | 21.7 | *Bold figures are Value Line estimates* | | **Avg Ann'l P/E Ratio** | **15.0** |
| .74 | .75 | .79 | .88 | .84 | .87 | 1.01 | .91 | .82 | .93 | 1.01 | 1.81 | 2.08 | NMF | 2.98 | 1.39 | | | **Relative P/E Ratio** | **1.00** |
| 5.6% | 5.2% | 4.9% | 4.7% | 3.8% | 3.7% | 4.0% | 4.2% | 4.1% | 3.9% | 3.5% | 3.6% | 5.4% | 5.7% | 5.6% | 5.2% | | | **Avg Ann'l Div'd Yield** | **4.3%** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $438.7 mill. **Due in 5 Yrs** $140.3 mill.
**LT Debt** $437.4 mill. **LT Interest** $28.0 mill.
(LT interest earned: 2.9x)

**Leases, Uncapitalized** Annual rentals $8 mill.
**Pension Assets-12/12** $191.0 mill. **Oblig.** $275.6 mill.
**Pfd Stock** None

**Common Stock** 36,269,263 shs.
**as of 7/31/13**
**MARKET CAP: $975 million (Small Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 753.2 | 882.3 | 1046.4 | 1105.0 | 1238.9 | 1311.2 | 1039.5 | 1119.1 | 1077.9 | 859.2 | **870** | **930** | **Revenues ($mill)** | **1300** |
| 39.7 | 40.0 | 52.9 | 50.8 | 54.0 | 35.1 | 26.0 | 13.6 | 16.4 | 39.0 | **50.0** | **55.0** | **Net Profit ($mill)** | **80.0** |
| 27.4% | 29.8% | 34.6% | 34.8% | 34.1% | 30.0% | - - | - - | 14.5% | 5.2% | **25.0%** | **25.0%** | **Income Tax Rate** | **25.0%** |
| 5.0% | 2.4% | 1.7% | 1.9% | 4.2% | 6.1% | 4.0% | .6% | 3.8% | 1.7% | **3.0%** | **4.0%** | **AFUDC % to Net Profit** | **5.0%** |
| 43.2% | 37.1% | 35.0% | 33.5% | 38.9% | 32.9% | 38.8% | 40.2% | 44.6% | 44.0% | **44.5%** | **45.0%** | **Long-Term Debt Ratio** | **45.0%** |
| 54.3% | 60.7% | 62.9% | 64.5% | 59.4% | 65.6% | 59.8% | 58.4% | 54.0% | 54.4% | **54.0%** | **54.0%** | **Common Equity Ratio** | **54.0%** |
| 614.6 | 706.5 | 738.2 | 763.0 | 882.1 | 1032.5 | 1124.4 | 1083.3 | 1058.9 | 959.2 | **1016** | **1116** | **Total Capital ($mill)** | **1336** |
| 633.3 | 682.1 | 697.1 | 718.6 | 854.0 | 1037.6 | 1098.6 | 1108.7 | 1077.5 | 1049.5 | **1100** | **1150** | **Net Plant ($mill)** | **1325** |
| 7.8% | 6.8% | 8.3% | 7.7% | 7.2% | 4.3% | 3.4% | 2.7% | 3.2% | 5.7% | **6.5%** | **6.5%** | **Return on Total Cap'l** | **7.5%** |
| 11.4% | 9.0% | 11.0% | 10.0% | 10.0% | 5.1% | 3.8% | 2.1% | 2.8% | 7.3% | **9.0%** | **9.0%** | **Return on Shr. Equity E** | **11.0%** |
| 11.7% | 9.1% | 11.2% | 10.2% | 10.2% | 5.1% | 3.8% | 2.0% | 2.7% | 7.3% | **9.0%** | **9.0%** | **Return on Com Equity** | **11.0%** |
| 3.2% | 2.5% | 4.2% | 3.3% | 3.5% | NMF | NMF | NMF | NMF | NMF | **1.0%** | **1.5%** | **Retained to Com Eq** | **4.0%** |
| 73% | 73% | 63% | 68% | 66% | 108% | NMF | NMF | NMF | 113% | **88%** | **81%** | **All Div'ds to Net Prof** | **66%** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +.4 | +.6 | -1.1 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 89 | 146 | 257 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 1.0% | -6.0% | *2.5%* |
| "Cash Flow" | -2.5% | -5.5% | *11.0%* |
| Earnings | -9.5% | -18.5% | *21.5%* |
| Dividends | 1.5% | .5% | *1.5%* |
| Book Value | 3.5% | -1.0% | *2.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 262.2 | 270.2 | 280.7 | 306.0 | 1119.1 |
| **2011** | 249.1 | 283.3 | 282.4 | 263.1 | 1077.9 |
| **2012** | 219.9 | 211.4 | 215.3 | 212.6 | 859.2 |
| **2013** | 218.0 | 212.4 | ***220*** | ***219.6*** | ***870*** |
| **2014** | ***230*** | ***230*** | ***235*** | ***235*** | ***930*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .13 | .04 | .16 | .05 | .38 |
| **2011** | .14 | .14 | .20 | d.02 | .45 |
| **2012** | .28 | .19 | .13 | .47 | 1.05 |
| **2013** | .41 | .21 | ***.30*** | ***.43*** | ***1.35*** |
| **2014** | ***.42*** | ***.30*** | ***.33*** | ***.45*** | ***1.50*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .298 | .298 | .298 | .298 | 1.19 |
| **2010** | .298 | .298 | .298 | .298 | 1.19 |
| **2011** | .298 | .298 | .298 | .298 | 1.19 |
| **2012** | .298 | .298 | .298 | .298 | 1.19 |
| **2013** | .298 | .298 | .298 | | |

**BUSINESS:** Otter Tail Corporation is the parent of Otter Tail Power Company, which supplies electricity to over 129,000 customers in Minnesota (49% of retail elec. revs.), North Dakota (42%), and South Dakota (9%). Electric rev. breakdown, '12: residential, 33%; commercial & farms, 36%; industrial, 25%; other, 6%. Fuel costs: 13.4% of revenues. Also has operations in manufacturing, construction, and plastics. 2012 depr. rate: 3.5%. Has 2,286 employees. Off. and dir. own 1.5% of common stock; Cascade Investment, LLC, 9.6%; BlackRock, Inc., 5.7% (2/13 Proxy). CEO: Edward McIntyre. Incorporated: Minnesota. Address: 215 South Cascade St., P.O. Box 496, Fergus Falls, Minnesota 56538-0496. Telephone: 866-410-8780. Internet: www.ottertail.com.

**Otter Tail Corporation posted modest top-line growth and a moderate share-net gain for the second quarter.** Both the electric and plastics businesses reported healthy revenue growth, though these lines also experienced a decrease in earnings. Nevertheless, bottom-line declines at these businesses were more than offset by solid improvement in the construction segment, where earnings swung from a loss of $1.8 million in the second quarter of 2012 to a modest gain in the recent period.

**We look for solid performance going forward.** Efforts to restructure operations should pay off in the coming years. Several important divestitures have allowed the company to reduce its risk profile and increase focus on its Electric business. This line ought to benefit from a substantial increase in its regulated rate base and should deliver more-predictable growth. The company plans to invest in generation and transmission projects for this business that will boost earnings and returns on capital. Meanwhile, the Plastics segment should remain a bright spot. We expect strong sales and healthy profit margins from its plastic pipe companies. Elsewhere, improved performance from the Construction business will likely also boost results. The Manufacturing line will probably also see better times ahead. Tooling activity at BTD (Otter Tail's metal parts stamping and fabrication company) has ramped up in preparation for increased sales in the third and fourth quarters and into next year. Moreover, efforts to control operating expenses should support the bottom line. Overall, we anticipate a slight advance in revenues and significant bottom-line growth for the current year. Performance will probably continue to improve in 2014.

**This stock is favorably ranked for year-ahead relative price performance, and may appeal to momentum-oriented investors.** Moreover, this issue features a solid dividend yield, though the dividend-to-net-profit ratio will likely remain somewhat higher than we would prefer over the next couple of years. Long-term accounts may want to look elsewhere, as appreciation potential from the recent quotation appears limited.

*Michael Napoli, CFA* *September 20, 2013*

(A) Diluted earnings. Excl. nonrecurring gains (losses): '98, 7¢; '99, 34¢; '10, (44¢); '11, 26¢; gains (losses) from discont. operations: '04, 8¢; '05, 33¢; '06, 1¢; '11, ($1.11); '12, ($1.22). Earnings may not sum due to rounding. Next earnings report due late October/early November. (B) Div'ds historically paid in early March, June, Sept., and Dec. ■ Div'd reinvestment plan avail. (C) Incl. intangibles. In '12: $53.3 mill., $1.47/sh. (D) In mill., adj. for split. (E) Regulatory Climate: MN, ND, Average; SD, Above Average.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 80 |
| **Price Growth Persistence** | 30 |
| **Earnings Predictability** | 50 |

# PG&E CORP. NYSE-PCG

**RECENT PRICE** 45.52 **P/E RATIO** 24.0 (Trailing: 23.2 Median: 15.0) **RELATIVE P/E RATIO** 1.33 **DIV'D YLD** 4.0% **VALUE LINE**

**TIMELINESS** 3 Raised 5/10/13
**SAFETY** 3 Lowered 2/3/12
TECHNICAL 1 Raised 7/19/13
**BETA** .55 (1.00 = Market)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 23.8 | 28.0 | 34.5 | 40.1 | 48.2 | 52.2 | 45.7 | 45.8 | 48.6 | 48.0 | 47.0 | 48.5 | | |
| Low: | 8.0 | 11.7 | 25.9 | 31.8 | 36.3 | 42.6 | 26.7 | 34.5 | 34.9 | 36.8 | 39.4 | 40.3 | | |

**Target Price Range**

| 2016 | 2017 | 2018 |
|---|---|---|

### 2016-18 PROJECTIONS

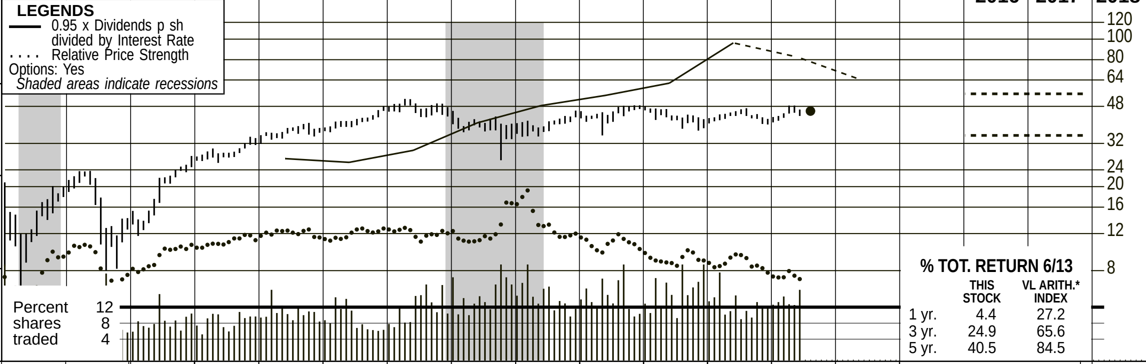
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 55 | (+20%) | 8% |
| Low | 35 | (-25%) | -2% |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 2 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 200 | 214 | 214 |
| to Sell | 194 | 190 | 182 |
| Hld's(000) | 314428 | 312913 | 334776 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 4.4 | 27.2 |
| 3 yr. | 24.9 | 65.6 |
| 5 yr. | 40.5 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36.87 | 52.12 | 57.74 | 67.75 | 63.18 | 32.74 | 25.05 | 26.47 | 31.78 | 36.02 | 37.42 | 40.51 | 36.15 | 35.02 | 36.28 | 34.92 | 33.30 | 34.80 | Revenues per sh | 39.50 |
| 5.98 | 6.08 | 7.15 | .80 | 5.66 | 1.14 | 4.80 | 5.71 | 7.12 | 7.76 | 8.02 | 8.44 | 8.37 | 8.22 | 8.08 | 7.32 | 7.00 | 7.70 | "Cash Flow" per sh | 9.25 |
| 1.57 | 1.88 | 2.24 | d9.21 | 3.02 | d2.36 | 2.05 | 2.12 | 2.35 | 2.76 | 2.78 | 3.22 | 3.03 | 2.82 | 2.78 | 2.07 | 1.90 | 2.40 | Earnings per sh A | 3.00 |
| 1.20 | 1.20 | 1.20 | 1.20 | - - | - - | - - | - - | 1.23 | 1.32 | 1.44 | 1.56 | 1.68 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | Div'd Decl'd per sh B ■ † | 2.10 |
| 4.36 | 4.23 | 4.39 | 4.54 | 7.33 | 7.94 | 4.08 | 3.72 | 4.90 | 6.90 | 7.83 | 10.05 | 10.68 | 9.62 | 9.79 | 10.74 | 11.20 | 11.30 | Cap'l Spending per sh | 11.50 |
| 21.30 | 21.08 | 19.10 | 8.19 | 11.89 | 9.47 | 10.12 | 20.62 | 19.60 | 22.44 | 24.18 | 25.97 | 27.88 | 28.55 | 29.35 | 30.35 | 31.25 | 31.95 | Book Value per sh C | 35.25 |
| 417.67 | 382.60 | 360.59 | 387.19 | 363.38 | 381.67 | 416.52 | 418.62 | 368.27 | 348.14 | 353.72 | 361.06 | 370.60 | 395.23 | 412.26 | 430.72 | 455.00 | 460.00 | Common Shs Outst'g D | 475.00 |
| 15.5 | 16.8 | 13.1 | - - | 4.8 | - - | 9.5 | 13.8 | 15.4 | 14.8 | 16.8 | 12.1 | 13.0 | 15.8 | 15.5 | 20.7 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | 15.0 |
| .89 | .87 | .75 | - - | .25 | - - | .54 | .73 | .82 | .80 | .89 | .73 | .87 | 1.01 | .97 | 1.32 | | | Relative P/E Ratio | 1.00 |
| 4.9% | 3.8% | 4.1% | 4.8% | - - | - - | - - | - - | 3.4% | 3.2% | 3.1% | 4.0% | 4.3% | 4.1% | 4.2% | 4.2% | | | Avg Ann'l Div'd Yield | 4.7% |
| | | | | | | 10435 | 11080 | 11703 | 12539 | 13237 | 14628 | 13399 | 13841 | 14956 | 15040 | 15150 | 16000 | Revenues ($mill) | 18800 |
| | | | | | | 791.0 | 901.0 | 904.0 | 1005.0 | 1020.0 | 1198.0 | 1168.0 | 1113.0 | 1132.0 | 893.0 | 855 | 1120 | Net Profit ($mill) | 1460 |
| | | | | | | 36.7% | 35.0% | 37.6% | 35.5% | 34.6% | 26.2% | 31.1% | 33.0% | 30.3% | 23.9% | 30.0% | 30.0% | Income Tax Rate | 30.0% |
| | | | | | | 3.7% | 3.6% | 5.6% | 6.7% | 9.4% | 9.5% | 11.9% | 14.4% | 11.2% | 17.5% | 19.0% | 15.0% | AFUDC % to Net Profit | 12.0% |
| | | | | | | 42.4% | 45.1% | 48.3% | 51.7% | 52.6% | 52.2% | 51.4% | 49.6% | 48.8% | 48.7% | 46.0% | 49.5% | Long-Term Debt Ratio | 50.0% |
| | | | | | | 53.9% | 53.2% | 50.0% | 46.8% | 46.1% | 46.5% | 47.4% | 49.3% | 50.2% | 50.4% | 53.0% | 49.5% | Common Equity Ratio | 49.0% |
| | | | | | | 7815.0 | 16242 | 14446 | 16696 | 18558 | 20163 | 21793 | 22863 | 24119 | 25956 | 26750 | 29575 | Total Capital ($mill) | 34000 |
| | | | | | | 18107 | 18989 | 19955 | 21785 | 23656 | 26261 | 28892 | 31449 | 33655 | 37523 | 40275 | 43050 | Net Plant ($mill) | 51100 |
| | | | | | | 16.3% | 7.6% | 8.1% | 7.6% | 7.4% | 7.8% | 6.7% | 6.2% | 5.9% | 4.7% | 4.5% | 5.0% | Return on Total Cap'l | 5.5% |
| | | | | | | 17.6% | 10.1% | 12.1% | 12.5% | 11.6% | 12.4% | 11.0% | 9.6% | 9.2% | 6.7% | 6.0% | 7.5% | Return on Shr. Equity | 8.5% |
| | | | | | | 18.5% | 10.3% | 12.3% | 12.7% | 11.8% | 12.6% | 11.2% | 9.7% | 9.2% | 6.7% | 6.0% | 7.5% | Return on Com Equity E | 8.5% |
| | | | | | | 18.5% | 10.3% | 7.7% | 6.8% | 6.0% | 6.8% | 5.5% | 3.9% | 3.4% | 1.0% | Nil | 2.0% | Retained to Com Eq | 2.5% |
| | | | | | | 2% | 1% | 39% | 47% | 50% | 47% | 52% | 61% | 63% | 85% | 96% | 76% | All Div'ds to Net Prof | 69% |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $13406 mill. **Due in 5 yrs** $3862 mill.
**LT Debt** $11518 mill. **LT Interest** $578.0 mill.
Incl. $113 mill. capitalized leases.
(LT interest earned: 2.6x)
**Pension Assets-12/12** $12.1 bill. **Oblig.** $15.5 bill.
**Pfd Stock** $252.0 mill. **Pfd Div'd** $14.0 mill.
4,534,958 shs. 4.36% to 5%, cumulative and $25 par, redeemable from $25.75 to $27.25; 5,784,825 shs. 5.00% to 6.00%, cumulative nonredeemable and $25 par.
**Common Stock** 442,173,394 shs.
**as of 4/23/13**
**MARKET CAP: $20 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -2.0 | -.3 | +6.0 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 9.88 | 9.51 | 9.17 |
| Capacity at Peak (Mw) | NMF | NMF | NMF |
| Peak Load, Summer (Mw) | NMF | NMF | NMF |
| Annual Load Factor (%) | NMF | NMF | NMF |
| % Change Customers (yr-end) | +.5 | +.4 | +.5 |
| Fixed Charge Cov. (%) | 303 | 295 | 231 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -4.0% | - - | 2.0% |
| "Cash Flow" | 12.0% | .5% | 2.5% |
| Earnings | - - | -.5% | 2.5% |
| Dividends | - - | 6.5% | 2.5% |
| Book Value | 11.5% | 6.0% | 3.0% |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 3475 | 3232 | 3513 | 3621 | 13841 |
| 2011 | 3597 | 3684 | 3860 | 3815 | 14956 |
| 2012 | 3641 | 3593 | 3976 | 3830 | 15040 |
| 2013 | 3672 | 3628 | 3950 | 3900 | 15150 |
| 2014 | 3950 | 3800 | 4150 | 4100 | 16000 |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .67 | .86 | .66 | .63 | 2.82 |
| 2011 | .50 | .91 | .68 | .69 | 2.78 |
| 2012 | .66 | .55 | .87 | d.01 | 2.07 |
| 2013 | .55 | .47 | .54 | .34 | 1.90 |
| 2014 | .65 | .60 | .70 | .45 | 2.40 |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .39 | .42 | .42 | .42 | 1.65 |
| 2010 | .42 | .455 | .455 | .455 | 1.79 |
| 2011 | .455 | .455 | .455 | .455 | 1.82 |
| 2012 | .455 | .455 | .455 | .455 | 1.82 |
| 2013 | .455 | .455 | .455 | | |

**BUSINESS:** PG&E Corporation is a holding company for Pacific Gas and Electric Company and nonutility subsidiaries. Supplies electricity and gas to most of northern and central California. Has 5.2 million electric and 4.4 million gas customers. Electric revenue breakdown: residential, 41%; commercial, 39%; industrial, 12%; agricultural, 7%; other, 1%. Generating sources: nuclear, 23%; hydro, 11%; gas, 8%; purchased, 58%. Fuel costs: 33% of revenues. '12 reported depreciation rate (utility): 3.6%. Has 20,600 employees. Chairman, President & Chief Executive Officer: Anthony F. Earley, Jr. Incorporated: California. Address: One Market, Spear Tower, Suite 2400, San Francisco, California 94105. Telephone: 415-267-7000. Internet: www.pgecorp.com.

**PG&E is facing a substantial penalty stemming from a pipeline explosion in San Bruno, California in September of 2010.** Since then, the company has incurred substantial costs associated with the accident, which killed or injured dozens of people and caused major property damage. PG&E will likely wind up swallowing over $2 billion of costs to upgrade its pipeline system and for third-party liability. However, the Safety and Enforcement Division of the California Public Utilities Commission (CPUC) is proposing a $300 million fine on top of this, along with the disallowance of $1.515 billion of pipeline safety-enhancement costs that the CPUC had ruled would be recoverable from customers. PG&E has already taken a $200 million reserve for any penalties. It appears as if a CPUC ruling will come by yearend.

**We estimate that share net will decline again this year.** At the start of 2013, the utility's allowed return on equity was cut from 11.35% to 10.4%. Also, average shares outstanding will be higher, due to the expected issuance of $1.0 billion-$1.2 billion of common equity. Note that earnings are tough to call because the timing of pipeline safety-enhancement spending is unknown, and neither the amount of any insurance recoveries nor the timing is predictable.

**A general rate case is pending.** PG&E requested tariff hikes of $1.282 billion in 2014, $500 million in 2015, and $500 million in 2016. On the other hand, the CPUC's Division of Ratepayer Advocates is recommending a $162 million *decrease* in 2014, followed by a $168 million raise in 2015 and a $159 million boost in 2016. Our estimate of profit improvement in 2014 is based on reasonable regulatory treatment and lower pipeline-related expenses.

**In our view, the concerns about the aforementioned penalty are not adequately reflected in the price of these shares.** The dividend yield is not much higher than the utility mean, and we expect no dividend hikes in 2013 or 2014. There are numerous utility equities with similar yields, better 3- to 5-year total return potential, and the companies are not facing the concerns we discussed above.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. nonrec. gains (losses): '97, 18¢; '99, ($2.44); '04, $6.95; '09, 18¢; '11, (68¢); '12, (15¢); gain from disc. ops.: '08, 41¢. Incl. nonrec. loss: '00, $11.83. Next earnings report due late Oct. **(B)** Div'ds historically paid in mid-Jan., Apr., July, and Oct. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. intangibles. In '12: $15.81/sh. **(D)** In mill. **(E)** Rate base: net orig. cost. Rate allowed on com. eq. in '13: 10.4%; earned on avg. com. eq., '11: 9.5%. Regulatory Climate: Above Average.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 80 |
| **Earnings Predictability** | 85 |

# P.S. ENTERPRISE GP. NYSE-PEG

| RECENT PRICE | 33.90 | P/E RATIO | 12.5 (Trailing: 14.5 / Median: 13.0) | RELATIVE P/E RATIO | 0.71 | DIV'D YLD | 4.3% |
|---|---|---|---|---|---|---|---|

VALUE LINE

**TIMELINESS** 2 Raised 8/9/13
**SAFETY** 1 Raised 11/23/12
TECHNICAL 3 Lowered 8/16/13
**BETA** .75 (1.00 = Market)

**2016-18 PROJECTIONS**

|  | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 40 | (+20%) | *8%* |
| Low | 30 | (-10%) | *2%* |

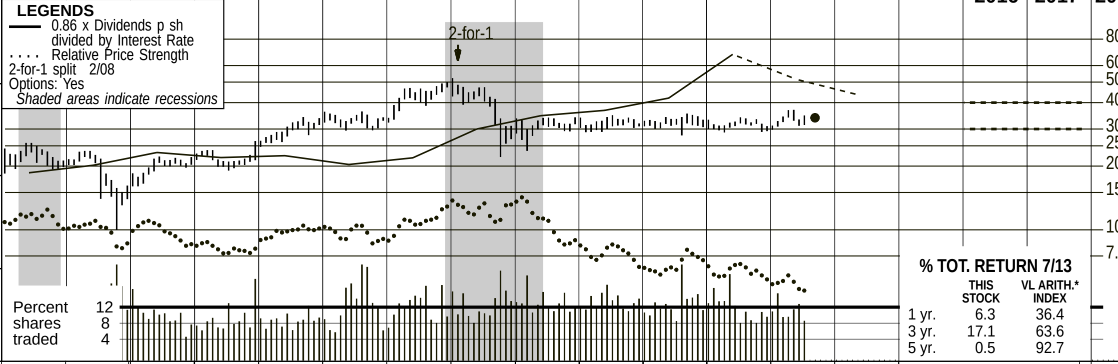
**Insider Decisions**

|  | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 |

**Institutional Decisions**

|  | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 213 | 222 | 231 |
| to Sell | 215 | 236 | 219 |
| Hld's(000) | 311292 | 310784 | 314634 |

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 23.6 | 22.3 | 26.3 | 34.2 | 36.3 | 49.9 | 52.3 | 34.1 | 34.9 | 35.5 | 34.1 | 37.0 |
| Low: | 10.0 | 16.0 | 19.0 | 24.7 | 29.5 | 32.2 | 22.1 | 23.7 | 29.0 | 28.0 | 28.9 | 29.7 |



**% TOT. RETURN 7/13**

|  | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 6.3 | 36.4 |
| 3 yr. | 17.1 | 63.6 |
| 5 yr. | 0.5 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.73 | 12.78 | 15.01 | 22.83 | 23.84 | 18.62 | 23.54 | 23.09 | 24.74 | 24.07 | 25.28 | 27.94 | 24.57 | 23.31 | 22.42 | 19.33 | *19.75* | *19.75* | Revenues per sh | *21.75* |
| 2.57 | 2.83 | 2.82 | 2.71 | 3.14 | 3.01 | 2.92 | 3.02 | 3.42 | 3.91 | 4.36 | 4.68 | 4.98 | 5.27 | 5.36 | 4.87 | *4.95* | *5.10* | "Cash Flow" per sh | *6.00* |
| 1.21 | 1.40 | 1.56 | 1.78 | 1.85 | 1.88 | 1.88 | 1.52 | 1.79 | 1.85 | 2.59 | 2.90 | 3.08 | 3.07 | 3.11 | 2.44 | *2.45* | *2.45* | Earnings per sh A | *2.75* |
| 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.10 | 1.12 | 1.14 | 1.17 | 1.29 | 1.33 | 1.37 | 1.37 | 1.42 | *1.44* | *1.46* | Div'd Decl'd per sh B ■† | *1.55* |
| 1.17 | 1.15 | 1.34 | 2.31 | 4.99 | 4.03 | 2.86 | 2.64 | 2.04 | 2.01 | 2.65 | 3.50 | 3.55 | 4.27 | 4.12 | 5.09 | *4.65* | *4.95* | Cap'l Spending per sh | *5.00* |
| 11.23 | 10.99 | 9.23 | 9.61 | 10.05 | 8.85 | 11.71 | 12.05 | 11.99 | 13.35 | 14.35 | 15.36 | 17.37 | 19.04 | 20.30 | 21.31 | *22.30* | *23.35* | Book Value per sh C | *27.00* |
| 463.92 | 463.92 | 432.83 | 415.94 | 411.68 | 450.53 | 472.27 | 476.20 | 502.33 | 505.29 | 508.52 | 506.02 | 505.99 | 505.97 | 505.95 | 505.89 | *506.00* | *506.00* | Common Shs Outst'g D | *506.00* |
| 10.9 | 12.7 | 12.5 | 10.3 | 12.0 | 10.0 | 10.6 | 14.3 | 16.5 | 17.8 | 16.5 | 13.6 | 10.0 | 10.4 | 10.4 | 12.8 | *Bold figures are Value Line estimates* |  | Avg Ann'l P/E Ratio | *12.5* |
| .63 | .66 | .71 | .67 | .61 | .55 | .60 | .76 | .88 | .96 | .88 | .82 | .67 | .66 | .65 | .82 |  |  | Relative P/E Ratio | *.85* |
| 8.2% | 6.1% | 5.5% | 5.9% | 4.9% | 5.7% | 5.4% | 5.1% | 3.8% | 3.5% | 2.7% | 3.3% | 4.3% | 4.3% | 4.2% | 4.6% |  |  | Avg Ann'l Div'd Yield | *4.6%* |
|  |  |  |  |  |  | 11116 | 10996 | 12430 | 12164 | 12853 | 14139 | 12431 | 11793 | 11343 | 9781.0 | *10000* | *10000* | Revenues ($mill) | *10900* |
|  |  |  |  |  |  | 856.0 | 725.0 | 862.0 | 934.0 | 1323.0 | 1477.0 | 1567.0 | 1557.0 | 1577.0 | 1239.0 | *1235* | *1255* | Net Profit ($mill) | *1285* |
|  |  |  |  |  |  | 35.2% | 38.1% | 38.6% | 36.6% | 44.5% | 45.9% | 42.3% | 40.5% | 40.4% | 36.2% | *40.0%* | *40.0%* | Income Tax Rate | *40.0%* |
|  |  |  |  |  |  | 13.9% | 15.9% | 11.5% | 4.7% | 2.7% | 3.2% | 3.8% | 5.5% | 2.7% | 4.8% | *4.0%* | *4.0%* | AFUDC % to Net Profit | *5.0%* |
|  |  |  |  |  |  | 69.8% | 69.0% | 64.9% | 60.3% | 54.0% | 50.5% | 46.3% | 44.8% | 42.1% | 38.3% | *39.0%* | *39.5%* | Long-Term Debt Ratio | *42.5%* |
|  |  |  |  |  |  | 29.8% | 30.6% | 34.6% | 39.2% | 45.5% | 49.0% | 53.2% | 55.2% | 57.9% | 61.7% | *61.0%* | *60.5%* | Common Equity Ratio | *57.5%* |
|  |  |  |  |  |  | 18554 | 18744 | 17381 | 17197 | 16041 | 15856 | 16513 | 17452 | 17731 | 17467 | *18475* | *19600* | Total Capital ($mill) | *23900* |
|  |  |  |  |  |  | 12422 | 13750 | 13336 | 13002 | 13275 | 14433 | 15440 | 16390 | 17849 | 19736 | *20875* | *22100* | Net Plant ($mill) | *24600* |
|  |  |  |  |  |  | 7.0% | 6.3% | 7.3% | 7.7% | 10.4% | 11.2% | 11.0% | 10.4% | 10.2% | 8.1% | *7.5%* | *7.0%* | Return on Total Cap'l | *7.0%* |
|  |  |  |  |  |  | 15.3% | 12.5% | 14.1% | 13.7% | 17.9% | 18.8% | 17.7% | 16.2% | 15.4% | 11.5% | *11.0%* | *10.5%* | Return on Shr. Equity | *10.5%* |
|  |  |  |  |  |  | 15.4% | 12.6% | 14.2% | 13.8% | 18.1% | 19.0% | 17.8% | 16.2% | 15.4% | 11.5% | *11.0%* | *10.5%* | Return on Com Equity E | *10.5%* |
|  |  |  |  |  |  | 6.5% | 3.5% | 5.3% | 5.3% | 9.9% | 10.5% | 10.1% | 9.0% | 8.6% | 4.8% | *4.5%* | *4.5%* | Retained to Com Eq | *5.0%* |
|  |  |  |  |  |  | 58% | 73% | 63% | 62% | 45% | 45% | 43% | 45% | 44% | 58% | *59%* | *59%* | All Div'ds to Net Prof | *54%* |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $8407.0 mill. **Due in 5 Yrs** $3799.0 mill.
**LT Debt** $7442.0 mill. **LT Interest** $315.0 mill.
Incl. $385.0 mill. securitized bonds.
(LT interest earned: 6.5x)

**Leases, Uncapitalized** Annual rentals $9.0 mill.
**Pension Assets-12/12** $4.36 bill. **Oblig.** $5.24 bill.

**Pfd Stock** None

**Common Stock** 505,857,262 shs.
**as of 7/16/13**
**MARKET CAP: $17 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

|  | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.0 | -2.6 | -2.1 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH(¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (avg.) | +1.6 | +.2 | NA |
| Fixed Charge Cov. (%) | 532 | 580 | 495 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | - - | -2.5% | *Nil* |
| "Cash Flow" | 6.0% | 6.0% | *2.5%* |
| Earnings | 4.5% | 6.5% | *-.5%* |
| Dividends | 2.5% | 4.0% | *2.0%* |
| Book Value | 8.0% | 9.0% | *5.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 3573 | 2361 | 3114 | 2745 | 11793 |
| 2011 | 3354 | 2469 | 2884 | 2636 | 11343 |
| 2012 | 2875 | 2098 | 2402 | 2406 | 9781 |
| 2013 | 2786 | 2310 | *2500* | *2404* | *10000* |
| 2014 | *2850* | *2300* | *2450* | *2400* | *10000* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .99 | .44 | 1.08 | .56 | 3.07 |
| 2011 | .91 | .63 | .86 | .71 | 3.11 |
| 2012 | .97 | .42 | .68 | .37 | 2.44 |
| 2013 | .63 | .66 | *.76* | *.40* | *2.45* |
| 2014 | *.90* | *.45* | *.70* | *.40* | *2.45* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .3325 | .3325 | .3325 | .3325 | 1.33 |
| 2010 | .3425 | .3425 | .3425 | .3425 | 1.37 |
| 2011 | .3425 | .3425 | .3425 | .3425 | 1.37 |
| 2012 | .355 | .355 | .355 | .355 | 1.42 |
| 2013 | .36 | .36 |  |  |  |

**BUSINESS:** Public Service Enterprise Group Incorporated is a holding company for Public Service Electric and Gas Company (PSE&G), which serves 2.2 million electric and 1.8 million gas customers in New Jersey. PSEG Power is a nonregulated power generator with nuclear, gas, and coal-fired plants in the Northeast. PSEG Energy Holdings is a domestic power producer. The company no longer breaks down data on electric and gas operating statistics. Fuel costs: 38% of revenues. '12 reported depreciation rate (utility): 2.5%. Has 9,800 employees. Chairman, President & Chief Executive Officer: Dr. Ralph Izzo. Inc.: New Jersey. Address: 80 Park Plaza, P.O. Box 1171, Newark, New Jersey 07101-1171. Telephone: 973-430-7000. Internet: www.pseg.com.

**We have raised our 2013 and 2014 earnings estimates for Public Service Enterprise Group.** Second-quarter profits were well above our expectation, due to mark-to-market accounting gains that boosted the bottom line by $0.16 a share. (We *include* these gains or charges in our presentation because they are an ongoing part of PSEG's quarterly results.) However, the second half of the year should be better than we had expected, as well. PSEG Power, the nonregulated generating subsidiary, is benefiting from higher capacity prices in the PJM (Pennsylvania-New Jersey-Maryland) power pool. This is helping to offset lower margins on power that the company has hedged. Also, Public Service Electric & Gas, the regulated utility, experienced hotter-than-normal weather in July. All told, we have raised our profit estimate for this year by $0.40 a share, to $2.45. That's near the upper end of PSEG's targeted range of $2.25-$2.50 a share. Because we think PSEG Power will fare better than we previously expected, we have boosted our 2014 forecast by $0.15 a share, to $2.45.

**The composition of PSEG's earnings is changing.** In 2009, PSE&G provided just 20% of the company's operating income. Because PSEG Power's contribution has been declining (due to lower margins on wholesale power) while PSE&G's profitability has been rising, their shares of corporate profits will likely be about even this year. In 2014, the utility's income might well exceed that of PSEG Power.

**The utility is awaiting a ruling on its storm-hardening proposal.** If the New Jersey Board of Public Utilities gives it the go-ahead, PSE&G plans to spend $3.9 billion over a 10-year period to strengthen its system against adverse weather conditions. The company is hoping to hear from the regulators by yearend. Separately, PSE&G plans to spend $1.5 billion over 10 years to harden its transmission system.

**This stock looks more attractive for the near term than it does for the 3- to 5-year period.** It is timely, and has a dividend yield that is fractionally above the utility average. However, with the recent price near the midpoint of our 2016-2018 Target Price Range, total return potential is low.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Dil. EPS. Excl. nonrecur. gain (losses): '99, ($1.75); '02, ($1.30); '05, (3¢); '06, (35¢); '08, (96¢); '09, 6¢; '11, (34¢); '12, 7¢; gains (loss) from disc. ops.: '05, (33¢); '06, 12¢; '07, 3¢; '08, 40¢; '11, 13¢. Next egs. report due late Oct. **(B)** Div'ds historically paid in late Mar., June, Sept., and Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. intang. In '12: $9.08/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '10: 10.3%; earned on avg. com. eq., '12: 11.6%. Reg. Climate: Avg.

|  |  |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 45 |
| **Earnings Predictability** | 80 |

# PNM RESOURCES NYSE-PNM

**RECENT PRICE** 23.94 **P/E RATIO** 17.1 (Trailing: 17.3 Median: 16.0) **RELATIVE P/E RATIO** 0.94 **DIV'D YLD** 2.8% **VALUE LINE**

**TIMELINESS** 3 Lowered 8/31/12

**SAFETY** 3 Lowered 5/9/08

TECHNICAL 2 Raised 7/26/13

**BETA** .95 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 20.5 | 19.6 | 26.1 | 30.5 | 32.1 | 34.3 | 21.7 | 13.1 | 14.0 | 19.2 | 22.5 | 24.1 |
| Low: | 11.5 | 12.6 | 18.7 | 23.8 | 22.5 | 21.0 | 7.6 | 5.9 | 10.8 | 12.8 | 17.3 | 20.1 |

**2016-18 PROJECTIONS**

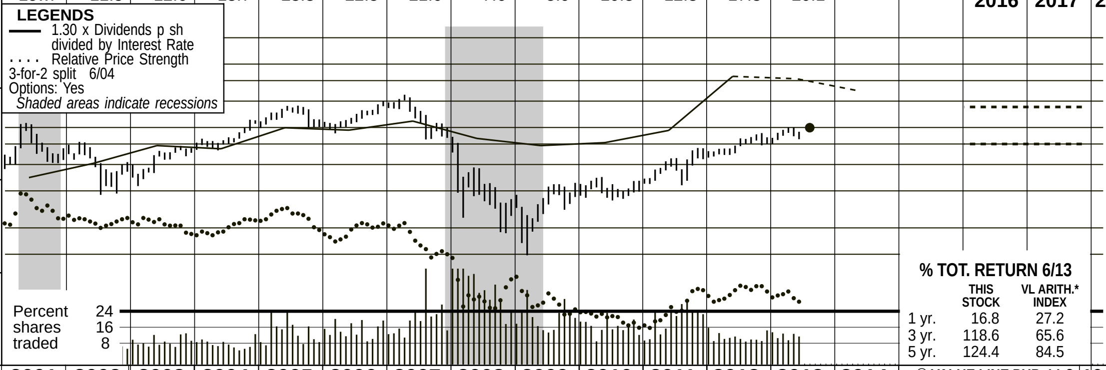
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (+25%) | 9% |
| Low | 20 | (-15%) | Nil |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 84 | 103 | 101 |
| to Sell | 83 | 77 | 94 |
| Hld's(000) | 70615 | 70255 | 69846 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 16.8 | 27.2 |
| 3 yr. | 118.6 | 65.6 |
| 5 yr. | 124.4 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.12 | 17.43 | 18.96 | 27.46 | 40.09 | 19.92 | 24.11 | 26.54 | 30.19 | 32.25 | 24.92 | 22.65 | 19.01 | 19.31 | 21.35 | 16.85 | **17.40** | **17.90** | Revenues per sh | **20.70** |
| 2.58 | 3.04 | 2.82 | 3.16 | 4.31 | 2.83 | 3.05 | 3.14 | 3.56 | 3.57 | 2.54 | 1.76 | 2.32 | 2.67 | 3.18 | 3.38 | **3.35** | **3.45** | "Cash Flow" per sh | **4.00** |
| 1.25 | 1.50 | 1.29 | 1.55 | 2.61 | 1.07 | 1.15 | 1.43 | 1.56 | 1.72 | .76 | .11 | .58 | .87 | 1.08 | 1.31 | **1.40** | **1.50** | Earnings per sh A | **2.15** |
| .42 | .51 | .53 | .53 | .53 | .57 | .61 | .63 | .79 | .86 | .91 | .61 | .50 | .50 | .50 | .58 | **.66** | **.74** | Div'd Decl'd per sh B ■† | **1.08** |
| 2.05 | 2.06 | 1.56 | 2.50 | 4.51 | 4.09 | 2.78 | 2.25 | 3.07 | 4.04 | 5.94 | 3.99 | 3.32 | 3.25 | 4.10 | 3.88 | **4.90** | **5.35** | Cap'l Spending per sh | **3.50** |
| 12.84 | 13.75 | 14.74 | 15.76 | 17.25 | 16.60 | 17.84 | 18.19 | 18.70 | 22.09 | 22.03 | 18.89 | 18.90 | 17.60 | 19.62 | 20.05 | **19.85** | **20.60** | Book Value per sh C | **23.60** |
| 62.66 | 62.66 | 61.05 | 58.68 | 58.68 | 58.68 | 60.39 | 60.46 | 68.79 | 76.65 | 76.81 | 86.53 | 86.67 | 86.67 | 79.65 | 79.65 | **80.00** | **80.00** | Common Shs Outst'g D | **80.00** |
| 10.0 | 9.8 | 9.5 | 8.5 | 7.3 | 15.1 | 14.7 | 15.0 | 17.4 | 15.6 | 35.6 | NMF | 18.1 | 14.0 | 14.5 | 15.0 | Bold figures are Value Line estimates | | Avg Ann'l P/E Ratio | **12.0** |
| .58 | .51 | .54 | .55 | .37 | .82 | .84 | .79 | .93 | .84 | 1.89 | NMF | 1.21 | .89 | .91 | .96 | | | Relative P/E Ratio | **.80** |
| 3.3% | 3.5% | 4.4% | 4.1% | 2.8% | 3.5% | 3.6% | 2.9% | 2.9% | 3.2% | 3.4% | 4.9% | 4.8% | 4.1% | 3.2% | 3.0% | | | Avg Ann'l Div'd Yield | **4.3%** |
| | | | | | | 1455.7 | 1604.8 | 2076.8 | 2471.7 | 1914.0 | 1959.5 | 1647.7 | 1673.5 | 1700.6 | 1342.4 | **1390** | **1430** | Revenues ($mill) | **1655** |
| | | | | | | 68.9 | 88.3 | 106.6 | 122.1 | 59.9 | 8.1 | 53.5 | 80.0 | 96.6 | 105.6 | **115** | **120** | Net Profit ($mill) | **170** |
| | | | | | | 29.0% | 28.2% | 31.1% | 24.7% | 5.1% | 40.4% | 30.4% | 32.6% | 38.8% | 31.4% | **38.0%** | **38.0%** | Income Tax Rate | **38.0%** |
| | | | | | | - - | 5.6% | 15.6% | 4.1% | - - | - - | 6.4% | 7.1% | 8.8% | 7.2% | **7.5%** | **7.5%** | AFUDC % to Net Profit | **8.0%** |
| | | | | | | 47.5% | 47.1% | 57.4% | 50.9% | 42.0% | 45.6% | 48.7% | 50.4% | 51.5% | 50.9% | **51.5%** | **51.5%** | Long-Term Debt Ratio | **51.5%** |
| | | | | | | 51.9% | 52.4% | 42.3% | 48.8% | 57.6% | 54.0% | 51.0% | 49.2% | 48.1% | 48.7% | **48.5%** | **48.5%** | Common Equity Ratio | **48.5%** |
| | | | | | | 2077.3 | 2098.9 | 3044.4 | 3470.7 | 2935.8 | 3025.4 | 3214.9 | 3100.3 | 3245.6 | 3277.9 | **3300** | **3410** | Total Capital ($mill) | **3900** |
| | | | | | | 2194.4 | 2324.6 | 2984.1 | 3761.9 | 2935.4 | 3192.0 | 3332.4 | 3444.4 | 3627.1 | 3746.5 | **3935** | **4130** | Net Plant ($mill) | **4775** |
| | | | | | | 4.7% | 5.3% | 4.7% | 4.9% | 3.4% | 1.9% | 3.1% | 4.2% | 4.5% | 5.1% | **5.5%** | **5.5%** | Return on Total Cap'l | **6.0%** |
| | | | | | | 6.3% | 7.9% | 8.2% | 7.2% | 3.5% | .5% | 3.2% | 5.2% | 6.1% | 6.6% | **7.0%** | **7.0%** | Return on Shr. Equity | **9.0%** |
| | | | | | | 6.3% | 8.0% | 8.2% | 7.2% | 3.5% | .5% | 3.2% | 5.2% | 6.1% | 6.6% | **7.0%** | **7.0%** | Return on Com Equity E | **9.0%** |
| | | | | | | 3.0% | 4.5% | 4.3% | 3.7% | NMF | NMF | .4% | 2.2% | 3.3% | 3.8% | **4.0%** | **3.5%** | Retained to Com Eq | **4.5%** |
| | | | | | | 53% | 44% | 48% | 49% | 117% | NMF | 86% | 58% | 47% | 43% | **46%** | **50%** | All Div'ds to Net Prof | **51%** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1915.8 mill. **Due in 5 Yrs** $291.4 mill.
**LT Debt** $1669.9 mill. **LT Interest** $120 mill.
(LT interest earned: 2.4x)
**Pension Assets-12/12** $518.1 mill.
**Oblig.** $675.5 mill.

**Pfd Stock** $11.5 mill. **Pfd Div'd** $.5 mill.
115,293 shs. 4.58%, $100 par w/o mandatory redemption. Sinking fund began 2/1/84.

**Common Stock** 79,653,624 shs.
**as of 5/1/13**
**MARKET CAP: $1.9 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**F

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -5.7 | +3.4 | -1.6 |
| Avg. Indust. Use (MWH) | N/A | N/A | N/A |
| Avg. Indust. Revs. per KWH (¢) | N/A | N/A | N/A |
| Capacity at Peak (Mw) | 2631 | 2547 | 2537 |
| Peak Load, Summer (Mw) | 1973 | 1938 | 1948 |
| Annual Load Factor (%) | N/A | N/A | N/A |
| % Change Customers (yr-end) | +.6 | +.4 | +.4 |
| Fixed Charge Cov. (%) | 189 | 204 | 225 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -4.0% | -8.0% | 1.5% |
| "Cash Flow" | -1.0% | -1.0% | 4.5% |
| Earnings | -4.5% | -4.0% | 12.0% |
| Dividends | -.5% | -9.0% | 12.5% |
| Book Value | 1.5% | -2.0% | 3.5% |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 383.5 | 405.8 | 503.7 | 380.5 | 1673.5 |
| 2011 | 387.7 | 415.5 | 549.5 | 347.9 | 1700.6 |
| 2012 | 305.4 | 323.9 | 390.4 | 322.7 | 1342.4 |
| 2013 | 317.7 | **335** | **430** | **307.3** | **1390** |
| 2014 | **335** | **360** | **475** | **260** | **1430** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .06 | .21 | .63 | d.03 | .87 |
| 2011 | .04 | .20 | .61 | .22 | 1.08 |
| 2012 | .17 | .33 | .69 | .13 | 1.31 |
| 2013 | .18 | **.35** | **.65** | **.22** | **1.40** |
| 2014 | **.20** | **.35** | **.70** | **.25** | **1.50** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B■† Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .125 | .125 | .125 | .125 | .50 |
| 2010 | .125 | .125 | .125 | .125 | .50 |
| 2011 | .125 | .125 | .125 | .125 | .50 |
| 2012 | .145 | .145 | .145 | .145 | .58 |
| 2013 | .165 | .165 | | | |

**BUSINESS:** PNM Resources is an investor-owned holding company of energy and energy related businesses. Primary subsidiaries include Public Service Company of New Mexico (PNM) and Texas-New Mexico Power Company (TNMP), which generate, transmit, and distribute electricity in New Mexico and Texas. Sold First Choice Energy (9/11) and gas utility operations (1/09). Electric rev. breakdown '12: residential, 38%; commercial, 37%; industrial, 9%; other, 16%. Fuels: coal, 59.2%; nuclear, 31.3%; gas/oil, 9.0%; solar, 0.5%. Fuel costs: 49% of revs. '12 dep. rate: 3.0%. Has 1,909 employees. Chrmn., Pres. & CEO: Patricia K. Collawn. Inc.: NM. Addr.: 414 Silver Ave. SW, Albuquerque, NM. 87102. Tel.: 505-241-2700. Internet: www.pnmresources.com.

**PNM Resources had a respectable start to 2013, in our view.** The top and bottom lines increased 4% and 5%, year over year, respectively, in the March period. Looking ahead, our share-net estimates remain unchanged, at $1.40 in 2013 and $1.50 next year. That said, although conditions in New Mexico are improving, the economy still has a long road to recovery. As a result, load at yearend could decline 1% from the year before.

**The alternative state plan, regarding the Environmental Protection Agency's (EPA) best-available retrofit technology (BART) requirements, is en route to receive the necessary approvals.** Once the company gets the go-ahead from the New Mexico Environment Department and the Environmental Improvement Board, which is anticipated to occur in the December interim, the plan will be submitted to the EPA. A response is expected the following year.

**The utility has received multiple approvals this year.** PNM's request for a one-year extension of the FERC wholesale agreement with the city of Gallup (NM) was authorized. The new rates were implemented on July 1st. This, coupled with the approval of the FERC generation case with the Navopache Electric Cooperative, should generate additional revenue and profit growth. Moreover, its smaller subsidiary, TNMP, was able to increase its rate base by $2.9 million, as a result of its transmission cost of service filing.

**Still, there are many outstanding items on its roster, which could further benefit the top and bottom lines.** This includes the FERC transmission formula rates case, which could potentially add $0.08-$0.09 to earnings per share; the company's Energy Efficiency Plan; and consent to purchase the Delta-Person Generating Station (Albuquerque, NM).

**PNM Resources' 2.8% dividend yield is below the utility industry median and its historical average.** Thus, income-seeking investors may want to look elsewhere at this time. However, the company's annual dividend review was moved up to December, which will likely result in another dividend hike. The issue also offers above-average total return potential through out to 2016-2018, for a utility.

*Michelle Jensen* *August 2, 2013*

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**(A)** EPS dil. Excl. n/r gains (losses): '97, 4¢; '98, (24¢); '99, 8¢; '00, 21¢; '01, (15¢); '03, 67¢; '05, (56¢); '08, ($3.77); '10, ($1.36); '11, 88¢. Excl. disc. ops.: '08, 42¢; '09, 78¢. Egs. may not sum due to rounding. Next egs. rpt. due Aug. 2nd. **(B)** Div'ds hist. pd. in mid Feb., May, Aug., Nov. ■ Div'd reinvest. plan avail. † Shareholder invest. plan avail. **(C)** Incl. intang. '12: $3.49/sh. **(D)** In mill., adjust. for split. **(E)** Rate base: net orig. cost. ROE allowed in '11: 10.0%; earned on avg. com. eq., '12: 10.0%. Reg. Climate: Avg. **(F)** Excl. First Choice.

| | |
|---|---|
| **Company's Financial Strength** | B |
| **Stock's Price Stability** | 75 |
| **Price Growth Persistence** | 25 |
| **Earnings Predictability** | 15 |

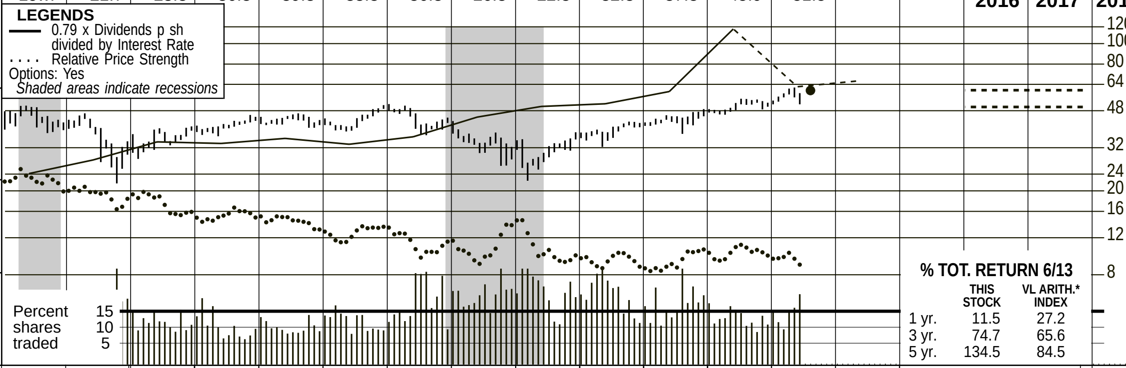
# PINNACLE WEST NYSE-PNW

| RECENT PRICE | 59.97 | P/E RATIO | 16.4 (Trailing: 15.8 Median: 14.0) | RELATIVE P/E RATIO | 0.91 | DIV'D YLD | 3.7% | VALUE LINE |
|---|---|---|---|---|---|---|---|---|

**TIMELINESS** 3 Lowered 11/16/12
**SAFETY** 1 Raised 5/3/13
**TECHNICAL** 2 Raised 7/12/13
**BETA** .70 (1.00 = Market)

|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 46.7 | 40.5 | 45.8 | 46.7 | 51.0 | 51.7 | 42.9 | 38.0 | 42.7 | 48.9 | 54.7 | 61.9 |  |
| Low: | 21.7 | 28.3 | 36.3 | 39.8 | 38.3 | 36.8 | 26.3 | 22.3 | 32.3 | 37.3 | 45.9 | 51.5 |  |

**Target Price Range**
2016 | 2017 | 2018



**2016-18 PROJECTIONS**

|  | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (Nil) | 4% |
| Low | 50 | (-15%) | Nil |

**Insider Decisions**

|  | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 1 | 0 | 2 | 1 | 0 | 2 | 2 | 0 | 3 |

**Institutional Decisions**

|  | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 151 | 161 | 168 |
| to Sell | 142 | 147 | 148 |
| Hld's(000) | 81096 | 83080 | 82624 |

**% TOT. RETURN 6/13**

|  | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 11.5 | 27.2 |
| 3 yr. | 74.7 | 65.6 |
| 5 yr. | 134.5 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.52 | 25.12 | 28.57 | 43.50 | 53.66 | 28.90 | 30.87 | 31.59 | 30.16 | 34.03 | 35.07 | 33.37 | 32.50 | 30.01 | 29.67 | 30.09 | ***31.10*** | ***31.70*** | **Revenues per sh** | ***34.25*** |
| 7.12 | 7.34 | 7.73 | 7.99 | 8.72 | 7.01 | 7.33 | 6.93 | 5.76 | 9.70 | 9.29 | 8.13 | 8.08 | 6.85 | 7.52 | 7.92 | ***8.15*** | ***8.45*** | **"Cash Flow" per sh** | ***9.50*** |
| 2.76 | 2.85 | 3.18 | 3.35 | 3.68 | 2.53 | 2.52 | 2.58 | 2.24 | 3.17 | 2.96 | 2.12 | 2.26 | 3.08 | 2.99 | 3.50 | ***3.65*** | ***3.80*** | **Earnings per sh** A | ***4.25*** |
| 1.13 | 1.23 | 1.33 | 1.43 | 1.53 | 1.63 | 1.73 | 1.83 | 1.93 | 2.03 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.67 | ***1.66*** | ***2.28*** | **Div'd Decl'd per sh** B ■ | ***2.60*** |
| 3.63 | 3.76 | 4.05 | 7.76 | 12.27 | 9.81 | 7.60 | 5.86 | 6.39 | 7.59 | 9.37 | 9.46 | 7.64 | 7.03 | 8.26 | 8.24 | ***8.25*** | ***9.65*** | **Cap'l Spending per sh** | ***9.25*** |
| 23.90 | 25.50 | 26.00 | 28.09 | 29.46 | 29.44 | 31.00 | 32.14 | 34.57 | 34.48 | 35.15 | 34.16 | 32.69 | 33.86 | 34.98 | 36.20 | ***37.40*** | ***38.80*** | **Book Value per sh** C | ***43.25*** |
| 84.83 | 84.83 | 84.83 | 84.83 | 84.83 | 91.26 | 91.29 | 91.79 | 99.08 | 99.96 | 100.49 | 100.89 | 101.43 | 108.77 | 109.25 | 109.74 | ***111.00*** | ***112.00*** | **Common Shs Outst'g** D | ***115.00*** |
| 11.8 | 15.2 | 11.9 | 11.3 | 12.0 | 14.4 | 14.0 | 15.8 | 19.2 | 13.7 | 14.9 | 16.1 | 13.7 | 12.6 | 14.6 | 14.3 | ***Bold figures are Value Line estimates*** |  | **Avg Ann'l P/E Ratio** | ***12.5*** |
| .68 | .79 | .68 | .73 | .61 | .79 | .80 | .83 | 1.02 | .74 | .79 | .97 | .91 | .80 | .92 | .92 |  |  | **Relative P/E Ratio** | ***.85*** |
| 3.5% | 2.8% | 3.5% | 3.8% | 3.5% | 4.5% | 4.9% | 4.5% | 4.5% | 4.7% | 4.8% | 6.2% | 6.8% | 5.4% | 4.8% | 5.3% |  |  | **Avg Ann'l Div'd Yield** | ***4.8%*** |
|  |  |  |  |  |  | 2817.9 | 2899.7 | 2988.0 | 3401.7 | 3523.6 | 3367.1 | 3297.1 | 3263.6 | 3241.4 | 3301.8 | ***3450*** | ***3550*** | **Revenues ($mill)** | ***3950*** |
|  |  |  |  |  |  | 230.6 | 235.2 | 223.2 | 317.1 | 298.8 | 213.6 | 229.2 | 330.4 | 328.2 | 387.4 | ***405*** | ***430*** | **Net Profit ($mill)** | ***495*** |
|  |  |  |  |  |  | 31.4% | 35.4% | 36.2% | 33.0% | 33.6% | 23.4% | 36.9% | 31.9% | 34.0% | 36.2% | ***35.0%*** | ***35.0%*** | **Income Tax Rate** | ***35.0%*** |
|  |  |  |  |  |  | 6.2% | 6.9% | 10.4% | 11.1% | 14.8% | 17.5% | 11.2% | 11.7% | 12.8% | 9.7% | ***10.0%*** | ***12.0%*** | **AFUDC % to Net Profit** | ***8.0%*** |
|  |  |  |  |  |  | 50.6% | 46.7% | 43.2% | 48.4% | 47.0% | 46.8% | 50.4% | 45.3% | 44.1% | 44.6% | ***40.5%*** | ***40.0%*** | **Long-Term Debt Ratio** | ***40.0%*** |
|  |  |  |  |  |  | 49.4% | 53.3% | 56.8% | 51.6% | 53.0% | 53.2% | 49.6% | 54.7% | 55.9% | 55.4% | ***59.5%*** | ***60.0%*** | **Common Equity Ratio** | ***60.0%*** |
|  |  |  |  |  |  | 5727.5 | 5535.2 | 6033.4 | 6678.7 | 6658.7 | 6477.6 | 6686.6 | 6729.1 | 6840.9 | 7171.9 | ***6950*** | ***7215*** | **Total Capital ($mill)** | ***8325*** |
|  |  |  |  |  |  | 7480.1 | 7535.5 | 7577.1 | 7881.9 | 8436.4 | 8916.7 | 9257.8 | 9578.8 | 9962.3 | 10396 | ***10815*** | ***11380*** | **Net Plant ($mill)** | ***12950*** |
|  |  |  |  |  |  | 5.5% | 5.6% | 5.0% | 6.2% | 5.9% | 4.7% | 4.8% | 6.5% | 6.4% | 6.8% | ***7.0%*** | ***7.0%*** | **Return on Total Cap'l** | ***7.0%*** |
|  |  |  |  |  |  | 8.1% | 8.0% | 6.5% | 9.2% | 8.5% | 6.2% | 6.9% | 9.0% | 8.6% | 9.8% | ***10.0%*** | ***10.0%*** | **Return on Shr. Equity** | ***10.0%*** |
|  |  |  |  |  |  | 8.1% | 8.0% | 6.5% | 9.2% | 8.5% | 6.2% | 6.9% | 9.0% | 8.6% | 9.8% | ***10.0%*** | ***10.0%*** | **Return on Com Equity** E | ***10.0%*** |
|  |  |  |  |  |  | 2.6% | 2.3% | 1.0% | 3.4% | 2.5% | .3% | .7% | 3.1% | 2.8% | 4.1% | ***4.0%*** | ***4.0%*** | **Retained to Com Eq** | ***4.0%*** |
|  |  |  |  |  |  | 68% | 71% | 85% | 63% | 70% | 96% | 89% | 66% | 68% | 58% | ***60%*** | ***59%*** | **All Div'ds to Net Prof** | ***60%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $3427.3 mill. **Due in 5 Yrs** $1490.8 mill.
**LT Debt** $3304.5 mill. **LT Interest** $185.0 mill.
Incl. $38.9 mill. Palo Verde sale leaseback lessor notes.
(LT interest earned: 4.4x)
**Leases, Uncapitalized** Annual rentals $21.0 mill.
**Pension Assets-12/12** $2.08 bill. **Oblig.** $2.86 bill.
**Pfd Stock** None

**Common Stock** 109,947,418 shs. **as of 4/26/13**
**MARKET CAP: $6.6 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

|  | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -1.6 | +1.8 | -.2 |
| Avg. Indust. Use (MWH) | 619 | 632 | 647 |
| Avg. Indust. Revs. per KWH (¢) | 7.83 | 7.78 | 7.86 |
| Capacity at Peak (Mw) | 8682 | 8577 | 8864 |
| Peak Load, Summer (Mw) | 6396 | 7087 | 7207 |
| Annual Load Factor (%) | 50.0 | 50.0 | 48.8 |
| % Change Customers (yr-end) | +.4 | +.8 | +1.3 |
| Fixed Charge Cov. (%) | 296 | 308 | 397 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -3.5% | -2.0% | *2.5%* |
| "Cash Flow" | -.5% | -2.0% | *4.0%* |
| Earnings | - - | 2.5% | *5.0%* |
| Dividends | 4.0% | 2.5% | *2.0%* |
| Book Value | 2.0% | - - | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 620.3 | 820.6 | 1139.1 | 683.6 | 3263.6 |
| **2011** | 648.9 | 799.8 | 1124.8 | 667.9 | 3241.4 |
| **2012** | 620.6 | 878.6 | 1109.5 | 693.1 | 3301.8 |
| **2013** | 686.7 | ***863.3*** | ***1175*** | ***725*** | ***3450*** |
| **2014** | ***700*** | ***900*** | ***1200*** | ***750*** | ***3550*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .07 | .83 | 2.08 | .06 | 3.08 |
| **2011** | d.15 | .78 | 2.24 | .11 | 2.99 |
| **2012** | d.07 | 1.12 | 2.21 | .24 | 3.50 |
| **2013** | .22 | ***1.05*** | ***2.28*** | ***.10*** | ***3.65*** |
| **2014** | ***.15*** | ***1.10*** | ***2.40*** | ***.15*** | ***3.80*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .525 | .525 | .525 | .525 | 2.10 |
| **2010** | .525 | .525 | .525 | .525 | 2.10 |
| **2011** | .525 | .525 | .525 | .525 | 2.10 |
| **2012** | .525 | .525 | .525 | .545 | 2.12 |
| **2013** | .545 | .545 |  |  |  |

**BUSINESS:** Pinnacle West Capital Corporation is a holding company for Arizona Public Service Company (APS), which supplies electricity to 1.1 million customers in most of Arizona, except about half of the Phoenix metro area, the Tucson metro area, and Mohave County in northwestern Arizona. Discontinued SunCor real estate subsidiary in '10. Electric revenue breakdown: residential, 47%; commercial, 39%; industrial, 5%; other, 9%. Generating sources: coal, 32%; nuclear, 27%; gas, 21%; solar, 1%; purchased, 19%. Fuel costs: 30% of revenues. Has 6,600 employees. '12 reported deprec. rate: 2.7%. Chairman, President & CEO: Donald E. Brandt. Inc.: AZ. Address: 400 North Fifth St., P.O. Box 53999, Phoenix, AZ 85072-3999. Tel.: 602-250-1000. Internet: www.pinnaclewest.com.

**A planned asset acquisition by Pinnacle West's utility subsidiary has run into a snag.** Arizona Public Service had hoped to complete the purchase of units 4 and 5 of the Four Corners coal-fired station in mid-2013, at a cost of $253 million. The utility plans to finance the purchase with debt. If the deal is completed, APS will retire units 1, 2, and 3, thereby avoiding $600 million in environmental upgrades that are needed to keep the facilities operating. (The utility will have to spend $300 million on units 4 and 5.) However, the Arizona Corporation Commission has decided to examine the issue of deregulating the retail electric market in the state. With this uncertainty overhanging generating assets in the state, APS doesn't want to complete the transaction until there is some clarity. Something should be known, one way or the other, by yearend. Our estimates and projections already exclude Four Corners 4 and 5, and won't include them unless the acquisition closes.

**We have raised our 2013 and 2014 earnings estimates by $0.15 a share each year.** The March-quarter tally was much better than we expected. In fact, we think the company's 2013 earnings guidance of $3.45-$3.60 is conservative, and our estimate now stands at $3.65. APS benefits each year from annual revenue adjustments for transmission and renewable energy. The utility has a 10-year, $612 million transmission investment program and has solar commitments to date totaling an estimated capital spend of $614 million. Pinnacle also has a track record of effective expense control.

**Our dividend presentation in the statistical array requires an explanation.** In 2012, there were five declarations because one that usually occurs in January was shifted to December. This means that we expect only three declarations this year. We continue to look for a $0.02-a-share (3.7%) hike in the quarterly disbursement in the fourth quarter, which is in line with the company's goal of 4% dividend growth.

**This high-quality stock has a dividend yield that is average for a utility.** With the recent price at the upper end of our 2016-2018 Target Price Range, total return potential is unexciting.

*Paul E. Debbas, CFA* *August 2, 2013*

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**(A)** Diluted EPS. Excl. nonrec. losses: '02, 77¢; '09, $1.45; excl. gains (losses) from disc. ops.: '00, 22¢; '05, (36¢); '06, 10¢; '08, 28¢; '09, (13¢); '10, 18¢; '11, 10¢; '12, (5¢). '10 EPS don't add due to change in shares, '11 due to rounding. Next earnings report due early Nov. **(B)** Div'ds historically paid in early Mar., June, Sept., and Dec. ■ Div'd reinvestment plan avail. **(C)** Incl. deferred chgs. In '12: $11.92/sh. **(D)** In mill. **(E)** Rate base: Fair value. Rate allowed on com. eq. in '12: 10%; earned on avg. com. eq., '12: 9.9%. Regulatory Climate: Avg.

| **Company's Financial Strength** | A |
|---|---|
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 45 |
| **Earnings Predictability** | 65 |

# PEPCO HOLDINGS NYSE-POM

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|
| 20.20 | 18.2 (Trailing: 17.9 Median: 15.0) | 1.03 | 5.3% | VALUE LINE |

| | | |
|---|---|---|
| **TIMELINESS** | 2 | Raised 7/12/13 |
| **SAFETY** | 3 | Lowered 6/6/03 |
| TECHNICAL | 3 | Lowered 8/16/13 |

**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 21.9 | 20.6 | 21.7 | 24.5 | 27.0 | 30.7 | 29.6 | 18.7 | 19.8 | 20.6 | 20.5 | 22.7 |
| Low: | 18.3 | 16.1 | 16.9 | 20.3 | 21.8 | 24.2 | 15.3 | 10.1 | 15.1 | 16.6 | 18.1 | 18.8 |

**Target Price Range**
2016 | 2017 | 2018

### 2016-18 PROJECTIONS

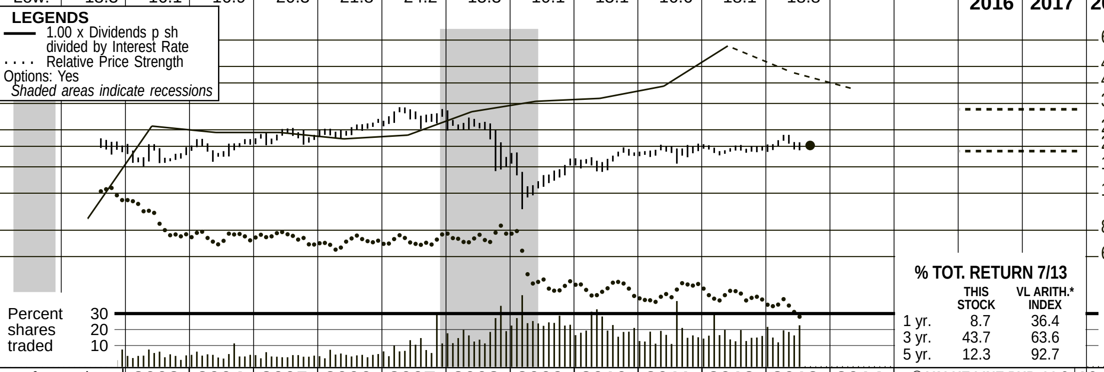
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (+50%) | *15%* |
| Low | 19 | (-5%) | *4%* |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 149 | 153 | 158 |
| to Sell | 134 | 143 | 134 |
| Hld's(000) | 125730 | 133078 | 139544 |



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 8.7 | 36.4 |
| 3 yr. | 43.7 | 63.6 |
| 5 yr. | 12.3 | 92.7 |

Pepco Holdings, Inc. (PHI) was formed on August 1, 2002, upon the merger of Potomac Electric Power Co. (PEPCO) and Conectiv. In the $2.2 billion deal, PEPCO common stockholders received one common share in PHI for each of their shares, and Conectiv investors exchanged each of their common shares for $25 worth of PHI stock and cash, prorated 50/50.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42.33 | 38.35 | 42.49 | 43.57 | 46.71 | 48.88 | 41.66 | 31.27 | 26.02 | 22.09 | ***20.00*** | ***20.65*** | **Revenues per sh** | ***25.50*** |
| 3.80 | 3.71 | 3.67 | 3.47 | 3.30 | 3.55 | 2.82 | 2.97 | 3.00 | 3.21 | ***3.10*** | ***3.25*** | **"Cash Flow" per sh** | ***3.70*** |
| 1.35 | 1.46 | 1.49 | 1.33 | 1.53 | 1.93 | 1.06 | 1.24 | 1.14 | 1.24 | ***1.10*** | ***1.25*** | **Earnings per sh ᴬ** | ***1.70*** |
| 1.00 | 1.00 | 1.00 | 1.04 | 1.04 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | ***1.08*** | ***1.12*** | **Div'd Decl'd per sh ᴮ ■** | ***1.16*** |
| 3.48 | 2.75 | 2.46 | 2.47 | 3.11 | 3.57 | 3.89 | 3.56 | 4.14 | 5.29 | ***5.20*** | ***5.20*** | **Cap'l Spending per sh** | ***4.00*** |
| 17.48 | 17.87 | 18.88 | 18.82 | 20.04 | 19.14 | 19.15 | 18.79 | 19.06 | 19.33 | ***19.00*** | ***19.45*** | **Book Value per sh ᶜ** | ***21.50*** |
| 171.77 | 188.33 | 189.82 | 191.93 | 200.51 | 218.91 | 222.27 | 225.08 | 227.50 | 230.02 | ***250.00*** | ***252.00*** | **Common Shs Outst'g ᴰ** | ***255.00*** |
| 13.4 | 13.6 | 14.9 | 18.1 | 18.2 | 12.2 | 13.7 | 14.0 | 16.7 | 15.6 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | ***14.0*** |
| .76 | .72 | .79 | .98 | .97 | .73 | .91 | .89 | 1.05 | .99 | ***Value Line*** | | **Relative P/E Ratio** | ***.95*** |
| 5.5% | 5.0% | 4.5% | 4.3% | 3.7% | 4.6% | 7.4% | 6.2% | 5.7% | 5.6% | ***estimates*** | | **Avg Ann'l Div'd Yield** | ***4.9%*** |
| 7271.3 | 7221.8 | 8065.5 | 8362.9 | 9366.4 | 10700 | 9259.0 | 7039.0 | 5920.0 | 5081.0 | ***5000*** | ***5200*** | **Revenues ($mill)** | ***6500*** |
| 245.2 | 261.3 | 277.4 | 254.4 | 296.5 | 400.0 | 235.0 | 276.0 | 257.0 | 285.0 | ***275*** | ***315*** | **Net Profit ($mill)** | ***430*** |
| 18.3% | 38.7% | 38.8% | 39.1% | 39.3% | 29.6% | 31.9% | 18.8% | 37.2% | 35.4% | ***35.0%*** | ***35.0%*** | **Income Tax Rate** | ***35.0%*** |
| - - | - - | - - | - - | - - | - - | - - | - - | - - | - - | ***Nil*** | ***Nil*** | **AFUDC % to Net Profit** | ***Nil*** |
| 63.1% | 59.7% | 57.1% | 54.6% | 54.1% | 56.2% | 53.8% | 49.0% | 49.1% | 47.3% | ***46.0%*** | ***47.5%*** | **Long-Term Debt Ratio** | ***50.0%*** |
| 35.6% | 39.6% | 42.3% | 45.1% | 45.9% | 43.8% | 46.2% | 51.0% | 50.9% | 52.7% | ***54.0%*** | ***52.5%*** | **Common Equity Ratio** | ***50.0%*** |
| 8439.3 | 8494.0 | 8469.3 | 8004.0 | 8753.0 | 9568.0 | 9203.0 | 8292.0 | 8516.0 | 8432.0 | ***8750*** | ***9300*** | **Total Capital ($mill)** | ***10880*** |
| 6964.9 | 7088.0 | 7312.0 | 7576.6 | 7876.7 | 8314.0 | 8863.0 | 7673.0 | 8220.0 | 8846.0 | ***9600*** | ***10000*** | **Net Plant ($mill)** | ***11000*** |
| 4.8% | 5.0% | 5.0% | 5.1% | 5.1% | 5.8% | 4.5% | 5.1% | 4.5% | 4.9% | ***4.5%*** | ***5.0%*** | **Return on Total Cap'l** | ***6.0%*** |
| 7.9% | 7.6% | 7.6% | 7.0% | 7.4% | 9.5% | 5.5% | 6.5% | 5.9% | 6.4% | ***6.0%*** | ***6.5%*** | **Return on Shr. Equity** | ***8.0%*** |
| 7.7% | 7.7% | 7.7% | 7.0% | 7.4% | 9.5% | 5.5% | 6.5% | 5.9% | 6.4% | ***6.0%*** | ***6.5%*** | **Return on Com Equity ᴱ** | ***8.0%*** |
| 2.0% | 2.5% | 2.4% | 1.5% | 2.3% | 4.2% | NMF | .8% | .3% | .8% | ***.5%*** | ***.5%*** | **Retained to Com Eq** | ***2.5%*** |
| 75% | 68% | 69% | 78% | 68% | 56% | 101% | 87% | 95% | 87% | ***98%*** | ***90%*** | **All Div'ds to Net Prof** | ***69%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $5271 mill. **Due in 5 Yrs** $1784 mill.
**LT Debt** $4123 mill. **LT Interest** $250 mill.
(LT interest earned: 3.7x)

**Pension Assets-12/12** $2.0 bill. **Oblig.** $2.5 bill.

**Pfd Stock** None

**Common Stock** 249,142,538 shs.
**as of 7/25/13**

**MARKET CAP: $5.0 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.1 | -2.8 | NA |
| Avg. Resid'l Use (KWH) | 11253 | 10836 | 10451 |
| Avg. Resid'l Revs. per KWH(¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +1.1 | +.7 | +.3 |
| Fixed Charge Cov. (%) | 204 | 251 | 253 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -5.5% | -10.0% | *-.5%* |
| "Cash Flow" | -3.0% | -2.5% | *3.0%* |
| Earnings | -4.0% | -3.5% | *6.0%* |
| Dividends | - - | 1.0% | *1.0%* |
| Book Value | .5% | - - | *2.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 1819 | 1636 | 2067 | 1517 | 7039 |
| **2011** | 1634 | 1409 | 1643 | 1234 | 5920 |
| **2012** | 1292 | 1179 | 1476 | 1134 | 5081 |
| **2013** | 1226 | 1053 | ***1500*** | ***1221*** | ***5000*** |
| **2014** | ***1250*** | ***1100*** | ***1550*** | ***1300*** | ***5200*** |

| Cal-endar | EARNINGS PER SHARE ᴬᶠ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .16 | .34 | .52 | .25 | 1.24 |
| **2011** | .27 | .42 | .35 | .10 | 1.14 |
| **2012** | .30 | .27 | .49 | .18 | 1.24 |
| **2013** | .24 | .22 | ***.43*** | ***.21*** | ***1.10*** |
| **2014** | ***.25*** | ***.25*** | ***.50*** | ***.25*** | ***1.25*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID ᴮ ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .27 | .27 | .27 | .27 | 1.08 |
| **2010** | .27 | .27 | .27 | .27 | 1.08 |
| **2011** | .27 | .27 | .27 | .27 | 1.08 |
| **2012** | .27 | .27 | .27 | .27 | 1.08 |
| **2013** | .27 | .27 | .27 | | |

**BUSINESS:** Pepco Holdings, Inc. consists mainly of three electric utility subsidiaries: Potomac Electric Power Co., serving Washington, D.C. and adjoining areas of Maryland; Delmarva Power, which serves the peninsula area of Delaware, Maryland and Virginia; and Atlantic City Electric, serving southern New Jersey. In July 2010, Pepco sold competitive energy business (Conectiv Energy) to Calpine Corp. Electricity customers: 1.8 million; gas customers: 125,000. Electricity breakdown: residential, 40%; commercial, 41%; other, 19%. 2012 depreciation rate: 2.5%. Has approximately 5,040 employees as of 12/31/12. Chrmn., Pres. & CEO: Joseph M. Rigby. Inc.: DE. Address: 701 Ninth Street, N.W., Wash., D.C. 20068. Telephone.: 202-872-2000. Internet: www.pepcoholdings.com.

**Pepco Holdings' second-quarter results came in below our expectations.** The Washington, DC-based utility reported earnings of $0.22 a share during the period, versus our estimate of $0.25 (the figure excludes one-time charges related to cross-border lease investments). Despite the slight miss, the company reaffirmed its full-year earnings guidance of $1.05-$1.20 a share, though it did acknowledge that challenges related to weak load growth and regulatory outcomes continue to be somewhat of a burden. All told, we have lowered our 2013 share-net estimate by a nickel, to $1.10.

**Rate-case outcomes continue to disappoint.** On July 12th, the company received yet another lackluster regulatory ruling in its electric distribution rate case in Maryland. The commission's order authorized a $28 million increase in rates based on a 9.36% return on equity, which was less than half of the amount requested in Pepco's initial filing. Moreover, it was denied two of three grid resiliency charge proposals. As a result, the company filed an appeal of this decision and plans to file its next base rate case in Maryland by year's end.

**The company reached a settlement in its Atlantic Electric rate case.** On June 21st, the New Jersey Board of Public Utilities approved a settlement agreement that will provide for an annual rate increase of $26 million based on a return on equity of 9.75%. The revenue increase includes full recovery of incremental storm restoration costs by including capital cost in rate base and amortizing the deferred O&M expenses of $26 million over a three-year period. The outcome was less constructive than expected by the company.

**Income-oriented accounts should consider taking a position here.** Shares of Pepco are currently yielding an attractive 5.3%, well above the utility industry's 3.8% mean. Based on the steady earnings stream we project for 2013 and 2014, the payout appears well covered over this time. In our view, the favorable income component remains a key draw.

**The stock has been upgraded a notch for Timeliness to 2 (Above Average).** By utility standards, total return potential to 2016-2018 is also above average.

*Michael Ratty* *August 23, 2013*

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**(A)** Based on dil. shs. Excl. nonrecur. items: '03, d69¢; '04, 1¢; '05, 47¢; '06, d1¢; '08, 46¢; '10, 62¢. Next egs. rpt. due early Nov. **(B)** Div'ds paid in early March, June, Sep., and Dec. ■ Div'd reinvest. plan. **(C)** Incl. def'd chgs: '12, $4.8 bill. or $20.87/sh. **(D)** In mill. **(E)** Rate allowed in MD: 9.36% ('13-Pepco), 10.0% ('09-Delmarva); DC: 9.6% ('10-Pep.); DEL: 10.0% ('06-Del.); NJ: 9.75% ('13-ACE); Earned on '12 avg. com. eq., 6.4%. Reg. Clim.: Avg. **(F)** Qtrly egs. may not add due to chng. in shs.

| | |
|---|---|
| **Company's Financial Strength** | B |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 25 |
| **Earnings Predictability** | 70 |

# PORTLAND GENERAL NYSE-POR

**RECENT PRICE** 32.24 **P/E RATIO** 17.4 (Trailing: 17.2 Median: NMF) **RELATIVE P/E RATIO** 0.96 **DIV'D YLD** 3.4% **VALUE LINE**

**TIMELINESS** 3 Lowered 8/19/11
**SAFETY** 2 Raised 5/4/12
TECHNICAL 2 Raised 7/26/13
**BETA** .75 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 30 | (-5%) | *2%* |
| Low | 25 | (-20%) | *-2%* |

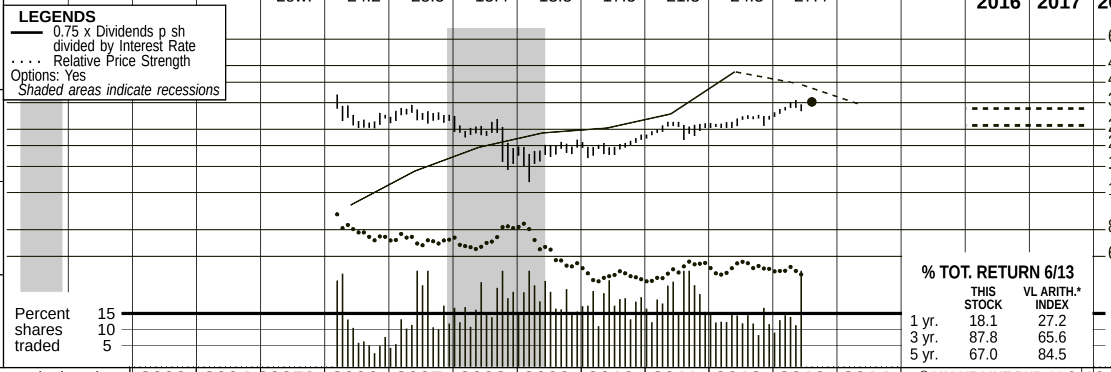
**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 111 | 116 | 114 |
| to Sell | 109 | 122 | 111 |
| Hld's(000) | 67500 | 68342 | 68765 |

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|
| High: | 35.0 | 31.3 | 27.7 | 21.4 | 22.7 | 26.0 | 28.1 | 32.9 |
| Low: | 24.2 | 25.5 | 15.4 | 13.5 | 17.5 | 21.3 | 24.3 | 27.4 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 18.1 | 27.2 |
| 3 yr. | 87.8 | 65.6 |
| 5 yr. | 67.0 | 84.5 |

On April 3, 2006, Portland General Electric's existing stock (which was owned by Enron) was canceled, and 62.5 million shares were issued to Enron's creditors or the Disputed Claims Reserve (DCR). The stock began trading on a when-issued basis that day, and regular trading began on April 10, 2006. Shares issued to the DCR were released over time to Enron's creditors until all of the remaining shares were released in June, 2007.

| 2003 | 2004 | 2005^G | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | - - | 23.14 | 24.32 | 27.87 | 27.89 | 23.99 | 23.67 | 24.06 | 23.89 | *23.25* | *22.75* | Revenues per sh | *24.50* |
| - - | - - | 4.75 | 4.64 | 5.21 | 4.71 | 4.07 | 4.82 | 4.96 | 5.15 | *4.95* | *4.90* | "Cash Flow" per sh | *5.75* |
| - - | - - | 1.02 | 1.14 | 2.33 | 1.39 | 1.31 | 1.66 | 1.95 | 1.87 | *1.85* | *1.95* | Earnings per sh ^A | *2.25* |
| - - | - - | - - | .68 | .93 | .97 | 1.01 | 1.04 | 1.06 | 1.08 | *1.10* | *1.12* | Div'd Decl'd per sh ^B ■ † | *1.25* |
| - - | - - | 4.08 | 5.94 | 7.28 | 6.12 | 9.25 | 5.97 | 3.98 | 4.01 | *9.90* | *12.20* | Cap'l Spending per sh | *2.75* |
| - - | - - | 19.15 | 19.58 | 21.05 | 21.64 | 20.50 | 21.14 | 22.07 | 22.87 | *23.35* | *24.45* | Book Value per sh ^C | *26.75* |
| - - | - - | 62.50 | 62.50 | 62.53 | 62.58 | 75.21 | 75.32 | 75.36 | 75.56 | *78.00* | *83.50* | Common Shs Outst'g ^D | *89.50* |
| - - | - - | - - | 23.4 | 11.9 | 16.3 | 14.4 | 12.0 | 12.4 | 14.0 | *Bold figures are* | | Avg Ann'l P/E Ratio | *12.5* |
| - - | - - | - - | 1.26 | .63 | .98 | .96 | .76 | .78 | .89 | *Value Line* | | Relative P/E Ratio | *.85* |
| - - | - - | - - | 2.5% | 3.3% | 4.3% | 5.4% | 5.2% | 4.4% | 4.1% | *estimates* | | Avg Ann'l Div'd Yield | *4.4%* |
| - - | 1454.0 | 1446.0 | 1520.0 | 1743.0 | 1745.0 | 1804.0 | 1783.0 | 1813.0 | 1805.0 | *1815* | *1900* | Revenues ($mill) | *2200* |
| - - | 92.0 | 64.0 | 71.0 | 145.0 | 87.0 | 95.0 | 125.0 | 147.0 | 141.0 | *140* | *155* | Net Profit ($mill) | *190* |
| - - | 37.0% | 40.2% | 33.6% | 33.8% | 28.7% | 28.8% | 30.5% | 28.3% | 31.4% | *30.0%* | *30.0%* | Income Tax Rate | *28.0%* |
| - - | 9.8% | 18.8% | 33.8% | 17.9% | 17.2% | 31.6% | 17.6% | 5.4% | 7.1% | *16.0%* | *19.0%* | AFUDC % to Net Profit | *4.0%* |
| - - | 41.1% | 42.3% | 43.4% | 49.9% | 46.2% | 50.3% | 53.0% | 49.6% | 47.1% | *49.0%* | *49.5%* | Long-Term Debt Ratio | *47.0%* |
| - - | 58.9% | 57.7% | 56.6% | 50.1% | 53.8% | 49.7% | 47.0% | 50.4% | 52.9% | *51.0%* | *50.5%* | Common Equity Ratio | *53.0%* |
| - - | 2171.0 | 2076.0 | 2161.0 | 2629.0 | 2518.0 | 3100.0 | 3390.0 | 3298.0 | 3264.0 | *3580* | *4030* | Total Capital ($mill) | *4550* |
| - - | 2275.0 | 2436.0 | 2718.0 | 3066.0 | 3301.0 | 3858.0 | 4133.0 | 4285.0 | 4392.0 | *4920* | *5685* | Net Plant ($mill) | *5800* |
| - - | 5.6% | 4.6% | 4.7% | 6.9% | 5.0% | 4.5% | 5.4% | 6.2% | 5.9% | *5.0%* | *5.0%* | Return on Total Cap'l | *5.5%* |
| - - | 7.2% | 5.3% | 5.8% | 11.0% | 6.4% | 6.2% | 7.9% | 8.8% | 8.2% | *8.0%* | *7.5%* | Return on Shr. Equity | *8.0%* |
| - - | 7.2% | 5.3% | 5.8% | 11.0% | 6.4% | 6.2% | 7.9% | 8.8% | 8.2% | *8.0%* | *7.5%* | Return on Com Equity ^E | *8.0%* |
| - - | 7.2% | 5.3% | 3.5% | 6.6% | 2.0% | 1.5% | 3.0% | 4.1% | 3.5% | *3.0%* | *3.0%* | Retained to Com Eq | *3.5%* |
| - - | - - | - - | 39% | 40% | 69% | 76% | 62% | 54% | 57% | *59%* | *58%* | All Div'ds to Net Prof | *58%* |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1636.0 mill. **Due in 5 Yrs** $295.0 mill.
**LT Debt** $1536.0 mill. **LT Interest** $89.0 mill.
(LT interest earned: 2.8x)
**Leases, Uncapitalized** Annual rentals $9.0 mill.

**Pension Assets-12/12** $537.0 mill.
**Oblig.** $728.0 mill.

**Pfd Stock** None

**Common Stock** 75,678,110 shs.
**as of 4/25/13**

**MARKET CAP: $2.4 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -3.1 | +3.3 | -.8 |
| Avg. Indust. Use (MWH) | 15051 | 16573 | 16409 |
| Avg. Indust. Revs. per KWH (¢) | 5.50 | 5.44 | 5.26 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) ^F | 3582 | 3555 | 3597 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.5 | +.2 | +.7 |
| Fixed Charge Cov. (%) | 224 | 273 | 270 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | - - | -1.0% | *.5%* |
| "Cash Flow" | - - | .5% | *2.5%* |
| Earnings | - - | 4.0% | *3.5%* |
| Dividends | - - | 14.5% | *3.0%* |
| Book Value | - - | 2.0% | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 449.0 | 415.0 | 464.0 | 455.0 | 1783.0 |
| **2011** | 484.0 | 411.0 | 439.0 | 479.0 | 1813.0 |
| **2012** | 479.0 | 413.0 | 450.0 | 463.0 | 1805.0 |
| **2013** | 473.0 | *415* | *462* | *465* | *1815* |
| **2014** | *500* | *430* | *485* | *485* | *1900* |

| Cal-endar | EARNINGS PER SHARE ^A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .36 | .32 | .65 | .34 | 1.66 |
| **2011** | .92 | .29 | .36 | .38 | 1.95 |
| **2012** | .65 | .34 | .50 | .38 | 1.87 |
| **2013** | .65 | *.30* | *.50* | *.40* | *1.85* |
| **2014** | *.67* | *.36* | *.52* | *.40* | *1.95* |

| Cal-endar | QUARTERLY DIVIDENDS PAID ^B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .245 | .245 | .255 | .255 | 1.00 |
| **2010** | .255 | .255 | .26 | .26 | 1.03 |
| **2011** | .26 | .26 | .265 | .265 | 1.05 |
| **2012** | .265 | .265 | .27 | .27 | 1.07 |
| **2013** | .27 | .27 | .275 | | |

**BUSINESS:** Portland General Electric Company (PGE) provides electricity to 830,000 customers in 52 cities in a 4,000-square-mile area of Oregon, including Portland and Salem. The company is in the process of decommissioning the Trojan nuclear plant, which it closed in 1993. Electric revenue breakdown: residential, 48%; commercial, 34%; industrial, 13%; other, 5%. Generating sources: coal, 17%; gas, 14%; hydro, 9%; wind, 5%; purchased, 55%. Fuel costs: 42% of revenues. '12 reported depreciation rate: 3.8%. Has 2,600 employees. Chairman: Corbin A. McNeill, Jr. Chief Executive Officer and President: Jim Piro. Incorporated: Oregon. Address: 121 SW Salmon Street, Portland, Oregon 97204. Telephone: 503-464-8000. Internet: www.portlandgeneral.com.

**Portland General Electric has reached a settlement of its general rate case.** The utility had sought a rate increase of $105 million, based on a 10% return on equity, but settled with the staff of the Oregon commission and some intervenors for a hike of $60 million (4%), based on a return of 9.75% on a common-equity ratio of 50%. Not every issue was settled; PGE is still seeking a regulatory mechanism to track pension expense. The agreement is subject to commission approval, and new tariffs will take effect at the start of 2014. We assume adoption of the settlement in our 2014 profit estimate.

**The utility is adding generating capacity.** PGE is building a 220-megawatt gas-fired peaking unit at a cost of $300 million-$310 million. This plant is scheduled to go on line in the first quarter of 2015. Two other projects will be built by other companies on PGE's behalf. These are a 267-mw wind project at a cost of $520 million-$535 million, to be in service in 2015, and a 440-mw gas-fired base-load facility at a cost of $440 million-$455 million, which is scheduled for 2016. PGE will rely on a combination of debt and equity financing. The utility is issuing $225 million of long-term debt and has executed a forward equity sale of 12.765 million shares at $29.50 each.

**Two coal-fired plants are out of service.** PGE will incur a small amount of repair costs, but expects that most of these will be covered by insurance. The utility will also book replacement power costs (tentatively estimated at $10 million-$12 million). The replacement power costs are recoverable in rates, but if they wind up much higher than expected, PGE might have to swallow a portion of them. We have trimmed our 2013 earnings estimate by $0.05 a share, to $1.85, due to a revenue refund that the utility will book against June-quarter results. Note that we will *exclude* an aftertax charge of $31 million ($0.40 a share) for a write-off of a proposed transmission project that will not be built.

**We consider this stock overvalued.** The dividend yield (even after a modest increase) is a cut below the utility average, and the recent quotation is *above* our 2016-2018 Target Price Range.

*Paul E. Debbas, CFA* *August 2, 2013*

**(A)** Diluted EPS. Excl. nonrecur. loss: 2Q '13, *40¢*. '10 EPS don't add due to rounding. Next earnings report due early Nov. **(B)** Div'ds paid mid-Jan., Apr., July, and Oct. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. def'd charges. In '12: $6.93/sh. **(D)** In mill. **(E)** Rate base: Net original cost. Rate allowed on com. eq. in '11: 10.0%; earned on avg. com. eq., '12: 8.2%. Regulatory Climate: Below Average. **(F)** Summer peak in '12. **(G)** '05 per-sh. data are pro forma, based on shs out. when stock began trading in '06.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 60 |
| **Earnings Predictability** | 45 |

# PPL CORPORATION NYSE-PPL

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 31.73 | 12.4 (Trailing: 12.7 Median: 13.0) | 0.70 | 4.7% |

**VALUE LINE**

| | | |
|---|---|---|
| **TIMELINESS** | 3 | Raised 4/5/13 |
| **SAFETY** | 3 | Lowered 11/28/08 |
| TECHNICAL | 4 | Lowered 8/23/13 |

**BETA** .65 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 40 | (+25%) | *10%* |
| Low | 25 | (-20%) | *Nil* |

**Insider Decisions**

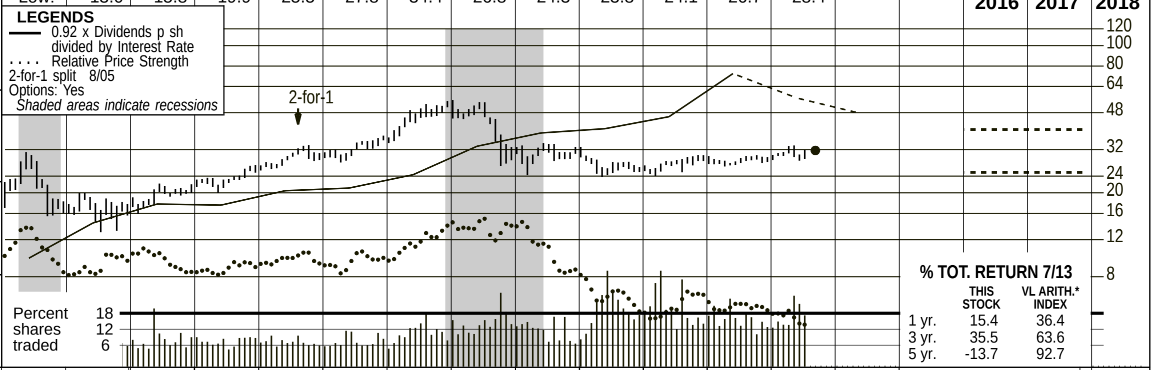
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 1 | 0 | 1 | 9 | 0 | 4 | 5 | 0 |
| to Sell | 1 | 1 | 0 | 2 | 4 | 0 | 4 | 5 | 0 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 280 | 294 | 285 |
| to Sell | 221 | 242 | 241 |
| Hld's(000) | 391470 | 397277 | 406929 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 20.0 | 22.2 | 27.1 | 33.7 | 37.3 | 54.6 | 55.2 | 34.4 | 33.1 | 30.3 | 30.2 | 33.6 |
| Low: | 13.0 | 15.8 | 19.9 | 25.5 | 27.8 | 34.4 | 26.8 | 24.3 | 23.8 | 24.1 | 26.7 | 28.4 |

**Target Price Range**
**2016 | 2017 | 2018**



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.4 | 36.4 |
| 3 yr. | 35.5 | 63.6 |
| 5 yr. | -13.7 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.17 | 12.03 | 15.97 | 19.59 | 19.53 | 16.38 | 15.75 | 15.37 | 16.36 | 17.92 | 17.41 | 21.47 | 20.03 | 17.63 | 22.02 | 21.11 | *19.20* | *18.80* | Revenues per sh | *20.50* |
| 2.11 | 2.43 | 2.56 | 3.32 | 3.51 | 3.20 | 3.60 | 3.59 | 3.84 | 4.26 | 5.10 | 4.71 | 3.47 | 3.66 | 4.59 | 4.84 | *4.70* | *4.40* | "Cash Flow" per sh | *5.00* |
| .99 | 1.12 | 1.01 | 1.64 | 1.79 | 1.54 | 1.84 | 1.87 | 1.92 | 2.29 | 2.63 | 2.45 | 1.19 | 2.29 | 2.61 | 2.61 | *2.40* | *2.20* | Earnings per sh A | *2.50* |
| .84 | .67 | .50 | .53 | .53 | .72 | .77 | .82 | .96 | 1.10 | 1.22 | 1.34 | 1.38 | 1.40 | 1.40 | 1.44 | *1.47* | *1.50* | Div'd Decl'd per sh B ■ | *1.60* |
| .93 | .97 | 1.11 | 1.59 | 2.99 | 2.74 | 2.17 | 1.94 | 2.13 | 3.62 | 4.51 | 3.79 | 3.25 | 3.30 | 4.30 | 5.34 | *6.90* | *5.65* | Cap'l Spending per sh | *5.00* |
| 8.45 | 5.69 | 5.61 | 6.94 | 6.33 | 6.71 | 9.19 | 11.21 | 11.62 | 13.30 | 14.88 | 13.55 | 14.57 | 16.98 | 18.72 | 18.01 | *19.50* | *20.65* | Book Value per sh C | *23.25* |
| 332.50 | 314.82 | 287.39 | 290.08 | 293.16 | 331.47 | 354.72 | 378.14 | 380.15 | 385.04 | 373.27 | 374.58 | 377.18 | 483.39 | 578.41 | 581.94 | *638.00* | *670.00* | Common Shs Outst'g D | *670.00* |
| 10.8 | 10.9 | 13.4 | 8.9 | 12.4 | 11.1 | 10.6 | 12.5 | 15.1 | 14.1 | 17.3 | 17.6 | 25.7 | 11.9 | 10.5 | 10.9 | *Bold figures are* | | Avg Ann'l P/E Ratio | *13.5* |
| .62 | .57 | .76 | .58 | .64 | .61 | .60 | .66 | .80 | .76 | .92 | 1.06 | 1.71 | .76 | .66 | .70 | *Value Line* | | Relative P/E Ratio | *.90* |
| 7.8% | 5.5% | 3.7% | 3.6% | 2.4% | 4.2% | 4.0% | 3.5% | 3.3% | 3.4% | 2.7% | 3.1% | 4.5% | 5.1% | 5.1% | 5.1% | *estimates* | | Avg Ann'l Div'd Yield | *4.7%* |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5587.0 | 5812.0 | 6219.0 | 6899.0 | 6498.0 | 8044.0 | 7556.0 | 8521.0 | 12737 | 12286 | *12250* | *12600* | Revenues ($mill) | *13750* |
| 667.0 | 692.0 | 739.0 | 899.0 | 1031.0 | 940.0 | 465.0 | 1009.0 | 1456.0 | 1536.0 | *1600* | *1480* | Net Profit ($mill) | *1655* |
| 27.1% | 22.8% | 14.0% | 23.2% | 20.7% | 31.8% | 21.8% | 22.0% | 31.0% | 26.2% | *26.5%* | *26.5%* | Income Tax Rate | *26.5%* |
| 1.2% | .7% | - - | - - | - - | .1% | .2% | .5% | .5% | .7% | *Nil* | *Nil* | AFUDC % to Net Profit | *Nil* |
| 71.1% | 61.6% | 57.5% | 55.4% | 54.1% | 57.1% | 55.2% | 59.0% | 61.9% | 64.1% | *60.0%* | *54.5%* | Long-Term Debt Ratio | *55.5%* |
| 28.5% | 37.9% | 42.0% | 42.2% | 43.6% | 40.5% | 42.5% | 39.8% | 37.2% | 35.9% | *40.0%* | *45.5%* | Common Equity Ratio | *44.5%* |
| 11455 | 11171 | 10513 | 12151 | 12747 | 12529 | 12940 | 20621 | 29071 | 29205 | *30900* | *30325* | Total Capital ($mill) | *34900* |
| 10446 | 11209 | 10916 | 12069 | 12605 | 12416 | 13174 | 20858 | 27266 | 30032 | *33025* | *35350* | Net Plant ($mill) | *40500* |
| 7.6% | 8.4% | 9.3% | 9.3% | 9.8% | 9.2% | 5.0% | 6.1% | 6.4% | 6.9% | *6.5%* | *6.5%* | Return on Total Cap'l | *6.0%* |
| 20.2% | 16.1% | 16.5% | 16.6% | 17.6% | 17.5% | 8.0% | 11.9% | 13.1% | 14.7% | *13.0%* | *10.5%* | Return on Shr. Equity | *10.5%* |
| 19.6% | 16.3% | 16.7% | 17.3% | 18.2% | 18.2% | 8.1% | 12.0% | 13.3% | 14.6% | *13.0%* | *10.5%* | Return on Com Equity E | *10.5%* |
| 11.7% | 9.3% | 8.8% | 9.3% | 10.0% | 8.5% | NMF | 5.2% | 6.4% | 6.7% | *5.5%* | *3.5%* | Retained to Com Eq | *3.5%* |
| 43% | 43% | 47% | 47% | 46% | 54% | 115% | 58% | 52% | 54% | *56%* | *66%* | All Div'ds to Net Prof | *65%* |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $20693 mill. **Due in 5 Yrs** $4403.0 mill.
**LT Debt** $18881 mill. **LT Interest** $911.0 mill.
Incl. 23 mill. units 7.75%, $25 liq. value; 82,000 units 8.23%, $1000 face value; 23 mill. units 4.625%, $50 stated value, conv. into com. in 2013.
(LT interest earned: 2.9x)
**Leases, Uncapitalized** Annual rentals $109.0 mill.
**Pension Assets-12/12** $10.9 bill. **Oblig.** $12.9 bill.
**Pfd Stock** None
**Common Stock** 592,339,687 shs.
**as of 4/30/13**
**MARKET CAP: $19 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +15.3 | +60.7 | -1.3 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +22.5 | NA | NA |
| Fixed Charge Cov. (%) | 304 | 321 | 321 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 1.0% | 3.5% | *Nil* |
| "Cash Flow" | 2.5% | - - | *2.5%* |
| Earnings | 4.0% | 2.0% | *Nil* |
| Dividends | 9.0% | 5.5% | *2.0%* |
| Book Value | 10.5% | 6.0% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 3006 | 1473 | 2179 | 1863 | 8521.0 |
| **2011** | 2910 | 2489 | 3120 | 4218 | 12737 |
| **2012** | 4112 | 2549 | 2403 | 3222 | 12286 |
| **2013** | 2457 | 3450 | *3100* | *3243* | *12250* |
| **2014** | *3250* | *3000* | *3100* | *3250* | *12600* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .74 | .22 | .62 | .69 | 2.29 |
| **2011** | .82 | .35 | .76 | .69 | 2.61 |
| **2012** | .93 | .47 | .61 | .60 | 2.61 |
| **2013** | .65 | .63 | *.67* | *.45* | *2.40* |
| **2014** | *.80* | *.40* | *.60* | *.40* | *2.20* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .335 | .345 | .345 | .345 | 1.37 |
| **2010** | .345 | .35 | .35 | .35 | 1.40 |
| **2011** | .35 | .35 | .35 | .35 | 1.40 |
| **2012** | .35 | .36 | .36 | .36 | 1.43 |
| **2013** | .36 | .3675 | .3675 | | |

**BUSINESS:** PPL Corporation (formerly PP&L Resources, Inc.) is a holding company for PPL Electric Utilities (formerly Pennsylvania Power & Light Company), which distributes electricity to 1.4 mill. customers in eastern & central PA. Acq'd Kentucky Utilities and Louisville Gas and Electric (1.2 mill. customers) 11/10. Has subs. in power generation & marketing, electricity distribution in U.K. (7.6 million customers). Sold gas distrib. sub. in '08. Electric rev. breakdown: res'l, 50%; comm'l & ind'l, 37%; other, 13%. Generating sources unavail. Fuel costs: 36% of revs. '12 reported depr. rates: 2.6%-4.9%. Has 18,000 empls. Chairman, Pres. & CEO: William H. Spence. Inc.: PA. Address: Two North Ninth St., Allentown, PA 18101-1179. Tel.: 800-345-3085. Internet: www.pplweb.com.

**We estimate that PPL's earnings will decline in 2013 and 2014.** The regulated utility operations are performing well. PPL's regulated subsidiaries in Pennsylvania and Kentucky were granted rate hikes at the start of 2013, and the company's utilities in England and Wales received price increases at the start of April. On the other hand, lower market prices for power, along with higher coal costs, are squeezing margins at the nonregulated energy-supply segment. Another negative factor for share profits is a sharp rise in average shares outstanding, due in part to stock that was issued in mid-2013 in connection with some equity units. This is why we estimate that share earnings will fall 8% this year and next. Note that earnings are influenced by mark-to-market accounting gains or losses that are impossible to predict. These raised earnings by $0.07 a share last year but hurt profits by $0.05 a share in the first six months of 2013. We include them in our presentation because they are an ongoing part of PPL's quarterly results.

**We look for continued dividend growth, even if earnings are declining.** The *regulated* portion of PPL's income is rising. The payout ratio is low enough to allow for annual (albeit modest) increases. Finances are in good shape, and the capital budget will decline after 2013.

**An important regulatory filing is pending in Great Britain.** This will determine base revenues for PPL's four utilities there for an eight-year period beginning in April of 2015. If the British regulator grants the utilities fast-track status for their review, this means that the company will benefit from an incentive pricing award. This would likely enable the utilities to maintain their earning power beyond 2014. (In PPL's favor is the fact that customer service has improved under the company's ownership.) There has been some concern about an adverse order that could hurt profitability, so a fast-track determination, which should be known by November, would be good news.

**PPL stock offers an attractive dividend yield.** It is almost a percentage point above the utility mean. Total return potential to 2016-2018 is modest, but superior to the industry average.

*Paul E. Debbas, CFA* *August 23, 2013*

**(A)** Dil. EPS. Excl. nonrec. gain (losses): '07, (12¢); '10, (8¢); '11, 8¢; gains (losses) on disc. ops.: '05, (12¢); '07, 19¢; '08, 3¢; '09, (10¢); '10, (4¢); '12, (1¢). '10 EPS don't add due to change in shs., '11 due to rounding. Next egs. report due early Nov. **(B)** Div'ds historically paid in early Jan., Apr., July, & Oct. ■ Div'd reinv. plan avail. **(C)** Incl. intang. In '12: $11.28/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Fair val. Rate all'd on com. eq. in PA in '13: 10.4%; in KY in '13: 10.25%; earned on avg. com. eq., '12: 13.8%. Regul. Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 45 |
| **Earnings Predictability** | 60 |

# SCANA CORP. NYSE-SCG

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|---|
| 51.18 | 15.1 | (Trailing: 15.1 Median: 14.0) | 0.86 | 4.0% |

**VALUE LINE**

| | | |
|---|---|---|
| **TIMELINESS** | 2 | Raised 8/23/13 |
| **SAFETY** | 2 | Lowered 9/10/99 |
| TECHNICAL | 3 | Lowered 8/16/13 |

**BETA** .65 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+15%) | *8%* |
| Low | 45 | (-10%) | *2%* |

### Insider Decisions

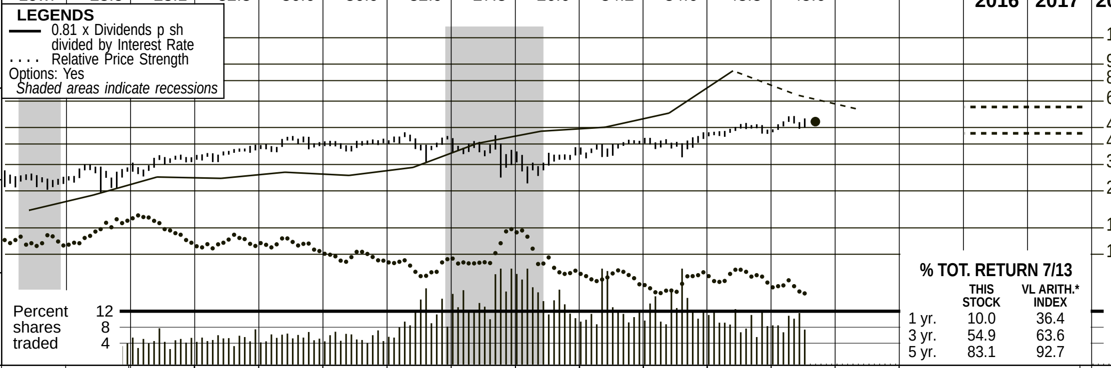
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 180 | 188 | 165 |
| to Sell | 125 | 135 | 159 |
| Hld's(000) | 66014 | 63241 | 64090 |

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 32.1 | 35.7 | 39.7 | 43.7 | 42.4 | 45.5 | 44.1 | 38.6 | 42.0 | 45.5 | 50.3 | 54.4 |
| Low: | 23.5 | 28.1 | 32.8 | 36.6 | 36.9 | 32.9 | 27.8 | 26.0 | 34.2 | 34.6 | 43.3 | 45.6 |

**LEGENDS**
— 0.81 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
*Shaded areas indicate recessions*



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 10.0 | 36.4 |
| 3 yr. | 54.9 | 63.6 |
| 5 yr. | 83.1 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.19 | 15.76 | 15.93 | 32.78 | 32.95 | 26.65 | 30.85 | 34.38 | 41.54 | 39.00 | 39.50 | 45.08 | 34.45 | 36.23 | 33.92 | 31.64 | ***32.50*** | ***31.55*** | **Revenues per sh** | ***33.75*** |
| 3.53 | 3.62 | 3.15 | 4.43 | 4.55 | 4.56 | 4.95 | 5.26 | 7.41 | 5.67 | 5.72 | 5.85 | 5.65 | 5.93 | 6.01 | 6.30 | ***6.40*** | ***6.40*** | **"Cash Flow" per sh** | ***7.25*** |
| 1.90 | 2.12 | 1.44 | 2.12 | 2.15 | 2.38 | 2.50 | 2.67 | 2.78 | 2.59 | 2.74 | 2.95 | 2.85 | 2.98 | 2.97 | 3.15 | ***3.40*** | ***3.50*** | **Earnings per sh A** | ***4.00*** |
| 1.51 | 1.54 | 1.32 | 1.15 | 1.20 | 1.30 | 1.38 | 1.46 | 1.56 | 1.68 | 1.76 | 1.84 | 1.88 | 1.90 | 1.94 | 1.98 | ***2.03*** | ***2.08*** | **Div'd Decl'd per sh B ■** | ***2.25*** |
| 2.45 | 2.87 | 2.37 | 3.28 | 4.99 | 6.41 | 6.94 | 4.84 | 3.37 | 4.50 | 6.20 | 7.66 | 7.43 | 6.90 | 6.80 | 8.16 | ***10.45*** | ***11.30*** | **Cap'l Spending per sh** | ***10.25*** |
| 16.66 | 16.86 | 20.27 | 19.40 | 20.95 | 19.64 | 20.82 | 21.69 | 23.28 | 24.32 | 25.30 | 25.81 | 27.71 | 29.15 | 29.92 | 31.47 | ***33.20*** | ***35.15*** | **Book Value per sh C** | ***40.75*** |
| 107.32 | 103.57 | 103.57 | 104.73 | 104.73 | 110.83 | 110.74 | 113.00 | 115.00 | 117.00 | 117.00 | 118.00 | 123.00 | 127.00 | 130.00 | 132.00 | ***140.00*** | ***149.00*** | **Common Shs Outst'g D** | ***160.00*** |
| 13.4 | 14.5 | 17.5 | 12.5 | 12.6 | 12.2 | 13.0 | 13.6 | 14.4 | 15.4 | 15.0 | 12.7 | 11.6 | 12.9 | 13.7 | 14.8 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***12.5*** |
| .77 | .75 | 1.00 | .81 | .65 | .67 | .74 | .72 | .77 | .83 | .80 | .76 | .77 | .82 | .86 | .94 | | | **Relative P/E Ratio** | ***.85*** |
| 5.9% | 5.0% | 5.2% | 4.3% | 4.4% | 4.5% | 4.2% | 4.0% | 3.9% | 4.2% | 4.3% | 4.9% | 5.7% | 4.9% | 4.8% | 4.2% | | | **Avg Ann'l Div'd Yield** | ***4.5%*** |
| | | | | | | 3416.0 | 3885.0 | 4777.0 | 4563.0 | 4621.0 | 5319.0 | 4237.0 | 4601.0 | 4409.0 | 4176.0 | ***4550*** | ***4700*** | **Revenues ($mill)** | ***5400*** |
| | | | | | | 285.0 | 305.0 | 323.0 | 306.0 | 327.0 | 353.0 | 357.0 | 376.0 | 387.0 | 420.0 | ***470*** | ***510*** | **Net Profit ($mill)** | ***630*** |
| | | | | | | 31.5% | 32.5% | - - | 26.5% | 29.2% | 35.4% | 32.0% | 29.8% | 30.3% | 30.2% | ***32.0%*** | ***32.0%*** | **Income Tax Rate** | ***31.0%*** |
| | | | | | | 10.5% | 8.5% | .9% | 2.6% | 4.6% | 8.5% | 14.3% | 8.0% | 5.4% | 7.6% | ***9.0%*** | ***11.0%*** | **AFUDC % to Net Profit** | ***2.0%*** |
| | | | | | | 57.1% | 55.4% | 51.4% | 50.9% | 48.4% | 58.0% | 56.8% | 52.9% | 54.3% | 54.4% | ***53.5%*** | ***53.5%*** | **Long-Term Debt Ratio** | ***53.5%*** |
| | | | | | | 40.8% | 42.6% | 46.6% | 47.2% | 49.7% | 40.5% | 43.2% | 47.1% | 45.7% | 45.6% | ***46.5%*** | ***46.5%*** | **Common Equity Ratio** | ***46.5%*** |
| | | | | | | 5646.0 | 5752.0 | 5739.0 | 6027.0 | 5952.0 | 7519.0 | 7891.0 | 7854.0 | 8511.0 | 9103.0 | ***10045*** | ***11235*** | **Total Capital ($mill)** | ***13950*** |
| | | | | | | 6417.0 | 6762.0 | 6734.0 | 7007.0 | 7538.0 | 8305.0 | 9009.0 | 9662.0 | 10047 | 10896 | ***11935*** | ***13375*** | **Net Plant ($mill)** | ***16475*** |
| | | | | | | 6.9% | 7.1% | 7.4% | 6.8% | 7.3% | 6.2% | 6.1% | 6.5% | 6.2% | 6.1% | ***6.0%*** | ***6.0%*** | **Return on Total Cap'l** | ***6.0%*** |
| | | | | | | 11.8% | 11.9% | 11.6% | 10.3% | 10.6% | 11.2% | 10.5% | 10.2% | 10.0% | 10.1% | ***10.0%*** | ***10.0%*** | **Return on Shr. Equity** | ***9.5%*** |
| | | | | | | 12.1% | 12.2% | 11.8% | 10.5% | 10.8% | 11.4% | 10.2% | 10.2% | 10.0% | 10.1% | ***10.0%*** | ***10.0%*** | **Return on Com Equity E** | ***9.5%*** |
| | | | | | | 5.5% | 5.6% | 5.3% | 3.8% | 4.0% | 4.4% | 3.6% | 3.8% | 3.6% | 3.9% | ***4.0%*** | ***4.0%*** | **Retained to Com Eq** | ***4.0%*** |
| | | | | | | 55% | 55% | 56% | 65% | 64% | 62% | 66% | 63% | 64% | 61% | ***59%*** | ***59%*** | **All Div'ds to Net Prof** | ***57%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $5742.0 mill. **Due in 5 Yrs** $794.0 mill.
**LT Debt** $5039.0 mill. **LT Interest** $273.0 mill.
(LT interest earned: 3.2x)

**Leases, Uncapitalized** Annual rentals $10.0 mill.
**Pension Assets-12/12** $799.1 mill.
**Oblig.** $931.6 mill.
**Pfd Stock** None

**Common Stock** 139,498,499 shs.
**as of 4/30/13**
**MARKET CAP: $7.1 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +8.5 | -3.4 | -3.9 |
| Avg. Indust. Use (MWH) | 7923 | 8129 | 8055 |
| Avg. Indust. Revs. per KWH (¢) | 6.72 | 6.87 | 7.09 |
| Capacity at Peak (Mw) | 5645 | 5642 | 5533 |
| Peak Load, Summer (Mw) | 4735 | 4885 | 4761 |
| Annual Load Factor (%) | 60.9 | 57.3 | 56.8 |
| % Change Customers (yr-end) | +.9 | +.5 | +.9 |
| Fixed Charge Cov. (%) | 278 | 279 | 281 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 1.0% | -3.0% | *Nil* |
| "Cash Flow" | 3.0% | -.5% | *3.0%* |
| Earnings | 3.0% | 2.5% | *4.5%* |
| Dividends | 5.0% | 3.0% | *2.5%* |
| Book Value | 4.0% | 4.5% | *5.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 1428 | 939 | 1088 | 1146 | 4601.0 |
| **2011** | 1281 | 1000 | 1092 | 1036 | 4409.0 |
| **2012** | 1107 | 908 | 1038 | 1123 | 4176.0 |
| **2013** | 1311 | 1016 | ***1100*** | ***1123*** | ***4550*** |
| **2014** | ***1350*** | ***1050*** | ***1150*** | ***1150*** | ***4700*** |

| **Cal-endar** | **EARNINGS PER SHARE A** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 1.02 | .43 | .79 | .74 | 2.98 |
| **2011** | 1.00 | .43 | .81 | .75 | 2.97 |
| **2012** | .91 | .54 | .91 | .78 | 3.15 |
| **2013** | 1.11 | .60 | ***.91*** | ***.78*** | ***3.40*** |
| **2014** | ***1.10*** | ***.55*** | ***1.00*** | ***.85*** | ***3.50*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID B ■** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .46 | .47 | .47 | .47 | 1.87 |
| **2010** | .47 | .475 | .475 | .475 | 1.90 |
| **2011** | .475 | .485 | .485 | .485 | 1.93 |
| **2012** | .485 | .495 | .495 | .495 | 1.97 |
| **2013** | .495 | .5075 | .5075 | | |

**BUSINESS:** SCANA Corporation is a holding company for South Carolina Electric & Gas Company, which supplies electricity to 675,000 customers in South Carolina. Supplies gas and transmission service to 1.3 million customers in North and South Carolina and Georgia. Owns gas pipelines. Acquired PSNC Energy 2/00. Electric revenue breakdown: residential, 43%; commercial, 32%; industrial, 17%; other, 8%. Generating sources: coal, 48%; oil & gas, 28%; nuclear, 19%; hydro, 3%; purchased, 2%. Fuel costs: 49% of revenues. '12 reported deprec. rate: 2.9%. Has 5,800 employees. Chairman, CEO & President: Kevin B. Marsh. Inc.: South Carolina. Address: 100 SCANA Parkway, Cayce, South Carolina 29033. Tel.: 803-217-9000. Internet: www.scana.com.

**The two nuclear units that SCANA's electric utility subsidiary is building have had some delays and cost overruns.** South Carolina Electric & Gas has a 55% share of the project, which will provide the utility with 1,229 megawatts of generating capacity. Originally scheduled to come on line in early 2017 and 2018, the new units are now expected to begin commercial operation in late 2017 (or early 2018) and early 2019. There has been a $200 million cost overrun due to the delay, and SCE&G is in discussions with its contractors to determine which company is responsible.

**Meanwhile, the utility has filed for recovery of construction work in progress for the new plant.** This is an annual process, made possible thanks to the state's Base Load Review Act (BLRA). SCE&G is asking the state regulators for an increase of $69.7 million (3%). The utility is allowed an 11% return on equity on its new nuclear construction, which is very attractive by today's standards, and compares favorably with the 10.25% allowed ROE on its nonnuclear plant. New rates should go into effect in late October.

**Earnings are likely to advance in 2013 and 2014.** In addition to the annual rate relief under the BLRA, SCE&G is benefiting from a $97.1 million (4.2%) base tariff increase that took effect at the start of the year. We look for flat earnings in the second half of 2013, due to a shifting of certain operating and maintenance expenses between the two halves, but the year-to-year profit comparisons were favorable in the first two quarters. Our 2013 estimate, which we have raised by $0.05 a share, is near the upper end of SCANA's targeted range of $3.25-$3.45. We have also boosted our 2014 forecast by a nickel a share, to $3.50.

**The nuclear construction delays have had a small negative effect on SCANA's stock price.** The quotation has fallen since our May report, but by less than 5%, and the stock is timely. The dividend yield is still comparable to the norm for electric utility equities. With the recent price within our 2016-2018 Target Price Range and dividend growth prospects over that time frame just modest, total return potential is low.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Dil egs. Excl. nonrec. gains (losses): '97, '99, 29¢; '00, 28¢; '01, $3.00; '02, ($3.72); '03, 31¢; '04, (23¢); '05, 3¢; '06, 9¢. '11 EPS don't add due to change in shs., '12 due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in early Jan., Apr., July, and Oct. ■ Div'd reinvestment plan avail. **(C)** Incl. intang. In '12: $11.09/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in SC: 10.25% elec. in '13, 10.25% gas in '05; in NC: 10.6% in '08; earned on avg. com. eq., '12: 10.4%. Regulatory Climate: Above Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 100 |

# SOUTHERN CO. NYSE-SO

**RECENT PRICE** 43.56 **P/E RATIO** 16.3 (Trailing: 16.3 Median: 16.0) **RELATIVE P/E RATIO** 0.93 **DIV'D YLD** 4.8% **VALUE LINE**

**TIMELINESS** 3 Lowered 12/14/12

**SAFETY** 1 Raised 6/3/05

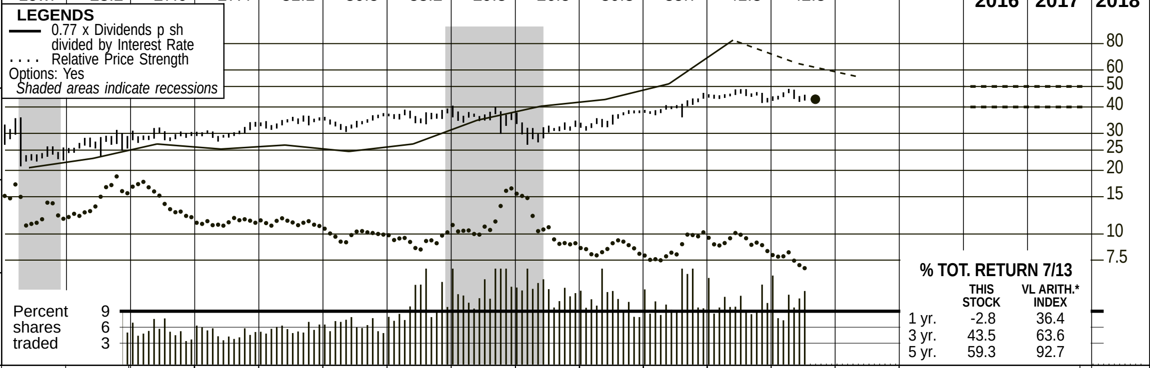
TECHNICAL 4 Lowered 8/23/13

**BETA** .55 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 31.1 | 32.0 | 34.0 | 36.5 | 37.4 | 39.3 | 40.6 | 37.6 | 38.6 | 46.7 | 48.6 | 48.7 |
| Low: | 23.2 | 27.0 | 27.4 | 31.1 | 30.5 | 33.2 | 29.8 | 26.5 | 30.8 | 35.7 | 41.8 | 42.3 |

**Target Price Range**

**2016 2017 2018**



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | -2.8 | 36.4 |
| 3 yr. | 43.5 | 63.6 |
| 5 yr. | 59.3 | 92.7 |

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+15%) | *8%* |
| Low | 40 | (-10%) | *3%* |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 0 |
| to Sell | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 2 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 400 | 452 | 415 |
| to Sell | 389 | 371 | 387 |
| Hld's(000) | 382314 | 391009 | 391334 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.19 | 16.34 | 17.40 | 14.78 | 14.54 | 14.73 | 15.31 | 16.05 | 18.28 | 19.24 | 20.12 | 22.04 | 19.21 | 20.70 | 20.41 | 19.06 | **19.75** | **20.35** | **Revenues per sh** | **22.50** |
| 3.86 | 4.26 | 4.17 | 3.89 | 3.55 | 3.46 | 3.53 | 3.65 | 4.03 | 4.01 | 4.22 | 4.43 | 4.43 | 4.51 | 4.91 | 5.18 | **5.25** | **5.45** | **"Cash Flow" per sh** | **6.25** |
| 1.58 | 1.73 | 1.83 | 2.01 | 1.61 | 1.85 | 1.97 | 2.06 | 2.13 | 2.10 | 2.28 | 2.25 | 2.32 | 2.36 | 2.55 | 2.67 | **2.65** | **2.80** | **Earnings per sh** A | **3.25** |
| 1.30 | 1.34 | 1.34 | 1.34 | 1.34 | 1.36 | 1.39 | 1.42 | 1.48 | 1.54 | 1.60 | 1.66 | 1.73 | 1.80 | 1.87 | 1.94 | **2.01** | **2.08** | **Div'd Decl'd per sh** B ■ † | **2.30** |
| 2.68 | 2.87 | 3.85 | 3.27 | 3.75 | 3.79 | 2.72 | 2.85 | 3.20 | 4.01 | 4.65 | 5.10 | 5.70 | 4.85 | 5.23 | 5.54 | **7.00** | **6.80** | **Cap'l Spending per sh** | **6.75** |
| 13.91 | 14.04 | 13.82 | 15.69 | 11.43 | 12.16 | 13.13 | 13.86 | 14.42 | 15.24 | 16.23 | 17.08 | 18.15 | 19.21 | 20.32 | 21.09 | **21.50** | **22.60** | **Book Value per sh** C | **25.75** |
| 693.42 | 697.75 | 665.80 | 681.16 | 698.34 | 716.40 | 734.83 | 741.50 | 741.45 | 746.27 | 763.10 | 777.19 | 819.65 | 843.34 | 865.13 | 867.77 | **883.00** | **896.00** | **Common Shs Outst'g** D | **930.00** |
| 14.0 | 15.7 | 14.3 | 13.2 | 14.6 | 14.6 | 14.8 | 14.7 | 15.9 | 16.2 | 16.0 | 16.1 | 13.5 | 14.9 | 15.8 | 17.0 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | **14.0** |
| .81 | .82 | .82 | .86 | .75 | .80 | .84 | .78 | .85 | .87 | .85 | .97 | .90 | .95 | .99 | 1.08 | | | **Relative P/E Ratio** | **.95** |
| 5.9% | 4.9% | 5.1% | 5.0% | 5.7% | 5.0% | 4.7% | 4.7% | 4.4% | 4.5% | 4.4% | 4.6% | 5.5% | 5.1% | 4.6% | 4.3% | | | **Avg Ann'l Div'd Yield** | **5.0%** |
| | | | | | | 11251 | 11902 | 13554 | 14356 | 15353 | 17127 | 15743 | 17456 | 17657 | 16537 | **17450** | **18250** | **Revenues ($mill)** | **21000** |
| | | | | | | 1602.1 | 1589.0 | 1621.0 | 1608.0 | 1782.0 | 1807.0 | 1910.0 | 2040.0 | 2268.0 | 2415.0 | **2430** | **2565** | **Net Profit ($mill)** | **3025** |
| | | | | | | 27.0% | 27.0% | 26.9% | 32.7% | 31.9% | 33.6% | 31.9% | 33.5% | 35.0% | 35.6% | **35.5%** | **35.5%** | **Income Tax Rate** | **35.5%** |
| | | | | | | 4.6% | 5.2% | 4.4% | 4.8% | 9.5% | 12.3% | 14.9% | 13.7% | 10.2% | 9.4% | **12.0%** | **13.0%** | **AFUDC % to Net Profit** | **12.0%** |
| | | | | | | 45.9% | 53.5% | 53.2% | 50.8% | 51.2% | 53.9% | 53.2% | 51.2% | 50.0% | 49.9% | **50.5%** | **51.5%** | **Long-Term Debt Ratio** | **52.5%** |
| | | | | | | 43.6% | 44.1% | 44.3% | 46.2% | 44.9% | 42.6% | 43.6% | 45.7% | 47.1% | 47.3% | **47.0%** | **46.0%** | **Common Equity Ratio** | **45.5%** |
| | | | | | | 22135 | 23288 | 24131 | 24618 | 27608 | 31174 | 34091 | 35438 | 37307 | 38653 | **40400** | **43900** | **Total Capital ($mill)** | **53100** |
| | | | | | | 27534 | 28361 | 29480 | 31092 | 33327 | 35878 | 39230 | 42002 | 45010 | 48390 | **51700** | **55400** | **Net Plant ($mill)** | **65300** |
| | | | | | | 8.4% | 8.1% | 8.2% | 8.2% | 7.9% | 7.1% | 6.9% | 7.0% | 7.2% | 7.3% | **7.0%** | **7.0%** | **Return on Total Cap'l** | **7.0%** |
| | | | | | | 13.4% | 14.7% | 14.4% | 13.3% | 13.2% | 12.6% | 12.0% | 11.8% | 12.2% | 12.5% | **12.0%** | **12.0%** | **Return on Shr. Equity** | **12.0%** |
| | | | | | | 14.8% | 14.9% | 14.9% | 13.8% | 14.0% | 13.1% | 12.4% | 12.2% | 12.5% | 12.8% | **12.5%** | **12.5%** | **Return on Com Equity** E | **12.5%** |
| | | | | | | 4.4% | 4.7% | 4.6% | 3.8% | 4.3% | 3.5% | 3.2% | 3.0% | 3.4% | 3.6% | **3.0%** | **3.0%** | **Retained to Com Eq** | **3.5%** |
| | | | | | | 73% | 69% | 70% | 73% | 70% | 74% | 75% | 77% | 73% | 73% | **75%** | **75%** | **All Div'ds to Net Prof** | **72%** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $23286 mill. **Due in 5 Yrs** $9027.0 mill.
**LT Debt** $20223 mill. **LT Interest** $789.0 mill.
(LT interest earned: 5.3x)
**Leases, Uncapitalized** Annual rentals $113.0 mill.
**Pension Assets-12/12** $7.95 bill. **Oblig.** $9.30 bill.
**Pfd Stock** $1082 mill. **Pfd Div'd** $65.0 mill.
Incl. 1 mill. shs. 4.20%-5.44% cum. pfd. ($100 par); 12 mill. shs. 4.95%-5.83% cum. pfd. ($1 par); 2 mill. shs. 6.0% noncum. pfd. ($25 par); 3 mill. shs. 6.0%-6.5% noncum. pfd. ($100 par); 14 mill. shs. 5.63%-6.5% noncum. pfd. ($1 par).
**Common Stock** 870,390,537 shs.
**MARKET CAP: $38 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +7.6 | -2.7 | -2.3 |
| Avg. Indust. Use (MWH) | 3332 | 3438 | 3445 |
| Avg. Indust. Revs. per KWH (¢) | 6.20 | 6.37 | 5.94 |
| Capacity at Yearend (Mw) | 42963 | 43555 | 45750 |
| Peak Load, Summer (Mw) | 36321 | 36956 | 35479 |
| Annual Load Factor (%) | 62.2 | 59.0 | 59.5 |
| % Change Customers (yr-end) | +.3 | -.1 | +.5 |
| Fixed Charge Cov. (%) | 342 | 397 | 416 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 3.0% | 1.0% | *2.0%* |
| "Cash Flow" | 3.0% | 3.5% | *4.0%* |
| Earnings | 3.5% | 3.0% | *4.5%* |
| Dividends | 3.5% | 4.0% | *3.5%* |
| Book Value | 4.5% | 5.5% | *4.0%* |

| **Cal-endar** | **QUARTERLY REVENUES (mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 4157 | 4208 | 5320 | 3771 | 17456 |
| **2011** | 4012 | 4521 | 5428 | 3696 | 17657 |
| **2012** | 3604 | 4181 | 5049 | 3703 | 16537 |
| **2013** | 3897 | 4246 | ***5400*** | ***3907*** | ***17450*** |
| **2014** | ***4100*** | ***4450*** | ***5600*** | ***4100*** | ***18250*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .60 | .62 | .98 | .18 | 2.36 |
| **2011** | .49 | .70 | 1.06 | .30 | 2.55 |
| **2012** | .42 | .71 | 1.11 | .43 | 2.67 |
| **2013** | .47 | .66 | ***1.13*** | ***.39*** | ***2.65*** |
| **2014** | ***.50*** | ***.75*** | ***1.15*** | ***.40*** | ***2.80*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .42 | .4375 | .4375 | .4375 | 1.73 |
| **2010** | .4375 | .455 | .455 | .455 | 1.80 |
| **2011** | .455 | .4725 | .4725 | .4725 | 1.87 |
| **2012** | .4725 | .49 | .49 | .49 | 1.94 |
| **2013** | .49 | .5075 | | | |

**BUSINESS:** The Southern Company, through its subsidiaries, supplies electricity to 4.4 million customers in about 120,000 square miles of Georgia, Alabama, Florida, and Mississippi. Also has competitive generation business. Electric revenue breakdown: residential, 37%; commercial, 32%; industrial, 19%; other, 12%. Retail revenues by state: Georgia, 51%; Alabama, 33%; Florida, 9%; Mississippi, 7%. Generating sources: oil & gas, 38%; coal, 35%; nuclear, 16%; hydro, 2%; purchased, 9%. Fuel costs: 34% of revenues. '12 reported deprec. rate (utility): 3.2%. Has 26,400 employees. Chairman, President and CEO: Thomas A. Fanning. Inc.: Delaware. Address: 30 Ivan Allen Jr. Blvd., N.W., Atlanta, Georgia 30308. Tel.: 404-506-5000. Internet: www.southerncompany.com.

**Southern Company has taken another writedown for a coal-gasification plant that its Mississippi Power subsidiary is building.** Due to cost overruns that won't be recovered from ratepayers, the utility took charges totaling $0.70 a share in the first half of 2013, which we have *excluded* from our presentation as nonrecurring losses. The 582-megawatt facility is expected to begin commercial operation in May of 2014. The cost overruns are prompting the company to issue a total of $1.3 billion of common equity this year and next. Due to a higher share count (and milder-than-normal weather in the second quarter of 2013), we have cut our share-net estimates by $0.05 in 2013 and 2014.

**There has been an increase in the cost of the two nuclear units that Georgia Power is building.** The total cost of the utility's share of the project (including financing costs that are being recovered now) has risen from $6.1 billion to $6.9 billion, and the time frame for completion of each unit has been delayed a year, to the fall of 2017 and 2018. So far, the state commission has not disallowed any costs.

**Regulatory matters are pending in three states.** Georgia Power filed for a rate hike of $482 million (6.1%), based on a return on equity ranging from 10.25%-12.25%. An order is expected in December, with new tariffs taking effect at the start of 2014. Gulf Power is asking the Florida commission for a $74.4 million increase, based on an 11.5% ROE. An order is expected in the first quarter of 2014. In Alabama, informal hearings are under way about whether utilities' allowed ROEs in the state are too generous. A decision is expected in the third quarter. We note that one utility, Mobile Gas, has already had its allowed ROE reduced, but we aren't assuming a cut for Alabama Power in our 2014 earnings estimate.

**Southern Company stock has lagged most utility issues so far this year.** The market is concerned about the cost overruns in Mississippi and the higher costs of the new nuclear units. Thus, the stock's yield is now above the utility mean. However, with the recent price near the midpoint of our 2016-2018 Target Price Range, total return potential, though above the industry average, is unspectacular.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Diluted earnings. Excl. nonrecurring gain (losses): '03, 6¢; '09, (25¢); '13, (70¢). '10 EPS don't add due to change in shares. Next earnings report due late Oct. **(B)** Div'ds historically paid in early Mar., June, Sept., and Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '12: $6.88/sh. **(D)** In mill. **(E)** Rate base: AL, MS, fair value; FL, GA, orig. cost. Allowed return on com. eq. (blended): 12.5%. Earned on avg. com. eq., '12: 13.1%. Regulatory Climate: GA, AL Above Average; MS, FL Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 70 |
| **Earnings Predictability** | 100 |

# SEMPRA ENERGY NYSE-SRE

**RECENT PRICE** 86.85 **P/E RATIO** 21.4 (Trailing: 19.9 Median: 12.0) **RELATIVE P/E RATIO** 1.18 **DIV'D YLD** 3.0% **VALUE LINE**

**TIMELINESS** 3 Lowered 5/11/12

**SAFETY** 2 Lowered 2/4/00

TECHNICAL 3 Lowered 8/2/13

**BETA** .80 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 26.3 | 30.9 | 37.9 | 47.9 | 57.3 | 66.4 | 63.0 | 57.2 | 57.2 | 56.0 | 72.9 | 87.2 |
| Low: | 15.5 | 22.3 | 29.5 | 35.5 | 42.9 | 50.9 | 34.3 | 36.4 | 43.9 | 44.8 | 54.7 | 70.6 |

**Target Price Range**
**2016 2017 2018**

### 2016-18 PROJECTIONS

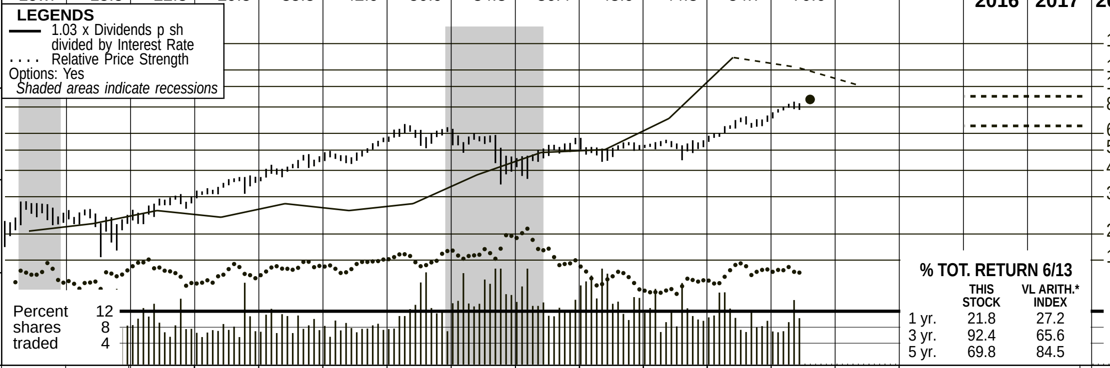
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 90 | (+5%) | 4% |
| Low | 65 | (-25%) | -3% |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 1 | 1 | 3 | 0 | 0 | 0 | 4 | 1 | 1 |
| to Sell | 1 | 1 | 4 | 0 | 3 | 1 | 4 | 1 | 1 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 176 | 187 | 217 |
| to Sell | 228 | 220 | 198 |
| Hld's(000) | 160516 | 166113 | 168274 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 21.8 | 27.2 |
| 3 yr. | 92.4 | 65.6 |
| 5 yr. | 69.8 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.51 | 23.31 | 22.89 | 35.38 | 39.27 | 29.38 | 34.81 | 40.18 | 45.64 | 44.89 | 43.79 | 44.21 | 32.88 | 37.44 | 41.83 | 39.80 | *42.30* | *43.50* | Revenues per sh | *49.50* |
| 5.27 | 5.16 | 5.36 | 4.91 | 5.39 | 5.71 | 5.56 | 6.58 | 5.96 | 6.74 | 6.93 | 7.40 | 7.94 | 7.76 | 8.58 | 8.92 | *8.80* | *9.45* | "Cash Flow" per sh | *11.25* |
| 2.20 | 1.24 | 1.66 | 2.06 | 2.55 | 2.79 | 3.01 | 3.93 | 3.52 | 4.23 | 4.26 | 4.43 | 4.78 | 4.02 | 4.47 | 4.35 | *4.05* | *4.45* | Earnings per sh A | *5.50* |
| 1.56 | 1.56 | 1.56 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.16 | 1.20 | 1.24 | 1.37 | 1.56 | 1.56 | 1.92 | 2.40 | *2.52* | *2.64* | Div'd Decl'd per sh B ■ | *3.00* |
| 1.74 | 1.85 | 2.48 | 3.76 | 5.22 | 5.92 | 4.63 | 4.62 | 5.46 | 7.28 | 7.70 | 8.47 | 7.76 | 8.58 | 11.85 | 12.20 | *13.60* | *12.65* | Cap'l Spending per sh | *11.00* |
| 13.82 | 12.29 | 12.58 | 12.35 | 13.17 | 13.79 | 17.17 | 20.78 | 23.95 | 28.66 | 31.87 | 32.75 | 36.54 | 37.54 | 41.00 | 42.42 | *43.55* | *45.30* | Book Value per sh C | *52.00* |
| 113.63 | 237.00 | 237.40 | 201.90 | 204.48 | 204.91 | 226.60 | 234.18 | 257.19 | 262.01 | 261.21 | 243.32 | 246.51 | 240.45 | 239.93 | 242.37 | *246.00* | *247.00* | Common Shs Outst'g D | *250.00* |
| 10.8 | 21.1 | 12.8 | 9.4 | 9.7 | 8.2 | 9.0 | 8.6 | 11.8 | 11.5 | 14.0 | 11.8 | 10.1 | 12.6 | 11.8 | 14.9 | *Bold figures are* | | Avg Ann'l P/E Ratio | *14.5* |
| .62 | 1.10 | .73 | .61 | .50 | .45 | .51 | .45 | .63 | .62 | .74 | .71 | .67 | .80 | .74 | .95 | *Value Line* | | Relative P/E Ratio | *.95* |
| 6.6% | 6.0% | 7.4% | 5.2% | 4.1% | 4.4% | 3.7% | 2.9% | 2.8% | 2.5% | 2.1% | 2.6% | 3.2% | 3.1% | 3.6% | 3.7% | *estimates* | | Avg Ann'l Div'd Yield | *3.8%* |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $12823 mill. **Due in 5 Yrs** $4664.0 mill.
**LT Debt** $10680 mill. **LT Interest** $491.0 mill.
(LT interest earned: 2.8x)
**Leases, Uncapitalized** Annual rentals $78.0 mill.
**Pension Assets-12/12** $2.56 bill. **Oblig.** $3.80 bill.
**Pfd Stock** $99.0 mill. **Pfd Div'd** $6.0 mill.
1,373,770 shs. 4.40%-5% cumulative, $20 par, callable $20.25-$24; 2,040,000 shs. $1.70-$1.82 cum., no par, callable $25.17-$26; 811,073 shs. 6% cum., $25 par.
**Common Stock** 243,577,278 shs.
**as of 4/29/13**
**MARKET CAP: $21 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7887.0 | 9410.0 | 11737 | 11761 | 11438 | 10758 | 8106.0 | 9003.0 | 10036 | 9647.0 | *10400* | *10750* | Revenues ($mill) | *12400* |
| 655.0 | 930.0 | 898.0 | 1118.0 | 1135.0 | 1123.0 | 1193.0 | 1008.0 | 1088.0 | 1079.0 | *1075* | *1180* | Net Profit ($mill) | *1470* |
| 23.2% | 17.2% | - - | 31.3% | 33.6% | 29.2% | 30.5% | 26.5% | 25.3% | 18.2% | *38.5%* | *35.5%* | Income Tax Rate | *34.5%* |
| 8.4% | 2.9% | 5.3% | 7.2% | 11.5% | 13.2% | 10.6% | 11.3% | 15.2% | 17.2% | *8.0%* | *8.0%* | AFUDC % to Net Profit | *9.0%* |
| 48.4% | 45.3% | 43.1% | 37.0% | 34.8% | 44.5% | 44.8% | 49.4% | 50.4% | 52.8% | *53.0%* | *53.5%* | Long-Term Debt Ratio | *54.0%* |
| 49.0% | 52.6% | 55.1% | 61.4% | 63.7% | 54.2% | 54.1% | 49.6% | 49.2% | 46.7% | *46.5%* | *46.0%* | Common Equity Ratio | *45.5%* |
| 7931.0 | 9255.0 | 11178 | 12229 | 13071 | 14692 | 16646 | 18186 | 20015 | 22002 | *23075* | *24250* | Total Capital ($mill) | *28500* |
| 10474 | 11086 | 12101 | 13175 | 14884 | 16865 | 18281 | 19876 | 23572 | 25191 | *27275* | *29175* | Net Plant ($mill) | *33200* |
| 9.8% | 11.3% | 9.2% | 10.3% | 9.6% | 8.5% | 8.3% | 6.8% | 6.7% | 6.1% | *6.0%* | *6.0%* | Return on Total Cap'l | *6.5%* |
| 16.0% | 18.4% | 14.1% | 14.5% | 13.3% | 13.8% | 13.0% | 10.9% | 10.9% | 10.4% | *9.5%* | *10.0%* | Return on Shr. Equity | *10.5%* |
| 16.6% | 18.9% | 14.4% | 14.8% | 13.5% | 14.0% | 13.1% | 11.1% | 11.0% | 10.4% | *9.5%* | *10.0%* | Return on Com Equity E | *11.0%* |
| 11.3% | 14.9% | 10.1% | 11.0% | 9.7% | 9.7% | 9.3% | 7.0% | 6.5% | 5.1% | *3.5%* | *4.0%* | Retained to Com Eq | *5.0%* |
| 33% | 22% | 31% | 26% | 29% | 31% | 29% | 37% | 41% | 52% | *61%* | *59%* | All Div'ds to Net Prof | *54%* |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -3.1 | +.1 | +2.6 |
| Avg. Indust. Use (MWH) | 4224 | 4157 | 4335 |
| Avg. Indust. Revs. per KWH (¢) | 10.75 | 12.13 | 12.19 |
| Capacity at Peak (Mw) | NMF | NMF | NMF |
| Peak Load, Summer (Mw) | NMF | NMF | NMF |
| Annual Load Factor (%) | NMF | NMF | NMF |
| % Change Customers (yr-end) | +.5 | +.6 | +.5 |
| Fixed Charge Cov. (%) | 296 | 319 | 262 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 1.5% | -2.5% | *3.5%* |
| "Cash Flow" | 4.5% | 5.0% | *5.0%* |
| Earnings | 5.5% | 1.5% | *4.5%* |
| Dividends | 7.0% | 10.5% | *7.5%* |
| Book Value | 12.0% | 7.5% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 2534 | 2008 | 2116 | 2345 | 9003 |
| **2011** | 2434 | 2422 | 2576 | 2604 | 10036 |
| **2012** | 2383 | 2089 | 2507 | 2668 | 9647 |
| **2013** | 2650 | *2350* | *2700* | *2700* | *10400* |
| **2014** | *2750* | *2400* | *2800* | *2800* | *10750* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .81 | .89 | 1.18 | 1.15 | 4.02 |
| **2011** | 1.07 | .97 | 1.22 | 1.21 | 4.47 |
| **2012** | .97 | .98 | 1.33 | 1.08 | 4.35 |
| **2013** | .54 | *1.26* | *1.20* | *1.05* | *4.05* |
| **2014** | *1.05* | *.95* | *1.30* | *1.15* | *4.45* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .35 | .39 | .39 | .39 | 1.52 |
| **2010** | .39 | .39 | .39 | .39 | 1.56 |
| **2011** | .39 | .48 | .48 | .48 | 1.83 |
| **2012** | .48 | .60 | .60 | .60 | 2.28 |
| **2013** | .60 | .63 | .63 | | |

**BUSINESS:** Sempra Energy is a holding co. for San Diego Gas & Electric Company, which sells electricity & gas mainly in San Diego County, & Southern California Gas Company, which distributes gas to most of Southern California. Customers: 1.4 mill. electric, 6.6 mill. gas. Elec. rev. breakdown: residential, 43%; commercial, 35%; industrial, 9%; other, 13%. Purchases most of its power; the rest is nuclear & gas. Has subs. in gas pipeline & storage, power generation, & liquefied natural gas. Sold commodities business in '10. Power costs: 37% of revs. '12 reported deprec. rates: 1.4%-7.9%. Has 16,900 employees. Chairman and CEO: Debra L. Reed. President: Mark A. Snell. Inc.: CA. Address: 101 Ash St., San Diego, CA 92101-3017. Tel.: 619-696-2034. Internet: www.sempra.com.

**Sempra Energy's utility subsidiaries have received final decisions on their general rate cases.** The rate orders were expected last year (retroactive to the start of 2012), but weren't issued until May 9th. SoCalGas' rates were raised by $115 million, and San Diego Gas & Electric's tariffs were boosted by $119 million (total for gas and electricity). Additional rate hikes will occur in 2014 and 2015. Because the ruling was issued in the second quarter of 2013, but is retroactive to the beginning of 2012, Sempra will book $0.30 a share of income in the June quarter that it would have recorded last year had the order been issued before the end of 2012.

**Southern California Edison's decision to close the San Onofre nuclear station will affect SDG&E.** The utility owns a 20% stake in the plant. Sempra will take a nonrecurring charge (currently estimated at $30 million-$110 million after taxes, depending upon regulatory treatment) against second-quarter results. Because this facility is no longer part of SDG&E's rate base, ongoing earnings have been reduced by $0.06 a share annually.

**Sempra wants to turn one of its liquefied natural gas assets into an export facility.** The company estimates that this would entail $9 billion-$10 billion of total costs and produce annual earnings of $300 million-$350 million. If permits are received, construction would begin in the first half of 2014, and commercial operation would start in the second half of 2017.

**Sempra sold 19% of its Mexican operations in an initial public offering in the first quarter.** This raised $574 million, but the company incurred $63 million of taxes in the first quarter stemming from the move. (We include these in our presentation.) Several projects are in various stages of development. Sempra also has operations in South America. Repatriation of $300 million of cash annually from international activities will reduce earnings by $0.30 a share in 2014 and beyond, however. Even so, Sempra's earnings should improve next year, assuming a more normal March-quarter tally.

**Sempra stock does not stand out for its yield, which is below the utility average, or its 3- to 5-year total return potential.**

*Paul E. Debbas, CFA* *August 2, 2013*

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(A) Dil. EPS. Excl. nonrec. gains (losses): '05, 17¢; '06, (6¢); '09, (26¢); '10, ($1.05); '11, $1.15; '12, (98¢); '13, 18¢; gain (losses) from disc. ops.: '04, (10¢); '05, (4¢); '06, $1.21; '07, (10¢). '10, '12 EPS don't add due to rounding. Next egs. report due early Aug. (B) Div'ds historically paid mid-Jan., Apr., July, & Oct. ■ Div'd reinvest. plan avail. (C) Incl. intang. In '12: $17.70/sh. (D) In mill. (E) Rate base: Net orig. cost. Rate allowed on com. eq.: SDG&E in '13: 10.3%; SoCalGas in '13: 10.1%; earn. on avg. com. eq., '12: 10.3%. Reg. Clim.: Above Avg.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 90 |
| **Earnings Predictability** | 95 |

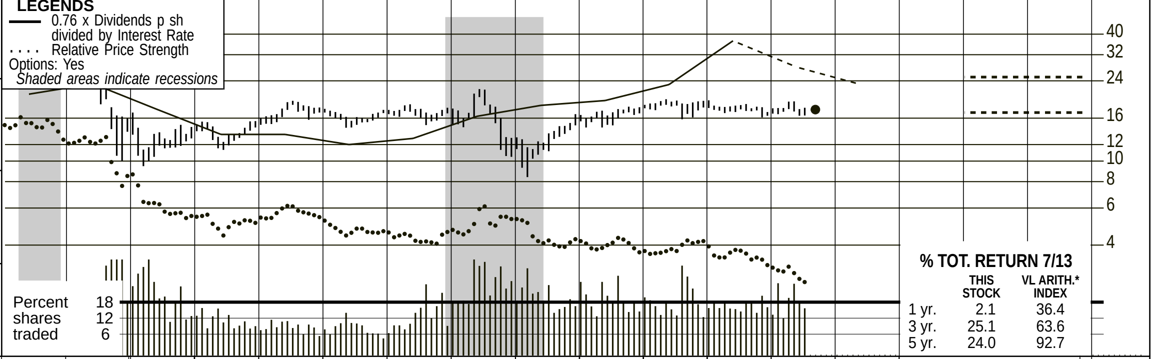
# TECO ENERGY, INC. NYSE-TE

**RECENT PRICE** 17.54 **P/E RATIO** 19.7 (Trailing: 16.5 Median: 15.0) **RELATIVE P/E RATIO** 1.12 **DIV'D YLD** 5.0% **VALUE LINE**

**TIMELINESS** 3 Raised 6/28/13
**SAFETY** 2 Raised 2/24/12
TECHNICAL 3 Lowered 8/16/13
**BETA** .85 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 29.0 | 17.0 | 15.5 | 19.3 | 17.7 | 18.6 | 22.0 | 16.7 | 18.1 | 19.7 | 19.4 | 19.2 |
| Low: | 10.0 | 9.5 | 11.3 | 14.9 | 14.4 | 14.8 | 10.5 | 8.4 | 14.5 | 15.8 | 16.1 | 16.4 |

**Target Price Range**
**2016 2017 2018**



**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 25 | (+45%) | *12%* |
| Low | 17 | (-5%) | *4%* |

**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Options | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 1 | 1 |
| to Sell | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 0 | 3 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 120 | 145 | 150 |
| to Sell | 146 | 154 | 142 |
| Hld's(000) | 127252 | 128112 | 131819 |

**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 2.1 | 36.4 |
| 3 yr. | 25.1 | 63.6 |
| 5 yr. | 24.0 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.23 | 14.83 | 15.01 | 18.17 | 18.97 | 15.22 | 14.59 | 13.37 | 14.46 | 16.46 | 16.77 | 15.85 | 15.48 | 16.23 | 15.49 | 13.83 | ***13.30*** | ***13.75*** | **Revenues per sh** | ***15.50*** |
| 3.34 | 3.25 | 3.28 | 4.11 | 4.31 | 3.20 | 1.96 | 2.14 | 2.37 | 2.51 | 2.51 | 2.01 | 2.35 | 2.59 | 2.77 | 2.69 | ***2.45*** | ***2.70*** | **"Cash Flow" per sh** | ***3.25*** |
| 1.61 | 1.52 | 1.53 | 1.97 | 2.24 | 1.95 | d.08 | .71 | 1.00 | 1.17 | 1.27 | .77 | 1.00 | 1.13 | 1.27 | 1.14 | ***.90*** | ***1.05*** | **Earnings per sh** A | ***1.40*** |
| 1.17 | 1.23 | 1.29 | 1.33 | 1.37 | 1.41 | .93 | .76 | .76 | .76 | .78 | .80 | .80 | .82 | .85 | .88 | ***.88*** | ***.88*** | **Div'd Decl'd per sh** B ■ | ***.95*** |
| 1.62 | 2.24 | 3.23 | 5.45 | 6.92 | 6.06 | 3.14 | 1.37 | 1.42 | 2.18 | 2.34 | 2.77 | 2.99 | 2.28 | 2.10 | 2.33 | ***2.40*** | ***3.60*** | **Cap'l Spending per sh** | ***2.25*** |
| 11.04 | 11.42 | 10.73 | 11.93 | 14.12 | 14.86 | 8.93 | 6.43 | 7.65 | 8.25 | 9.56 | 9.43 | 9.75 | 10.10 | 10.50 | 10.58 | ***10.60*** | ***10.75*** | **Book Value per sh** C | ***11.75*** |
| 130.90 | 132.00 | 132.10 | 126.30 | 139.60 | 175.80 | 187.80 | 199.70 | 208.20 | 209.50 | 210.90 | 212.90 | 213.90 | 214.90 | 215.80 | 216.60 | ***218.00*** | ***218.00*** | **Common Shs Outst'g** D | ***218.00*** |
| 15.4 | 17.8 | 14.2 | 11.9 | 12.9 | 11.0 | - - | 19.3 | 17.1 | 13.8 | 13.3 | 21.2 | 12.6 | 14.6 | 14.4 | 15.5 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***14.0*** |
| .89 | .93 | .81 | .77 | .66 | .60 | - - | 1.02 | .91 | .75 | .71 | 1.28 | .84 | .93 | .90 | .99 | | | **Relative P/E Ratio** | ***.95*** |
| 4.7% | 4.5% | 5.9% | 5.7% | 4.8% | 6.6% | 7.4% | 5.5% | 4.4% | 4.7% | 4.6% | 4.9% | 6.3% | 4.9% | 4.6% | 5.0% | | | **Avg Ann'l Div'd Yield** | ***4.8%*** |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2740.0 | 2669.1 | 3010.1 | 3448.1 | 3536.1 | 3375.3 | 3310.5 | 3487.9 | 3343.4 | 2996.6 | ***2900*** | ***3000*** | **Revenues ($mill)** | ***3400*** |
| d14.7 | 137.4 | 211.0 | 244.4 | 265.8 | 162.4 | 213.9 | 242.9 | 272.6 | 246.0 | ***190*** | ***235*** | **Net Profit ($mill)** | ***300*** |
| - - | 38.5% | 45.1% | 40.4% | 40.7% | 36.8% | 31.6% | 34.8% | 36.1% | 35.9% | ***35.5%*** | ***35.0%*** | **Income Tax Rate** | ***35.0%*** |
| - - | .7% | - - | 1.6% | 2.3% | 5.4% | 6.5% | 1.2% | .6% | 1.7% | ***4.0%*** | ***9.0%*** | **AFUDC % to Net Profit** | ***3.0%*** |
| 72.4% | 75.1% | 70.0% | 65.0% | 61.0% | 61.5% | 60.6% | 59.2% | 54.2% | 56.5% | ***56.0%*** | ***54.0%*** | **Long-Term Debt Ratio** | ***55.5%*** |
| 27.6% | 24.9% | 30.0% | 35.0% | 39.0% | 38.5% | 39.4% | 40.8% | 45.8% | 43.5% | ***44.0%*** | ***46.0%*** | **Common Equity Ratio** | ***44.5%*** |
| 6070.3 | 5163.9 | 5300.9 | 4941.6 | 5175.4 | 5214.3 | 5287.0 | 5317.8 | 4953.9 | 5264.5 | ***5240*** | ***5120*** | **Total Capital ($mill)** | ***5725*** |
| 5679.0 | 4657.9 | 4566.9 | 4766.9 | 4888.2 | 5221.3 | 5544.1 | 5841.0 | 5967.8 | 5990.1 | ***6180*** | ***6620*** | **Net Plant ($mill)** | ***7175*** |
| 2.1% | 5.6% | 6.5% | 7.3% | 7.3% | 5.1% | 6.0% | 6.4% | 7.4% | 6.1% | ***5.5%*** | ***6.0%*** | **Return on Total Cap'l** | ***7.0%*** |
| NMF | 10.7% | 13.3% | 14.1% | 13.2% | 8.1% | 10.3% | 11.2% | 12.0% | 10.7% | ***8.5%*** | ***10.0%*** | **Return on Shr. Equity** | ***12.0%*** |
| NMF | 10.7% | 13.3% | 14.1% | 13.2% | 8.1% | 10.3% | 11.2% | 12.0% | 10.7% | ***8.5%*** | ***10.0%*** | **Return on Com Equity** E | ***12.0%*** |
| NMF | NMF | 3.3% | 5.0% | 5.1% | NMF | 2.1% | 3.1% | 3.9% | 2.4% | ***Nil*** | ***2.0%*** | **Retained to Com Eq** | ***3.5%*** |
| NMF | 106% | 75% | 65% | 61% | 104% | 80% | 72% | 67% | 77% | ***99%*** | ***82%*** | **All Div'ds to Net Prof** | ***69%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $2972.7 mill. **Due in 5 Yrs** $991.2 mill.
**LT Debt** $2889.4 mill. **LT Interest** $166.8 mill.
(LT interest earned: 3.4x)

**Leases, Uncapitalized** Annual rentals $5.0 mill.

**Pension Assets-12/12** $529.1 mill.
**Oblig.** $715.0 mill.

**Pfd Stock** None

**Common Stock** 217,310,055 shs.
**as of 7/26/13**
**MARKET CAP: $3.8 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.3 | -3.4 | -.8 |
| Avg. Indust. Use (Mw) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 9.35 | 8.94 | 8.84 |
| Capacity at Peak (Mw) | 4684 | 4684 | 4668 |
| Peak Load, Winter (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (avg.) | +.6 | +.7 | +1.3 |
| Fixed Charge Cov. (%) | 270 | 302 | 301 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -1.5% | -1.0% | *.5%* |
| "Cash Flow" | -3.5% | 1.5% | *3.0%* |
| Earnings | -5.5% | .5% | *3.0%* |
| Dividends | -4.5% | 2.0% | *2.0%* |
| Book Value | -2.5% | 4.0% | *2.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 912.3 | 898.8 | 901.8 | 775.0 | 3487.9 |
| **2011** | 796.1 | 885.7 | 911.4 | 750.2 | 3343.4 |
| **2012** | 697.1 | 752.5 | 858.6 | 688.4 | 2996.6 |
| **2013** | 661.1 | 735.9 | ***850*** | ***653*** | ***2900*** |
| **2014** | ***675*** | ***775*** | ***875*** | ***675*** | ***3000*** |

| **Cal-endar** | **EARNINGS PER SHARE** A Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .26 | .35 | .35 | .17 | 1.13 |
| **2011** | .24 | .36 | .42 | .25 | 1.27 |
| **2012** | .20 | .30 | .42 | .22 | 1.14 |
| **2013** | .19 | .24 | ***.33*** | ***.14*** | ***.90*** |
| **2014** | ***.18*** | ***.28*** | ***.39*** | ***.20*** | ***1.05*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID** B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .20 | .20 | .20 | .20 | .80 |
| **2010** | .20 | .205 | .205 | .205 | .82 |
| **2011** | .205 | .215 | .215 | .215 | .85 |
| **2012** | .22 | .22 | .22 | .22 | .88 |
| **2013** | .22 | .22 | .22 | | |

**BUSINESS:** TECO Energy, Inc. is a holding company for Tampa Electric, which serves 690,000 customers in west central Florida, and Peoples Gas (acquired 6/97), which serves 346,000 customers in Florida. TECO Coal mines coal. Sold TECO Transport 12/07; discontinued generation investments in Guatemala in '12. Electric revenue breakdown: residential, 49%; commercial, 31%; industrial, 9%; other, 11%. Generating sources: coal, 58%; gas, 36%; purchased, 6%. Fuel costs: 32% of revenues. '12 reported deprec. rate (utility): 3.8%. Has 3,900 employees. Chairman: Sherrill W. Hudson. President & CEO: John B. Ramil. Incorporated: Florida. Address: TECO Plaza, 702 N. Franklin Street, Tampa, Florida 33602. Telephone: 813-228-1111. Internet: www.tecoenergy.com.

**TECO Energy has announced a significant utility acquisition.** The company has agreed to pay $750 million in cash and will assume $200 million of debt in order to purchase New Mexico Gas Company. The utility has 509,000 customers, a rate base of $520 million, and an allowed return on equity of 10%. The deal requires the approval of the New Mexico commission and various federal regulators and is expected to close in the first quarter of 2014. The company plans to finance the transaction with a combination of long-term debt and common equity. TECO expects the purchase to be accretive in 2015, but the contribution might well be affected by any concessions that the utility makes in order to win regulatory approval. Note that our estimates and projections do not include New Mexico Gas, but will include merger-related expenses as TECO records them.

**Tampa Electric has a rate case pending.** The utility is seeking a hike of $134.8 million, based on an ROE in a range of 10.25%-12.25% and a common-equity ratio of 54.2%. Due in part to rising expenses, Tampa Electric is underearning its allowed ROE (in fact, its earned ROE will probably be below 9% this year). New tariffs are expected to take effect at the start of 2014.

**Earnings are almost certainly headed down in 2013.** The single biggest reason is a sharp decline in profitability at TECO Coal. Due to lower customer demand, both volume and margins are down at this subsidiary. Our estimate is at the low end of the company's targeted range of $0.90-$1.00 a share.

**We forecast a partial profit recovery in 2014.** We assume a reasonable outcome in Tampa Electric's rate case, but we are less confident than usual about our estimate due to the uncertainty at TECO Coal.

**TECO stock has some appeal for investors seeking a high dividend yield.** The yield is more than one percentage point above the average for utilities, and the equity's 3- to 5-year total return potential is also above the group average. The valuation reflects the lack of near-term dividend growth, the regulatory risks, and the declining profitability of TECO Coal.

*Paul E. Debbas, CFA* *August 23, 2013*

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**(A)** Diluted earnings. Excl. nonrecurring gain (losses): '97, (6¢); '99, (11¢); '03, ($4.97); '07, 63¢; '10, (2¢) net; gains (losses) on discontinued ops.: '04, (77¢); '05, 31¢; '06, 1¢; '07, 7¢; '12, (15¢). Next earnings report due early Nov. **(B)** Div'ds paid in late Feb., May, Aug., & Nov. ■ Div'd reinvestment plan avail. **(C)** Incl. deferred charges. In '12: $2.35/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '09 (elec.): 10.25%-12.25%; in '09 (gas): 9.75%-11.75%; earned on avg. com. eq., '12: 10.8%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 55 |
| **Earnings Predictability** | 75 |

# INTEGRYS ENERGY NYSE-TEG

| RECENT PRICE | 54.97 | P/E RATIO | 18.0 (Trailing: 15.8 Median: 15.0) | RELATIVE P/E RATIO | 1.02 | DIV'D YLD | 4.9% | VALUE LINE |
|---|---|---|---|---|---|---|---|---|

**TIMELINESS** 3 Raised 5/10/13

**SAFETY** 2 Raised 6/24/11

TECHNICAL 3 Raised 9/13/13

**BETA** .90 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+20%) | *9%* |
| Low | 45 | (-20%) | *1%* |

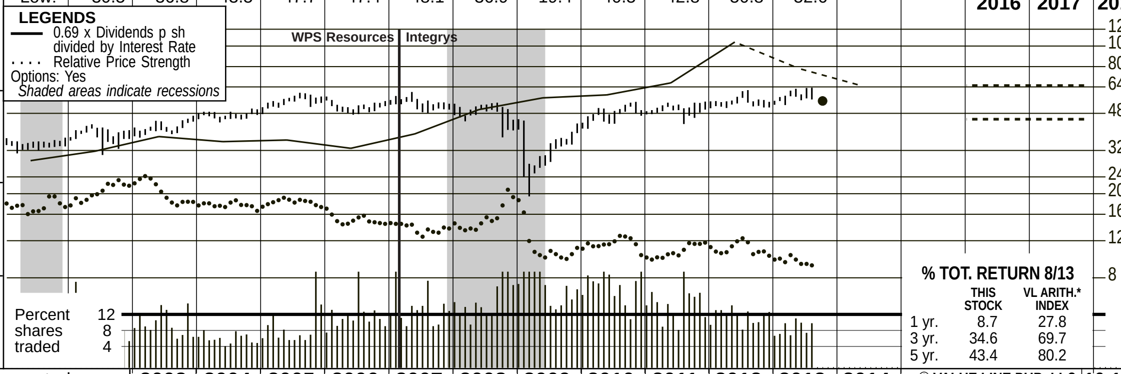
**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 13 | 3 | 6 | 6 | 0 |
| to Sell | 0 | 0 | 1 | 0 | 0 | 8 | 6 | 6 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 129 | 132 | 151 |
| to Sell | 155 | 144 | 149 |
| Hld's(000) | 39933 | 40527 | 40972 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 42.7 | 46.8 | 50.5 | 60.0 | 57.8 | 60.6 | 53.9 | 45.1 | 54.4 | 54.6 | 61.9 | 63.6 |
| Low: | 30.5 | 36.8 | 43.5 | 47.7 | 47.4 | 48.1 | 36.9 | 19.4 | 40.5 | 42.8 | 50.8 | 52.6 |



**LEGENDS**
— 0.69 x Dividends p sh divided by Interest Rate
. . . . Relative Price Strength
Options: Yes
*Shaded areas indicate recessions*

**Target Price Range**
**2016 | 2017 | 2018**

**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 8.7 | 27.8 |
| 3 yr. | 34.6 | 69.7 |
| 5 yr. | 43.4 | 80.2 |

Integrys Energy Group was created as a holding company on February 21, 2007 to oversee the entire operations of the recently merged WPS Resources and Peoples Energy. WPS acquired Peoples in an agreement under which each common share of Peoples was converted into .825 share of WPS common. The combination took the new name of Integrys Energy Group. All data on this page prior to 2/21/07 are for WPS Resources only.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.07 | 131.26 | 173.37 | 160.01 | 135.44 | 184.86 | 98.71 | 67.27 | 60.44 | 54.07 | ***70.45*** | ***73.30*** | **Revenues per sh** | ***77.75*** |
| 6.23 | 6.98 | 7.40 | 6.33 | 5.19 | 4.69 | 5.34 | 6.70 | 6.13 | 6.95 | ***6.85*** | ***7.15*** | **"Cash Flow" per sh** | ***8.25*** |
| 2.76 | 4.07 | 4.09 | 3.51 | 2.48 | 1.58 | 2.28 | 3.24 | 2.88 | 3.67 | ***3.60*** | ***3.70*** | **Earnings per sh A** | ***4.25*** |
| 2.16 | 2.20 | 2.24 | 2.28 | 2.56 | 2.68 | 2.72 | 2.72 | 2.72 | 2.72 | ***2.72*** | ***2.72*** | **Div'd Decl'd per sh B ■** | ***2.90*** |
| 4.77 | 7.78 | 10.31 | 7.94 | 5.17 | 7.01 | 5.85 | 3.35 | 4.00 | 7.63 | ***10.50*** | ***11.25*** | **Cap'l Spending per sh** | ***10.00*** |
| 27.18 | 29.30 | 32.47 | 35.61 | 42.58 | 40.79 | 37.62 | 37.57 | 38.01 | 38.84 | ***40.10*** | ***41.30*** | **Book Value per sh C** | ***50.50*** |
| 36.91 | 37.26 | 40.16 | 43.06 | 75.99 | 75.99 | 75.98 | 77.35 | 77.91 | 77.90 | ***79.50*** | ***80.50*** | **Common Shs Outst'g D** | ***83.50*** |
| 14.9 | 11.5 | 13.4 | 14.7 | 21.4 | 30.7 | 14.8 | 14.7 | 17.5 | 14.8 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| .85 | .61 | .71 | .79 | 1.14 | 1.85 | .99 | .94 | 1.10 | .94 | ***Value Line*** | | **Relative P/E Ratio** | ***.85*** |
| 5.3% | 4.7% | 4.1% | 4.4% | 4.8% | 5.5% | 8.1% | 5.7% | 5.4% | 5.0% | ***estimates*** | | **Avg Ann'l Div'd Yield** | ***5.3%*** |
| 4321.3 | 4890.6 | 6962.7 | 6890.7 | 10292 | 14048 | 7499.8 | 5203.2 | 4708.7 | 4212.4 | ***5600*** | ***5900*** | **Revenues ($mill)** | ***6500*** |
| 94.5 | 156.2 | 157.4 | 151.6 | 181.1 | 124.8 | 178.2 | 255.9 | 230.9 | 294.2 | ***295*** | ***305*** | **Net Profit ($mill)** | ***360*** |
| 26.3% | 16.1% | 22.9% | 22.9% | 32.2% | 29.1% | 41.5% | 40.4% | 36.7% | 33.8% | ***38.5%*** | ***38.5%*** | **Income Tax Rate** | ***38.5%*** |
| 2.5% | 1.7% | 1.0% | .5% | .7% | 5.8% | 4.5% | .7% | .4% | 1.2% | ***2.0%*** | ***2.0%*** | **AFUDC % to Net Profit** | ***1.0%*** |
| 45.3% | 43.1% | 39.0% | 44.8% | 40.8% | 42.1% | 45.1% | 42.2% | 38.3% | 38.6% | ***48.0%*** | ***48.0%*** | **Long-Term Debt Ratio** | ***46.5%*** |
| 52.1% | 54.4% | 58.7% | 53.4% | 58.3% | 57.0% | 53.9% | 56.8% | 60.6% | 60.4% | ***51.0%*** | ***51.0%*** | **Common Equity Ratio** | ***53.5%*** |
| 1926.2 | 2008.6 | 2222.4 | 2871.9 | 5552.0 | 5438.7 | 5304.4 | 5118.5 | 4884.5 | 5008.6 | ***6245*** | ***6510*** | **Total Capital ($mill)** | ***7850*** |
| 1828.7 | 2002.6 | 2049.4 | 2534.8 | 4463.8 | 4773.3 | 4945.1 | 5013.4 | 5199.1 | 5501.9 | ***6475*** | ***7105*** | **Net Plant ($mill)** | ***8625*** |
| 6.1% | 8.8% | 8.0% | 6.4% | 4.5% | 3.5% | 4.6% | 6.2% | 5.9% | 6.9% | ***5.5%*** | ***6.0%*** | **Return on Total Cap'l** | ***5.5%*** |
| 9.0% | 13.7% | 11.6% | 9.6% | 5.5% | 4.0% | 6.1% | 8.7% | 7.7% | 9.6% | ***9.0%*** | ***9.0%*** | **Return on Shr. Equity** | ***8.5%*** |
| 9.1% | 14.0% | 11.8% | 9.7% | 5.5% | 3.9% | 6.1% | 8.7% | 7.7% | 9.6% | ***9.0%*** | ***9.0%*** | **Return on Com Equity E** | ***8.5%*** |
| 2.0% | 6.6% | 5.3% | 3.4% | - - | NMF | NMF | 2.3% | .7% | 2.6% | ***2.5%*** | ***2.5%*** | **Retained to Com Eq** | ***3.0%*** |
| 79% | 54% | 56% | 65% | 99% | NMF | 118% | 74% | 91% | 73% | ***74%*** | ***72%*** | **All Div'ds to Net Prof** | ***68%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $2995.9 mill. **Due in 5 Yrs** $1871.5 mill.
**LT Debt** $1886.2 mill. **LT Interest** $92.4 mill.
(LT interest earned: 5.8x)
**Leases, Uncapitalized** Annual rentals $8.5 mill.
**Pension Assets-12/12** $1.35 bill.
**Oblig.** $1.78 bill.
**Pfd Stock** $51.1 mill. **Pfd Div'd** $3.1 mill.
510,626 shs. 5.00% to 6.88%, callable $101 to $107.50; sinking fund began 11/1/79. All cumulative, $100 par.
**Common Stock** 79,589,538 shs.
**as of 8/2/13**
**MARKET CAP: $4.4 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.2 | +.9 | +.2 |
| Avg. C & I Use (KWH) | NA | NA | NA |
| Avg. C & I Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | 3078 | 3312 | 3173 |
| Peak Load, Summer (Mw) | 2421 | 2465 | 2347 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.4 | +.4 | +.4 |
| Fixed Charge Cov. (%) | 314 | 302 | 367 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -3.0% | -17.5% | *4.0%* |
| "Cash Flow" | 1.5% | 1.0% | *4.0%* |
| Earnings | 2.0% | -.5% | *4.5%* |
| Dividends | 2.5% | 3.0% | *1.0%* |
| Book Value | 5.5% | .5% | *5.0%* |

| **Cal-endar** | **QUARTERLY REVENUES ($ mill.)** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | 1903.4 | 1014.8 | 997.9 | 1287.1 | 5203.2 |
| **2011** | 1627.1 | 1010.8 | 938.7 | 1132.1 | 4708.7 |
| **2012** | 1247.9 | 839.6 | 927.7 | 1197.2 | 4212.4 |
| **2013** | 1678.2 | 1116.0 | ***1250*** | ***1555.8*** | ***5600*** |
| **2014** | ***1850*** | ***1150*** | ***1300*** | ***1600*** | ***5900*** |

| **Cal-endar** | **EARNINGS PER SHARE A** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2010** | .95 | .82 | .56 | .91 | 3.24 |
| **2011** | 1.56 | .38 | .47 | .48 | 2.88 |
| **2012** | 1.24 | .65 | .93 | .86 | 3.67 |
| **2013** | 2.29 | d.06 | ***.45*** | ***.92*** | ***3.60*** |
| **2014** | ***1.75*** | ***.45*** | ***.50*** | ***1.00*** | ***3.70*** |

| **Cal-endar** | **QUARTERLY DIVIDENDS PAID B ■** Mar.31 | Jun.30 | Sep.30 | Dec.31 | **Full Year** |
|---|---|---|---|---|---|
| **2009** | .68 | .68 | .68 | .68 | 2.72 |
| **2010** | .68 | .68 | .68 | .68 | 2.72 |
| **2011** | .68 | .68 | .68 | .68 | 2.72 |
| **2012** | .68 | .68 | .68 | .68 | 2.72 |
| **2013** | .68 | .68 | .68 | | |

**BUSINESS:** Integrys Energy Group, Inc. is a holding company for Wisconsin Public Service, Peoples Gas, and four other utility subsidiaries. Has 495,000 electric customers in WI and MI, 1.7 million gas customers in WI, IL, MN, and MI. Also has retail electric and gas marketing operations in the Northeast and Midwest. Electric revenue breakdown: residential, 29%; small commercial & industrial, 29%; large commercial & industrial, 19%; other, 23%. Generating sources: coal, 44%; wind, 2%; hydro, 1%; gas, 1%; purchased, 52%. Fuel costs: 56% of revenues. '12 deprec. rates (utility): 2.2%-3.3%. Has 4,700 employees. Chairman, President & CEO: Charles A. Schrock. Inc.: WI. Address: 130 East Randolph St., Chicago, IL 60601-6207. Tel.: 312-228-5400. Internet: www.integrysgroup.com.

**Integrys Energy's gas utilities in Illinois have received rate orders.** Peoples Gas and North Shore Gas were granted rate hikes totaling $63.8 million, based on a return of 9.28% on a common-equity ratio of slightly above 50%. New tariffs took effect in late June.

**Peoples Gas will benefit from a new regulatory law in Illinois.** The utility is replacing some 2,000 miles of old pipe. Peoples plans to spend $2.2 billion-$2.6 billion over the 10-year duration of the law, beginning in 2014. This will eliminate regulatory lag on this capital spending and enhance the utility's earning power.

**Rate cases are pending in Wisconsin and Michigan.** Wisconsin Public Service filed for electric and gas increases of $71.1 million (7.4%) and $19.0 million (5.6%), respectively, based on a return of 10.75% on a common-equity ratio of 51.11%. The utility wants to place a gas-fired plant that it bought earlier this year for $442 million (including $50 million to buy out a purchased-power contract) into the rate base. New rates should take effect at the start of 2014. In Michigan, Integrys' electric utility filed for an increase of $7.9 million (8.1%), based on a 10.75% return on a 54.98% common-equity ratio, and its gas business requested a hike of $8.0 million (6%), based on a 10.75% return on a 50.12% common-equity ratio. Interim rates will take effect at the start of 2014, with final orders due in June.

**We expect modest earnings growth in 2014.** Earnings would likely be higher in 2013, as well, were it not for mark-to-market gains that boosted the bottom line by $0.38 a share in 2012. (These credits amounted to $0.02 a share in the first half of 2013.) Our estimate for this year is near the top end of Integrys' guidance of $3.35-$3.60 a share. Rate relief should boost profits in 2014. One source of uncertainty is the retail energy marketing business, which is experiencing lower margins.

**Integrys stock is noteworthy for a dividend yield that is nearly one percentage point above the utility average.** However, the valuation reflects a lack of dividend growth. The recent price is at the midpoint of our 2016-2018 Target Price Range, and total return potential (like that of most utility issues) is low.

*Paul E. Debbas, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecur. losses: '09, $3.24; '10, 41¢; gains (losses) from disc. ops.: '07, $1.02; '08, 6¢; '09, 4¢; '11, (1¢); '12, (12¢); '13, 8¢. '11 & '12 EPS don't add due to rounding. Next egs. report due early Nov. **(B)** Div'ds historically paid mid-Mar., June, Sept., & Dec. ■ Div'd reinvestment plan avail. **(C)** Incl. intang. In '12: $31.73/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in WI in '13: 10.3%; in IL in '13: 9.28%; in MN in '12: 9.7%; earned on avg. com. eq, '12: 9.4%. Regulat. Climate: WI, Above Avg.; IL, Below Avg.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 75 |
| **Price Growth Persistence** | 60 |
| **Earnings Predictability** | 45 |

# UIL HOLDINGS NYSE-UIL

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 40.04 | 17.9 (Trailing: 18.0 Median: 18.0) | 1.02 | 4.3% |

**VALUE LINE**

**TIMELINESS** 2 Raised 7/19/13

**SAFETY** 2 Raised 2/29/08

**TECHNICAL** 3 Lowered 8/16/13

**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 35.3 | 27.6 | 32.8 | 33.7 | 43.8 | 43.0 | 37.8 | 31.2 | 31.3 | 35.8 | 37.7 | 42.1 |
| Low: | 16.9 | 18.5 | 25.1 | 27.4 | 27.4 | 27.0 | 25.1 | 17.0 | 23.8 | 28.6 | 32.3 | 35.9 |

**Target Price Range**

2016 | 2017 | 2018

### 2016-18 PROJECTIONS

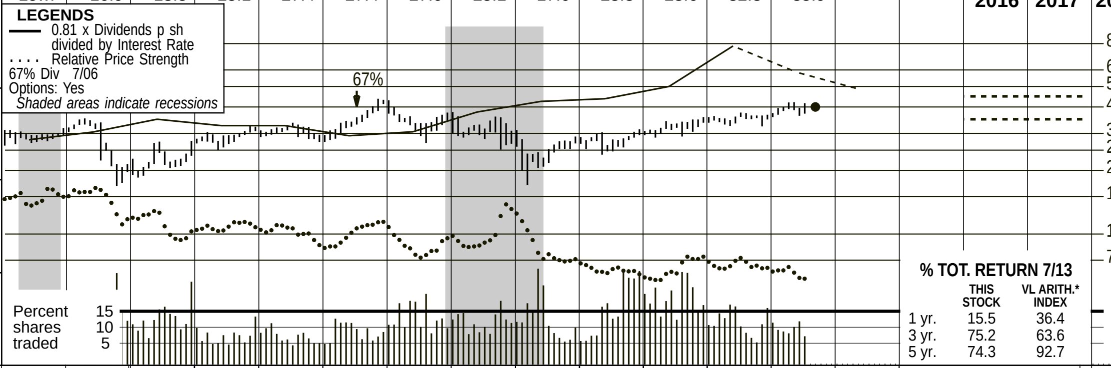
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (+10%) | *7%* |
| Low | 35 | (-15%) | *1%* |

### Insider Decisions

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 70 | 72 | 86 |
| to Sell | 74 | 69 | 59 |
| Hld's(000) | 29562 | 31172 | 32005 |



**% TOT. RETURN 7/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.5 | 36.4 |
| 3 yr. | 75.2 | 63.6 |
| 5 yr. | 74.3 | 92.7 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.64 | 29.34 | 29.01 | 37.54 | 46.15 | 47.55 | 40.39 | 45.87 | 49.88 | 34.03 | 39.23 | 37.69 | 29.91 | 19.75 | 31.01 | 29.22 | ***30.90*** | ***31.95*** | **Revenues per sh** | ***36.25*** |
| 5.40 | 5.34 | 4.67 | 5.53 | 6.61 | 5.89 | 4.69 | 4.37 | 4.13 | 4.65 | 5.48 | 5.93 | 5.09 | 3.65 | 5.33 | 5.65 | ***5.45*** | ***5.65*** | **"Cash Flow" per sh** | ***5.85*** |
| 1.96 | 1.80 | 2.23 | 2.56 | 2.53 | 1.85 | 1.24 | 1.54 | 1.30 | 1.86 | 1.87 | 1.89 | 1.94 | 1.99 | 1.95 | 2.02 | ***2.20*** | ***2.40*** | **Earnings per sh** A | ***2.55*** |
| 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | ***1.73*** | ***1.73*** | **Div'd Decl'd per sh** B ■ | ***1.73*** |
| 1.44 | 1.63 | 1.48 | 2.31 | 2.01 | 2.41 | 2.19 | 2.04 | 2.25 | 3.09 | 9.92 | 8.57 | 4.12 | 4.03 | 6.48 | 5.67 | ***5.10*** | ***5.10*** | **Cap'l Spending per sh** | ***5.00*** |
| 18.94 | 19.05 | 19.55 | 20.42 | 21.25 | 20.28 | 20.65 | 22.84 | 22.39 | 18.53 | 18.55 | 18.85 | 19.15 | 21.31 | 21.61 | 21.95 | ***22.55*** | ***24.90*** | **Book Value per sh** C | ***28.45*** |
| 23.18 | 23.39 | 23.44 | 23.46 | 23.53 | 23.79 | 23.86 | 24.01 | 24.32 | 24.86 | 25.03 | 25.17 | 29.98 | 50.51 | 50.65 | 50.87 | ***51.00*** | ***51.00*** | **Common Shs Outst'g** E | ***51.00*** |
| 10.1 | 16.3 | 12.6 | 10.8 | 11.5 | 15.0 | 18.0 | 18.7 | 23.5 | 18.7 | 18.4 | 16.7 | 12.7 | 14.0 | 16.5 | 17.4 | | | **Avg Ann'l P/E Ratio** | ***16.0*** |
| .58 | .85 | .72 | .70 | .59 | .82 | 1.03 | .99 | 1.25 | 1.01 | .98 | 1.01 | .85 | .89 | 1.04 | 1.11 | | | **Relative P/E Ratio** | ***1.05*** |
| 8.8% | 5.9% | 6.2% | 6.2% | 5.9% | 6.2% | 7.7% | 6.0% | 5.7% | 5.0% | 5.0% | 5.5% | 7.0% | 6.2% | 5.4% | 4.9% | | | **Avg Ann'l Div'd Yield** | ***4.2%*** |
| | | | | | | 963.7 | 1101.3 | 1213.1 | 846.0 | 982.0 | 948.7 | 896.6 | 997.7 | 1570.4 | 1486.5 | ***1575*** | ***1630*** | **Revenues ($mill)** | ***1850*** |
| | | | | | | 29.5 | 36.9 | 31.4 | 45.4 | 46.7 | 48.1 | 54.3 | 70.3 | 99.7 | 103.7 | ***110*** | ***120*** | **Net Profit ($mill)** | ***130*** |
| | | | | | | 53.1% | 45.4% | 44.1% | 31.2% | 39.5% | 42.2% | 38.0% | 38.6% | 38.5% | 41.9% | ***40.0%*** | ***40.0%*** | **Income Tax Rate** | ***40.0%*** |
| | | | | | | 8.5% | 1.1% | 9.0% | 8.0% | 8.3% | 8.3% | 10.0% | 26.3% | 12.1% | 10.0% | ***10.0%*** | ***10.0%*** | **AFUDC % to Net Profit** | ***10.0%*** |
| | | | | | | 50.1% | 47.2% | 47.2% | 47.0% | 50.8% | 53.6% | 54.0% | 58.4% | 58.6% | 58.9% | ***57.0%*** | ***56.0%*** | **Long-Term Debt Ratio** | ***54.5%*** |
| | | | | | | 49.9% | 52.8% | 52.8% | 53.0% | 49.2% | 46.4% | 46.0% | 41.6% | 41.4% | 41.1% | ***43.0%*** | ***44.0%*** | **Common Equity Ratio** | ***45.5%*** |
| | | | | | | 988.2 | 1039.6 | 1031.5 | 869.2 | 943.6 | 1023.6 | 1247.7 | 2587.9 | 2642.7 | 2716.9 | ***2700*** | ***2900*** | **Total Capital ($mill)** | ***3200*** |
| | | | | | | 548.8 | 563.9 | 592.1 | 647.0 | 878.4 | 1073.6 | 1153.0 | 2327.5 | 2570.4 | 2787.4 | ***2850*** | ***2950*** | **Net Plant ($mill)** | ***3250*** |
| | | | | | | 4.3% | 4.5% | 4.1% | 6.5% | 6.2% | 6.1% | 5.8% | 3.7% | 5.2% | 5.4% | ***5.5%*** | ***5.5%*** | **Return on Total Cap'l** | ***5.5%*** |
| | | | | | | 6.0% | 6.7% | 5.8% | 9.9% | 10.1% | 10.1% | 9.5% | 6.5% | 9.1% | 9.3% | ***9.5%*** | ***9.5%*** | **Return on Shr. Equity** | ***9.0%*** |
| | | | | | | 6.0% | 6.7% | 5.8% | 9.9% | 10.1% | 10.1% | 9.5% | 6.5% | 9.1% | 9.3% | ***9.5%*** | ***9.5%*** | **Return on Com Equity** D | ***9.0%*** |
| | | | | | | NMF | NMF | NMF | NMF | 3.1% | 1.0% | 1.2% | 1.7% | 1.1% | 1.5% | ***2.0%*** | ***2.5%*** | **Retained to Com Eq** | ***3.0%*** |
| | | | | | | NMF | 112% | NMF | 117% | 70% | 90% | 88% | 74% | 88% | 84% | ***80%*** | ***74%*** | **All Div'ds to Net Prof** | ***68%*** |

***Bold figures are Value Line estimates***

**CAPITAL STRUCTURE as of 6/30/13**

**Total Debt** $1789 mill. **Due in 5 Yrs.** $346.0 mill.
**LT Debt** $1598 mill. **LT Interest** $75.0 mill.
(LT interest earned: 3.0x)
**Leases, Uncapitalized:** Ann. rentals $4.6 mill.

**Pension Assets-12/12** $625 mill. **Oblig.** $951 mill.

**Pfd Stock** None

**Common Stock** 50,712,507 shs.
**as of 8/1/13**

**MARKET CAP: $2.0 billion (Mid Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.4 | -2.8 | -2.6 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 6.3 | 6.4 | 7.1 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | -.1 | Nil | +.2 |
| Fixed Charge Cov. (%) | 281 | 230 | 249 |

| **ANNUAL RATES** of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -5.0% | -8.5% | *5.5%* |
| "Cash Flow" | -2.0% | .5% | *3.0%* |
| Earnings | -1.5% | 3.5% | *4.0%* |
| Dividends | - - | - - | *Nil* |
| Book Value | .5% | 2.0% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 220.3 | 207.1 | 236.3 | 334.0 | 997.7 |
| **2011** | 561.1 | 314.0 | 321.4 | 373.9 | 1570.4 |
| **2012** | 458.3 | 283.5 | 323.8 | 420.9 | 1486.5 |
| **2013** | 548.0 | 319.1 | ***320*** | ***387.9*** | ***1575*** |
| **2014** | ***570*** | ***310*** | ***350*** | ***400*** | ***1630*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .53 | .48 | .63 | .35 | 1.99 |
| **2011** | 1.02 | .28 | .24 | .41 | 1.95 |
| **2012** | .92 | .23 | .31 | .56 | 2.02 |
| **2013** | 1.01 | .35 | ***.30*** | ***.54*** | ***2.20*** |
| **2014** | ***1.05*** | ***.30*** | ***.40*** | ***.65*** | ***2.40*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .432 | .432 | .432 | .432 | 1.73 |
| **2010** | .432 | .432 | .432 | .432 | 1.73 |
| **2011** | .432 | .432 | .432 | .432 | 1.73 |
| **2012** | .432 | .432 | .432 | .432 | 1.73 |
| **2013** | .432 | .432 | | | |

**BUSINESS:** UIL Holdings, through its subsidiaries, operates as one of the largest regulated utility companies in Connecticut. Business consists of electric distribution/transmission operations of The United Illuminating Company and natural gas transportation/distribution operations of The Southern Connecticut Gas Company, The Connecticut Natural Gas Company, and The Berkshire Gas Company. Revenue distribution by class: residential, 46%; commercial, 28%; industrial, 4%; other, 22%. Fuel costs: 35% of revenues; O&M costs, 24%. Has 1,865 employees as of 12/12. President & Chief Executive Officer: James P. Torgerson. Inc.: CT. Address: 157 Church Street, P.O. Box 1564, New Haven, CT. 06506-0901. Telephone: 203-499-2000. Internet: www.uil.com.

**UIL Holdings performed well in the second quarter.** The Connecticut-based utility reported earnings of $0.35 a share in the period, versus $0.23 in the comparable year-ago quarter. Improvement was driven by more-favorable weather patterns, a larger base for the transmission rate base, and the impact of natural gas conversions. We are maintaining our 2013 earnings estimate at $2.20 a share, representing year-over-year growth of 9%.

**Regulators issued a draft decision in United Illuminating's rate case.** On July 30th, the Connecticut Public Utilities Regulatory Authority (PURA) released its draft decision for UI's pending electric rate case. The draft order, which could be subject to change before the final order is issued in mid-August, recommends a $21.1 million rate increase in year one, and a $15.9 million increase in year two. It's based on a 9.15% return on equity and 50% equity ratio. Indeed, we view the draft order as somewhat of a disappointment, given that UI's original request called for increases of $65 million in year one, and $26 million in year two, based on a 10.25% return on equity and 50% equity ratio. While we were optimistic that regulatory conditions had been improving in the state, the unfavorable draft order once again proves that Connecticut is among the more challenging environments for utilities. The order is expected to be finalized at PURA's meeting on August 14th (just as this Issue was going to press).

**The gas utilities will continue to be a key focus area.** Through the end of the second quarter, UIL had converted 7,749 households to gas, putting it well ahead of its year-end target of 12,200 conversions. Management further indicated it added a little over 1,300 in July, upping the total to about 9,000. Its 2014 conversion target stands at 15,315, and its expects 55,000 over the 2014-2016 time frame.

**The stock has been raised a notch for Timeliness to 2 (Above Average).** In our view, these shares remain an attractive holding for investors seeking to add a low-risk income play to their portfolios. UIL holds above-average scores for Safety (2) and Financial Strength (B++). Its 4.3% yield ranks favorably compared to the utility industry's 3.8% mean.

*Michael Ratty* *August 23, 2013*

**(A)** EPS basic. Excl. nonrecur. gains (losses): '00, 4¢; '03, (26¢); '04, $2.14; '06, ($5.07); '10, (47¢). Next egs. report due early Nov. **(B)** Div'ds historically paid in early March, June, Sept., and Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. deferred charges. In '12: $380.1 mill. or $7.47/sh. **(D)** Rate base: orig. cost. Rate allowed on common equity in '09: 8.75%. Earned on average common equity in '12: 9.3%. Regul. Clim.: Below Average. **(E)** In millions. Adjusted for stock dividend.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 90 |

# UNS ENERGY NYSE-UNS

**RECENT PRICE** 51.63 **P/E RATIO** 19.1 (Trailing: 22.4 Median: 17.0) **RELATIVE P/E RATIO** 1.06 **DIV'D YLD** 3.4% **VALUE LINE**

**TIMELINESS** 3 Raised 4/5/13
**SAFETY** 3 New 12/31/04
TECHNICAL 2 Raised 7/19/13
**BETA** .70 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+25%) | *9%* |
| Low | 45 | (-15%) | *1%* |

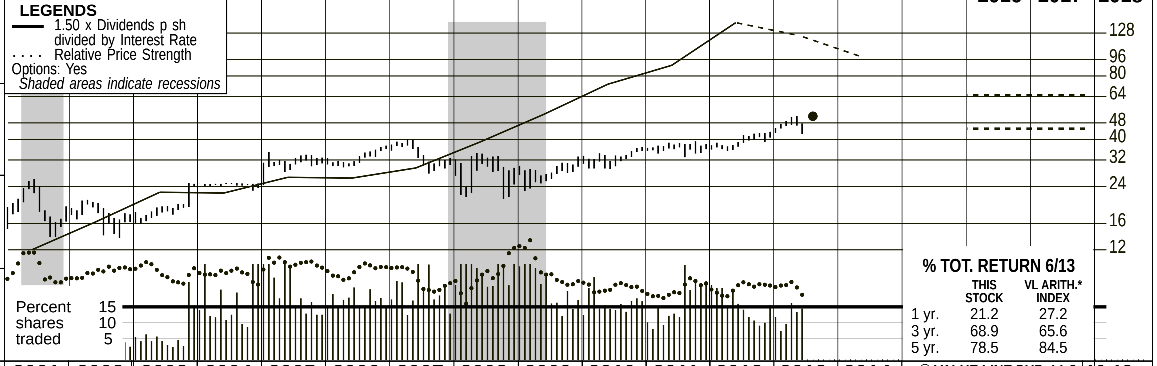
**Insider Decisions**

| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 |

**Institutional Decisions**

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 92 | 86 | 98 |
| to Sell | 69 | 71 | 72 |
| Hld's(000) | 34343 | 35228 | 37296 |

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 20.8 | 24.9 | 24.9 | 34.8 | 37.5 | 40.0 | 34.5 | 33.3 | 36.9 | 39.3 | 43.6 | 51.8 |
| Low: | 13.7 | 16.0 | 22.9 | 24.3 | 29.5 | 27.6 | 20.9 | 22.8 | 29.0 | 33.0 | 35.2 | 42.5 |



**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 21.2 | 27.2 |
| 3 yr. | 68.9 | 65.6 |
| 5 yr. | 78.5 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.71 | 23.83 | 24.85 | 31.12 | 43.12 | 25.50 | 28.71 | 34.13 | 35.26 | 37.42 | 39.12 | 39.41 | 38.89 | 39.78 | 40.89 | 35.36 | *36.15* | *37.60* | Revenues per sh | *41.20* |
| 5.29 | 3.48 | 3.96 | 4.23 | 5.41 | 4.80 | 5.20 | 5.29 | 5.21 | 5.68 | 5.64 | 4.56 | 7.82 | 7.33 | 7.44 | 6.48 | *7.10* | *7.60* | "Cash Flow" per sh | *8.00* |
| 2.60 | .68 | 1.08 | 1.27 | 1.79 | .97 | 1.30 | 1.31 | 1.30 | 1.85 | 1.55 | .39 | 2.69 | 2.82 | 2.75 | 2.20 | *2.70* | *3.40* | Earnings per sh A | *3.80* |
| - - | - - | - - | .32 | .40 | .50 | .60 | .64 | .76 | .84 | .90 | .96 | 1.16 | 1.56 | 1.68 | 1.72 | *1.74* | *1.76* | Div'd Decl'd per sh B ■ † | *2.28* |
| 2.22 | 2.52 | 2.87 | 3.19 | 3.63 | 3.36 | 4.06 | 4.49 | 5.83 | 6.77 | 6.95 | 9.85 | 8.01 | 7.26 | 10.13 | 7.43 | *9.45* | *8.05* | Cap'l Spending per sh | *7.85* |
| 6.75 | 7.65 | 10.02 | 11.20 | 12.68 | 13.05 | 15.97 | 16.95 | 17.68 | 18.59 | 19.54 | 19.16 | 20.94 | 22.46 | 24.07 | 25.77 | *26.65* | *27.85* | Book Value per sh | *32.25* |
| 32.14 | 32.26 | 32.35 | 33.22 | 33.50 | 33.58 | 33.79 | 34.26 | 34.87 | 35.19 | 35.32 | 35.46 | 35.85 | 36.54 | 36.92 | 41.34 | *41.50* | *42.00* | Common Shs Outst'g C | *42.50* |
| 6.1 | 23.3 | 10.8 | 11.8 | 10.8 | 18.2 | 14.6 | 18.7 | 23.9 | 17.7 | 22.0 | NMF | 10.4 | 11.6 | 13.3 | 17.8 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *14.0* |
| .35 | 1.21 | .62 | .77 | .55 | .99 | .83 | .99 | 1.27 | .96 | 1.17 | NMF | .69 | .74 | .83 | 1.14 | | | Relative P/E Ratio | *.95* |
| - - | - - | - - | 2.1% | 2.1% | 2.8% | 3.2% | 2.6% | 2.5% | 2.6% | 2.6% | 3.3% | 4.1% | 4.8% | 4.6% | 4.4% | | | Avg Ann'l Div'd Yield | *4.1%* |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $1804.7 mill. **Due in 5 Yrs** $642.0 mill.
**LT Debt** $1504.5 mill. **LT Interest** $72.0 mill.
Incl. $179.6 mill. capitalized leases.

(LT interest earned: 3.0x)

**Pension Assets-12/12** $289 mill. **Oblig.** $380 mill.
**Pfd Stock** None

**Common Stock** 41,459,272 shs.
**as of 4/17/13**
**MARKET CAP: $2.1 billion (Mid Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 969.9 | 1169.0 | 1229.5 | 1316.9 | 1381.4 | 1397.5 | 1394.4 | 1453.7 | 1509.5 | 1461.8 | *1500* | *1580* | Revenues ($mill) | *1750* |
| 45.2 | 45.9 | 46.1 | 69.2 | 58.4 | 14.0 | 104.3 | 111.5 | 110.0 | 90.9 | *115* | *140* | Net Profit ($mill) | *160* |
| 19.7% | 42.5% | 41.4% | 38.8% | 40.1% | 54.8% | 38.2% | 41.2% | 37.8% | 38.0% | *38.0%* | *38.0%* | Income Tax Rate | *40.0%* |
| 2.2% | - - | - - | 2.9% | 3.4% | - - | - - | - - | - - | - - | *Nil* | *Nil* | AFUDC % to Net Profit | *Nil* |
| 79.2% | 77.1% | 75.3% | 72.9% | 68.8% | 72.9% | 70.5% | 68.5% | 67.8% | 62.3% | *62.5%* | *63.0%* | Long-Term Debt Ratio | *63.0%* |
| 20.8% | 22.9% | 24.7% | 27.1% | 31.2% | 27.1% | 29.5% | 31.5% | 32.2% | 37.7% | *37.5%* | *37.0%* | Common Equity Ratio | *37.0%* |
| 2589.0 | 2540.3 | 2494.9 | 2414.1 | 2214.9 | 2506.4 | 2547.0 | 2602.8 | 2758.6 | 2826.0 | *2935* | *3165* | Total Capital ($mill) | *3720* |
| 2069.2 | 2081.1 | 2171.5 | 2259.6 | 2407.3 | 2617.7 | 2785.7 | 2961.5 | 3182.3 | 3300.4 | *3530* | *3775* | Net Plant ($mill) | *4625* |
| 4.9% | 5.1% | 5.1% | 5.9% | 5.7% | 3.0% | 5.2% | 5.5% | 5.3% | 4.5% | *5.5%* | *6.0%* | Return on Total Cap'l | *6.0%* |
| 8.4% | 7.9% | 7.5% | 10.6% | 8.5% | 2.1% | 13.9% | 13.6% | 12.4% | 8.5% | *10.5%* | *12.0%* | Return on Shr. Equity | *11.5%* |
| 8.4% | 7.9% | 7.5% | 10.6% | 8.5% | 2.1% | 13.9% | 13.6% | 12.4% | 8.5% | *10.5%* | *12.0%* | Return on Com Equity D | *11.5%* |
| 4.6% | 4.1% | 3.2% | 6.1% | 3.9% | NMF | 8.4% | 6.7% | 5.4% | 2.0% | *4.0%* | *5.5%* | Retained to Com Eq | *4.5%* |
| 45% | 48% | 57% | 43% | 54% | NMF | 40% | 51% | 56% | 77% | *63%* | *53%* | All Div'ds to Net Prof | *61%* |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -.8 | +.4 | -.7 |
| Avg. Indust. Use (MWH) | 5052 | 5060 | 5086 |
| Avg. Indust. Revs. per KWH (¢) | 6.90 | 7.10 | 7.20 |
| Capacity at Peak (Mw) | 3044 | 3271 | 2950 |
| Peak Load, Summer (Mw) | 2333 | 2334 | 2290 |
| Annual Load Factor (%) | N/A | N/A | N/A |
| % Change Customers (yr-end) | +.3 | +.4 | +.5 |
| Fixed Charge Cov. (%) | 268 | 251 | 239 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | 1.5% | .5% | *1.0%* |
| "Cash Flow" | 4.0% | 5.0% | *2.0%* |
| Earnings | 7.0% | 10.5% | *6.5%* |
| Dividends | 15.0% | 14.5% | *5.5%* |
| Book Value | 7.0% | 5.5% | *5.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 317.9 | 337.8 | 438.8 | 359.2 | 1453.7 |
| 2011 | 344.8 | 369.7 | 450.9 | 344.1 | 1509.5 |
| 2012 | 315.4 | 364.0 | 434.1 | 348.3 | 1461.8 |
| 2013 | 332.1 | *360* | *465* | *342.9* | *1500* |
| 2014 | *350* | *375* | *485* | *370* | *1580* |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .52 | .65 | 1.36 | .29 | 2.82 |
| 2011 | .35 | .71 | 1.46 | .22 | 2.75 |
| 2012 | .17 | .64 | 1.21 | .18 | 2.20 |
| 2013 | .27 | *.60* | *1.50* | *.33* | *2.70* |
| 2014 | *.45* | *.80* | *1.65* | *.50* | *3.40* |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ † Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .29 | .29 | .29 | .29 | 1.16 |
| 2010 | .39 | .39 | .39 | .39 | 1.56 |
| 2011 | .42 | .42 | .42 | .42 | 1.68 |
| 2012 | .43 | .43 | .43 | .43 | 1.72 |
| 2013 | .435 | .435 | | | |

**BUSINESS:** UNS Energy Corporation, through its subsidiaries, operates as an electric utility in Arizona. Subsidiaries include Tucson Electric Power (TEP), UNS Gas, and UNS Electric. '12 retail customers: TEP, 406,000 (in southeastern Arizona); UNS Gas, 149,000; UNS Electric, 92,000. Revenue sources: residential, 41%; commercial, 21%; industrial, 35%; other, 3%. Copper mining is largest industry served. Fuels: coal, 72%; gas, 11%; purchased power, 17%. '12 TEP reported depreciation rate: 4.0%. Has 1,979 employees: TEP, 1,392; UNS Gas, 186; UNS Electric, 148; Other, 253. Chrmn. & CEO: Paul J. Bonavia. Pres.: David G. Hutchens. Inc.: AZ. Address: 88 E. Broadway Blvd., Tucson, AZ 85701. Telephone: 520-571-4000. Internet: www.uns.com.

**UNS Energy's primary subsidiary, Tucson Electric Power (TEP), announced its first base-rate increase since 2008.** On June 11th, the Arizona Corporation Commission (ACC) approved the settlement agreement, previously filed in February, which specified a nonfuel retail base-rate increase of $76 million, (over the adjusted test-year revenues), based on a return on equity of 10.0%. The common-equity ratio would be 43.5%. These new rates were implemented on July 1st. In addition, the rate order for UNS Electric is expected late this year or early next year.

**Other regulatory changes were included in the 2013 TEP rate order, as well, such as the purchased power and fuel adjustment clause (PPFAC).** In addition, the utility will probably be able to recover costs associated with energy efficiency programs, and environmental regulations, among other things, through its lost fixed-cost recovery mechanism (LFCR), which is expected to be effective July 1, 2014, and its environmental compliance adjuster (ECA) mechanism (effective, May 1, 2014).

**The bottom line should somewhat recover in 2013, after a dismal showing last year.** In fact, March-period share earnings increased a dime over the prior-year tally, largely due to higher retail sales volumes (for both TEP and UNS Gas) from colder winter weather. Electricity demand should continue going forward in the summer months. Moreover, momentum should pick up, with TEP's four-year base-rate freeze in the past.

**In other news, utility deregulation may become a possibility in Arizona.** Consequently, TEP and UNS Electric sent a joint response to the ACC, requesting the commission reject retail electric competition, as the structure would "impose new costs, greater inequities, significant risks, and daunting regulatory and legal challenges without delivering real benefits for customers".

**These shares offer a below-average dividend yield, by utility standards.** That said, the company's dividend growth over the past five years has been substantial, and total return potential over the 2016-2018 time frame is worthwhile.

*Michelle Jensen* *August 2, 2013*

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(A) EPS diluted. Excl. nonrecur. gains: '98, 19¢; '99, $1.35; '00, 48¢; '03, $2.00. Next earnings report due July 30th. Earnings may not sum due to rounding. (B) Div'ds historically paid in early Mar., June, Sept., and Dec. ■ Div'd reinvest. plan avail. † Shareholder invest. plan avail. (C) In millions. (D) Rate base: fair value. Rate allowed on com. eq. in '13: 10.0%; earned on avg. com. eq., '12: 8.5%. Regulatory Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | B+ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 85 |
| **Earnings Predictability** | 40 |

# VECTREN CORP. NYSE-VVC

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 32.71 | 19.1 (Trailing: 16.9 Median: 15.0) | 1.09 | 4.4% | |

| | | |
|---|---|---|
| **TIMELINESS** | 3 | Lowered 2/24/12 |
| **SAFETY** | 2 | Lowered 1/5/01 |
| TECHNICAL | 3 | Raised 9/13/13 |

**BETA** .75 (1.00 = Market)

**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 45 | (+40%) | *12%* |
| Low | 35 | (+5%) | *6%* |

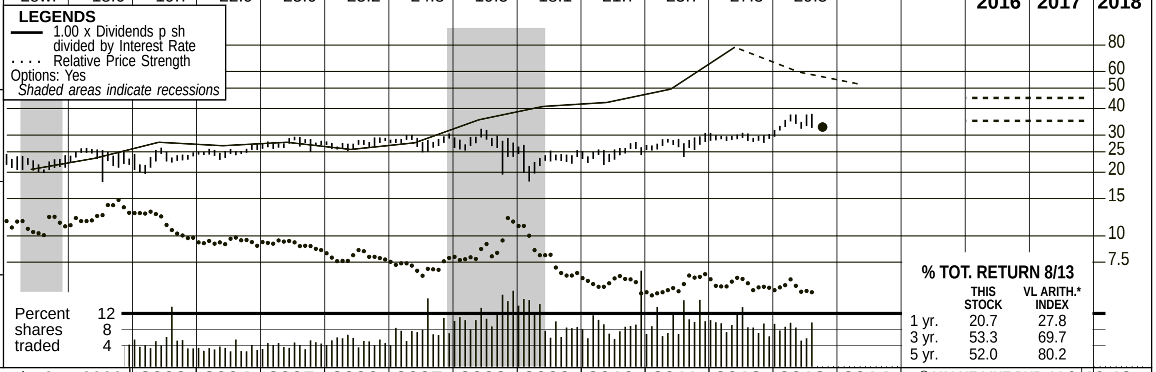
**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 97 | 113 | 112 |
| to Sell | 101 | 105 | 114 |
| Hld's(000) | 43904 | 45056 | 45991 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 26.1 | 26.1 | 27.1 | 29.5 | 29.3 | 30.5 | 32.2 | 26.9 | 27.8 | 30.7 | 30.8 | 37.9 |
| Low: | 18.0 | 19.7 | 22.9 | 25.0 | 25.2 | 24.8 | 19.5 | 18.1 | 21.7 | 23.7 | 27.5 | 29.5 |



**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 20.7 | 27.8 |
| 3 yr. | 53.3 | 69.7 |
| 5 yr. | 52.0 | 80.2 |

Vectren was formed on March 31, 2000 through the merger of Indiana Energy and SIGCORP. The merger was consummated with a tax-free exchange of shares and has been accounted for as a pooling of interests. Indiana Energy common stockholders received one Vectren common share for each share held. SIGCORP stockholders exchanged each common share for 1.333 common shares of Vectren.

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $1906.3 mill. **Due in 5 Yrs** $886.3 mill.
**LT Debt** $1477.8 mill. **LT Interest** $75.0 mill.
(LT interest earned: 3.6x)

**Pension Assets-12/12** $295.7 mill.
**Oblig.** $377.3 mill.

**Pfd Stock** None

**Common Stock** 82,315,558 shs.
**as of 7/31/13**

**MARKET CAP: $2.7 billion (Mid Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.00 | 22.26 | 26.62 | 26.83 | 29.88 | 30.67 | 25.76 | 26.06 | 28.39 | 27.16 | ***29.65*** | ***30.25*** | **Revenues per sh** | ***35.65*** |
| 3.17 | 3.27 | 3.87 | 3.69 | 4.29 | 3.97 | 4.40 | 4.44 | 4.71 | 5.03 | ***4.90*** | ***5.60*** | **"Cash Flow" per sh** | ***7.00*** |
| 1.56 | 1.42 | 1.81 | 1.44 | 1.83 | 1.63 | 1.79 | 1.64 | 1.73 | 1.94 | ***1.60*** | ***2.20*** | **Earnings per sh A** | ***2.70*** |
| 1.11 | 1.15 | 1.19 | 1.23 | 1.27 | 1.31 | 1.35 | 1.37 | 1.39 | 1.41 | ***1.43*** | ***1.45*** | **Div'd Decl'd per sh B■†** | ***1.60*** |
| 3.12 | 3.66 | 3.04 | 3.70 | 4.38 | 4.83 | 5.33 | 3.39 | 3.92 | 4.45 | ***4.50*** | ***4.90*** | **Cap'l Spending per sh** | ***6.90*** |
| 14.18 | 14.42 | 15.01 | 15.43 | 16.16 | 16.68 | 17.23 | 17.61 | 17.89 | 18.57 | ***18.80*** | ***19.65*** | **Book Value per sh C** | ***23.00*** |
| 75.60 | 75.90 | 76.19 | 76.10 | 76.36 | 81.03 | 81.10 | 81.70 | 81.90 | 82.20 | ***83.00*** | ***84.00*** | **Common Shs Outst'g D** | ***87.00*** |
| 14.8 | 17.6 | 15.1 | 18.9 | 15.3 | 16.8 | 12.9 | 15.0 | 15.8 | 15.0 | ***Bold figures are Value Line estimates*** | | **Avg Ann'l P/E Ratio** | ***15.0*** |
| .84 | .93 | .80 | 1.02 | .81 | 1.01 | .86 | .95 | .99 | .96 | | | **Relative P/E Ratio** | ***1.00*** |
| 4.8% | 4.6% | 4.4% | 4.5% | 4.5% | 4.8% | 5.9% | 5.5% | 5.1% | 4.8% | | | **Avg Ann'l Div'd Yield** | ***4.0%*** |
| 1587.6 | 1689.8 | 2028.0 | 2041.6 | 2281.9 | 2484.7 | 2088.9 | 2129.5 | 2325.2 | 2232.8 | ***2460*** | ***2540*** | **Revenues ($mill)** | ***3100*** |
| 111.2 | 108.0 | 136.8 | 108.8 | 143.1 | 129.0 | 145.0 | 133.7 | 141.6 | 159.0 | ***135*** | ***185*** | **Net Profit ($mill)** | ***230*** |
| 25.3% | 26.5% | 24.4% | 21.8% | 34.7% | 37.1% | 26.5% | 35.8% | 37.9% | 34.2% | ***35.0%*** | ***35.0%*** | **Income Tax Rate** | ***35.0%*** |
| 4.5% | 3.0% | 1.4% | 3.8% | 2.8% | 2.9% | 4.1% | - - | 4.1% | 4.0% | ***3.5%*** | ***3.5%*** | **AFUDC % to Net Profit** | ***3.5%*** |
| 50.0% | 48.1% | 51.2% | 50.7% | 50.2% | 48.0% | 52.4% | 49.9% | 51.6% | 50.4% | ***49.0%*** | ***49.0%*** | **Long-Term Debt Ratio** | ***48.5%*** |
| 50.0% | 51.8% | 48.8% | 49.3% | 49.8% | 52.0% | 47.6% | 50.1% | 48.4% | 49.6% | ***51.0%*** | ***51.0%*** | **Common Equity Ratio** | ***51.5%*** |
| 2144.7 | 2111.5 | 2341.3 | 2382.2 | 2479.1 | 2599.5 | 2937.7 | 2874.1 | 3025.1 | 3079.5 | ***3060*** | ***3250*** | **Total Capital ($mill)** | ***3900*** |
| 2003.7 | 2156.2 | 2251.9 | 2385.5 | 2539.7 | 2720.3 | 2878.8 | 2955.4 | 3032.6 | 3119.6 | ***3200*** | ***3300*** | **Net Plant ($mill)** | ***3600*** |
| 6.6% | 6.4% | 7.2% | 6.0% | 7.2% | 6.5% | 6.3% | 6.1% | 6.2% | 6.4% | ***5.5%*** | ***7.0%*** | **Return on Total Cap'l** | ***7.0%*** |
| 10.4% | 9.9% | 12.0% | 9.3% | 11.6% | 9.5% | 10.4% | 9.3% | 9.7% | 10.4% | ***8.5%*** | ***11.0%*** | **Return on Shr. Equity** | ***11.5%*** |
| 10.4% | 9.9% | 12.0% | 9.3% | 11.6% | 9.5% | 10.4% | 9.3% | 9.7% | 10.4% | ***8.5%*** | ***11.0%*** | **Return on Com Equity E** | ***11.5%*** |
| 3.0% | 1.9% | 4.0% | 1.3% | 3.8% | 2.0% | 2.6% | 1.6% | 1.9% | 2.9% | ***1.0%*** | ***4.0%*** | **Retained to Com Eq** | ***4.5%*** |
| 71% | 81% | 66% | 86% | 67% | 80% | 75% | 83% | 80% | 73% | ***88%*** | ***66%*** | **All Div'ds to Net Prof** | ***61%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | 11.5 | -.3 | -2.3 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | 1496 | 1494 | 1494 |
| Peak Load, Summer (Mw) | 1275 | 1220 | 1259 |
| Annual Load Factor (%) | 58.1 | 57.1 | 57.6 |
| % Change Customers (yr-end) | +.3 | - - | +.4 |
| Fixed Charge Cov. (%) | 303 | 347 | 367 |

| **ANNUAL RATES of change (per sh)** | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -.5% | -.5% | *4.5%* |
| "Cash Flow" | 4.5% | 3.5% | *7.0%* |
| Earnings | 3.0% | 1.0% | *7.5%* |
| Dividends | 3.0% | 2.5% | *2.5%* |
| Book Value | 4.0% | 3.0% | *4.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 740.3 | 402.4 | 422.7 | 564.1 | 2129.5 |
| **2011** | 682.6 | 475.8 | 539.4 | 627.4 | 2325.2 |
| **2012** | 604.6 | 470.6 | 513.5 | 644.1 | 2232.8 |
| **2013** | 700.6 | 531.0 | ***565*** | ***663.4*** | ***2460*** |
| **2014** | ***720*** | ***540*** | ***580*** | ***700*** | ***2540*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .78 | .11 | .20 | .55 | 1.64 |
| **2011** | .55 | .18 | .43 | .57 | 1.73 |
| **2012** | .62 | .31 | .48 | .52 | 1.94 |
| **2013** | .61 | d.07 | ***.48*** | ***.58*** | ***1.60*** |
| **2014** | ***.72*** | ***.35*** | ***.50*** | ***.63*** | ***2.20*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B■† Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .335 | .335 | .335 | .340 | 1.35 |
| **2010** | .340 | .340 | .340 | .345 | 1.37 |
| **2011** | .345 | .345 | .345 | .350 | 1.39 |
| **2012** | .350 | .350 | .350 | .355 | 1.41 |
| **2013** | .355 | .355 | .355 | | |

**BUSINESS:** Vectren is a holding company formed through the merger of Indiana Energy and SIGCORP. Supplies electricity and gas to an area nearly two-thirds of the state of Indiana. Owns gas distribution assets in Ohio. Has a customer base exceeding 1.1 million. 2012 Electricity revenues: residential, 36%; commercial, 27%; industrial, 35%; other, 2%. 2012 Gas revenues: residential, 68%; commercial, 23%; other, 9%. Also provides energy-related products and services and has an investment subsidiary. Est'd plant age: electric, 8 years. '12 deprec. rate: 4.9%. Has 5,400 employees. Chairman, President, & CEO: Carl Chapman. Incorporated: IN. Address: One Vectren Square, Evansville, Indiana 47708. Telephone: 812-491-4000. Internet: www.vectren.com.

**Vectren reported solid revenue growth for the second quarter.** Top-line performance was fairly strong in both the company's utility and nonutility operations. However, bottom-line results require some explanation. Vectren reported a share loss of $0.07. Our presentation includes the results of gas-marketer ProLiance and a loss on the disposition of some of the net assets of this business (discussed below). Excluding losses related to ProLiance, share earnings would have been $0.33. Utility earnings advanced at a good clip for the quarter.

**The company's exit from the natural gas marketing business appears to be a wise move.** It has achieved this with the disposition of certain net assets, along with the long-term pipeline and storage commitments, of its gas marketing subsidiary, ProLiance Energy. This move should boost profitability at Vectren, and allow the company to increase focus on its core operations.

**We expect favorable top-line comparisons going forward, and moderate revenue growth for the current year.** Share net ought to rebound in 2014. The utility group should continue to report healthy performance in the coming quarters. This group ought to further benefit from healthy gas utility margins and a good return on electric transmission investment. Meanwhile, the Infrastructure Services line will probably continue to benefit from strong demand, as companies replace their aging natural gas and oil infrastructure. Moreover, construction activity should be favorably impacted as pipeline operators construct new pipelines due to robust demand for shale gas and oil infrastructure. Results in the coal mining business should be less impressive, due to higher costs and other unfavorable conditions at the Prosperity Mine.

**This issue offers worthwhile risk-adjusted total return potential for the pull to 2016-2018.** The company earns favorable marks for Safety, Financial Strength, Price Stability, and Earnings Predictability. Moreover, the stock's healthy dividend yield should appeal to income-seeking investors. This equity is neutrally ranked for year-ahead relative price performance.

*Michael Napoli, CFA* *September 20, 2013*

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**(A)** Diluted EPS. Excl. nonrecur. gain (loss): '03, (6¢); '09, 15¢. Earnings may not sum due to rounding. Next egs report due in November. **(B)** Div'ds historically paid in early March, June, September, and December. ■Div'd reinvest. plan avail. † Shareholder invest. plan avail. **(C)** Incl. intang. In '12, $6.27/sh. **(D)** In millions. **(E)** Electric rate base determination: fair value. Rates allowed on elect. common equity range from 10.15% to 10.4%; earned on common equity in '12: 10.4%. Regulatory Climate: Above Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 90 |

# WISCONSIN ENERGY NYSE-WEC

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|---|---|---|---|---|
| 40.14 | 16.5 (Trailing: 16.9 Median: 15.0) | 0.94 | 3.8% | |

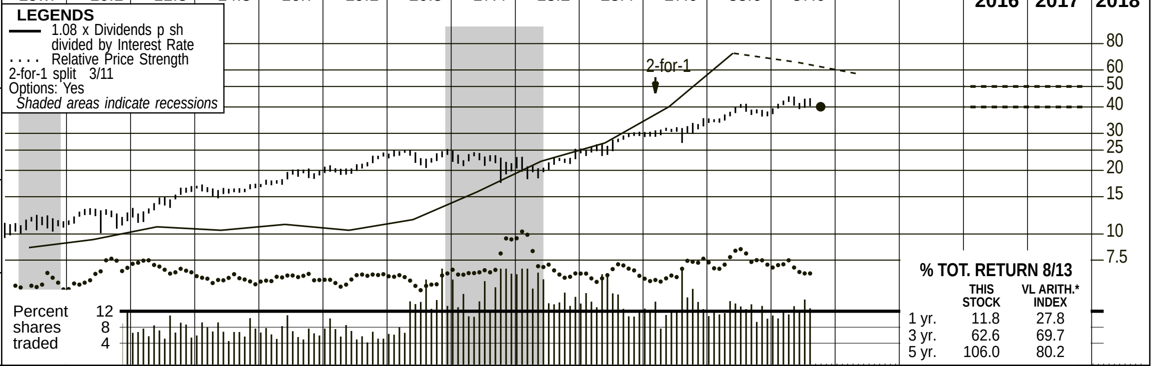
**TIMELINESS** 3 Raised 5/17/13

**SAFETY** 1 Raised 3/23/12

TECHNICAL 3 Raised 9/13/13

**BETA** .65 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 13.2 | 16.8 | 17.3 | 20.4 | 24.3 | 25.2 | 24.8 | 25.3 | 30.5 | 35.4 | 41.5 | 45.0 |
| Low: | 10.1 | 11.3 | 14.8 | 16.7 | 19.1 | 20.5 | 17.4 | 18.2 | 23.4 | 27.0 | 33.6 | 37.0 |



% TOT. RETURN 8/13

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 11.8 | 27.8 |
| 3 yr. | 62.6 | 69.7 |
| 5 yr. | 106.0 | 80.2 |

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+25%) | *10%* |
| Low | 40 | (Nil) | *4%* |

### Insider Decisions

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Options | 0 | 1 | 0 | 0 | 5 | 2 | 1 | 2 | 0 |
| to Sell | 0 | 2 | 0 | 0 | 5 | 2 | 1 | 2 | 0 |

### Institutional Decisions

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 212 | 191 | 178 |
| to Sell | 193 | 195 | 199 |
| Hld's(000) | 147925 | 152425 | 155418 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.93 | 8.56 | 9.56 | 14.14 | 17.02 | 16.10 | 17.12 | 14.66 | 16.31 | 17.08 | 18.12 | 18.95 | 17.65 | 17.98 | 19.46 | 18.54 | ***19.80*** | ***20.65*** | Revenues per sh | ***23.75*** |
| 1.48 | 2.06 | 2.26 | 2.24 | 2.72 | 2.84 | 2.86 | 2.58 | 2.89 | 2.90 | 2.98 | 2.95 | 3.11 | 3.30 | 3.68 | 4.01 | ***4.26*** | ***4.50*** | "Cash Flow" per sh | ***5.50*** |
| .27 | .83 | .94 | .54 | .92 | 1.16 | 1.13 | .93 | 1.28 | 1.32 | 1.42 | 1.52 | 1.60 | 1.92 | 2.18 | 2.35 | ***2.45*** | ***2.55*** | Earnings per sh A | ***3.00*** |
| .77 | .78 | .78 | .69 | .40 | .40 | .40 | .42 | .44 | .46 | .50 | .54 | .68 | .80 | 1.04 | 1.20 | ***1.45*** | ***1.53*** | Div'd Decl'd per sh B ■ | ***2.00*** |
| 1.56 | 1.76 | 2.22 | 2.64 | 3.01 | 2.54 | 2.95 | 2.85 | 3.40 | 4.17 | 5.28 | 4.86 | 3.50 | 3.41 | 3.60 | 3.09 | ***3.25*** | ***2.95*** | Cap'l Spending per sh | ***3.25*** |
| 8.25 | 8.23 | 8.44 | 8.50 | 8.91 | 9.22 | 9.96 | 10.65 | 11.46 | 12.35 | 13.25 | 14.27 | 15.26 | 16.26 | 17.20 | 18.05 | ***18.60*** | ***19.30*** | Book Value per sh C | ***21.25*** |
| 225.73 | 231.21 | 237.81 | 237.29 | 230.84 | 232.06 | 236.85 | 233.97 | 233.96 | 233.94 | 233.89 | 233.84 | 233.82 | 233.77 | 230.49 | 229.04 | ***227.50*** | ***227.50*** | Common Shs Outst'g D | ***227.50*** |
| NMF | 18.0 | 13.3 | 18.7 | 12.1 | 10.5 | 12.4 | 17.5 | 14.5 | 16.0 | 16.5 | 14.8 | 13.3 | 14.0 | 14.2 | 15.8 | *Bold figures are* | | Avg Ann'l P/E Ratio | ***15.0*** |
| NMF | .94 | .76 | 1.22 | .62 | .57 | .71 | .92 | .77 | .86 | .88 | .89 | .89 | .89 | .89 | 1.01 | *Value Line* | | Relative P/E Ratio | ***1.00*** |
| 6.0% | 5.2% | 6.3% | 6.8% | 3.6% | 3.3% | 2.8% | 2.6% | 2.4% | 2.2% | 2.1% | 2.4% | 3.2% | 3.0% | 3.3% | 3.2% | *estimates* | | Avg Ann'l Div'd Yield | ***4.5%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $5133.7 mill. **Due in 5 Yrs** $1627.9 mill.
**LT Debt** $4383.2 mill. **LT Interest** $241.1 mill.
Incl. $104.2 mill. capitalized leases.
(LT interest earned: 4.0x)
**Leases, Uncapitalized** Annual rentals $6.5 mill.
**Pension Assets-12/12** $1.39 bill.
**Oblig.** $1.51 bill.
**Pfd Stock** $30.4 mill. **Pfd Div'd** $1.2 mill.
260,000 shs. 3.60%, $100 par, callable at $101;
44,498 shs. 6%, $100 par.
**Common Stock** 227,666,738 shs.

**MARKET CAP: $9.1 billion (Large Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4054.3 | 3431.1 | 3815.5 | 3996.4 | 4237.8 | 4431.0 | 4127.9 | 4202.5 | 4486.4 | 4246.4 | ***4500*** | ***4700*** | Revenues ($mill) | ***5400*** |
| 269.2 | 221.2 | 304.8 | 313.7 | 337.7 | 359.8 | 378.4 | 455.6 | 514.0 | 547.5 | ***565*** | ***590*** | Net Profit ($mill) | ***700*** |
| 35.5% | 37.5% | 32.9% | 35.8% | 39.1% | 37.6% | 36.5% | 35.4% | 33.9% | 35.9% | ***36.5%*** | ***36.5%*** | Income Tax Rate | ***36.5%*** |
| 6.9% | 10.0% | 12.5% | 19.0% | 23.8% | 27.2% | 25.0% | 18.6% | 16.8% | 9.4% | ***7.0%*** | ***6.0%*** | AFUDC % to Net Profit | ***6.0%*** |
| 59.9% | 56.2% | 52.8% | 51.3% | 50.3% | 54.8% | 51.9% | 50.6% | 53.6% | 51.7% | ***51.5%*** | ***51.5%*** | Long-Term Debt Ratio | ***50.5%*** |
| 39.6% | 43.3% | 46.7% | 48.2% | 49.2% | 44.8% | 47.7% | 49.0% | 46.0% | 48.0% | ***48.0%*** | ***48.5%*** | Common Equity Ratio | ***49.5%*** |
| 5963.3 | 5762.3 | 5741.5 | 5992.8 | 6302.1 | 7442.0 | 7473.1 | 7764.5 | 8608.0 | 8619.3 | ***8815*** | ***9070*** | Total Capital ($mill) | ***9825*** |
| 5926.1 | 5903.1 | 6362.9 | 7052.5 | 7681.2 | 8517.0 | 9070.5 | 9601.5 | 10160 | 10572 | ***10900*** | ***11150*** | Net Plant ($mill) | ***11925*** |
| 6.3% | 5.6% | 7.0% | 6.6% | 7.0% | 6.3% | 6.4% | 7.5% | 7.5% | 7.9% | ***8.0%*** | ***8.0%*** | Return on Total Cap'l | ***8.5%*** |
| 11.3% | 8.8% | 11.2% | 10.7% | 10.8% | 10.7% | 10.5% | 11.9% | 12.9% | 13.1% | ***13.5%*** | ***13.5%*** | Return on Shr. Equity | ***14.5%*** |
| 11.4% | 8.8% | 11.3% | 10.8% | 10.9% | 10.7% | 10.6% | 12.0% | 12.9% | 13.2% | ***13.5%*** | ***13.5%*** | Return on Com Equity E | ***14.5%*** |
| 7.4% | 4.9% | 7.5% | 7.1% | 7.1% | 7.0% | 6.2% | 7.0% | 6.8% | 6.5% | ***5.5%*** | ***5.5%*** | Retained to Com Eq | ***5.0%*** |
| 35% | 45% | 34% | 35% | 35% | 35% | 42% | 41% | 47% | 51% | ***58%*** | ***59%*** | All Div'ds to Net Prof | ***65%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +6.0 | -.5 | -.6 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 6.80 | 7.64 | 7.66 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 5908 | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.3 | +.2 | +.3 |
| Fixed Charge Cov. (%) | 312 | 336 | 377 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | 1.5% | 1.5% | *4.0%* |
| "Cash Flow" | 3.5% | 4.5% | *7.0%* |
| Earnings | 9.5% | 10.0% | *5.5%* |
| Dividends | 7.5% | 17.0% | *12.0%* |
| Book Value | 7.0% | 7.0% | *3.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | 1248.6 | 890.9 | 973.2 | 1089.8 | 4202.5 |
| 2011 | 1328.7 | 991.7 | 1052.8 | 1113.2 | 4486.4 |
| 2012 | 1191.2 | 944.7 | 1039.3 | 1071.2 | 4246.4 |
| 2013 | 1275.2 | 1012.3 | ***1050*** | ***1162.5*** | ***4500*** |
| 2014 | ***1350*** | ***1050*** | ***1100*** | ***1200*** | ***4700*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2010 | .55 | .37 | .47 | .53 | 1.92 |
| 2011 | .72 | .41 | .55 | .49 | 2.18 |
| 2012 | .74 | .51 | .67 | .43 | 2.35 |
| 2013 | .76 | .52 | ***.56*** | ***.61*** | ***2.45*** |
| 2014 | ***.75*** | ***.55*** | ***.65*** | ***.60*** | ***2.55*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2009 | .16875 | .16875 | .16875 | .16875 | .68 |
| 2010 | .20 | .20 | .20 | .20 | .80 |
| 2011 | .26 | .26 | .26 | .26 | 1.04 |
| 2012 | .30 | .30 | .30 | .30 | 1.20 |
| 2013 | .34 | .34 | .3825 | | |

**BUSINESS:** Wisconsin Energy Corporation is a holding company for We Energies, which provides electric, gas & steam service in Wisconsin. Customers: 1.1 mill. elec., 1.1 mill. gas. Acq'd WICOR 4/00. Discontinued pump-manufacturing operations in '04. Sold Point Beach nuclear plant in '07. Elec. revenue breakdown: residential, 36%; small commercial & industrial, 32%; large commercial & industrial, 23%; other, 9%. Generating sources: coal, 43%; gas, 17%; wind, 2%; hydro, 1%; purchased, 37%. Fuel costs: 39% of revs. '12 reported deprec. rate (utility): 2.9%. Has 4,500 employees. Chairman & CEO: Gale E. Klappa. President: Allen L. Leverett. Inc.: WI. Address: 231 W. Michigan St., P.O. Box 1331, Milwaukee, WI 53201. Tel.: 414-221-2345. Internet: www.wisconsinenergy.com.

**Wisconsin Energy's board of directors has increased the dividend for the second time in 2013.** In recent years, the board has raised the disbursement in the first quarter. Following a 13.3% hike in early 2013, the board accelerated the increase that was expected to come in early 2014. The latest boost in the payout was $0.17 a share (12.5%) annually. Wisconsin Energy is targeting a payout ratio of 60% in 2014 and trending toward 65%-70% (in line with its utility peers) in 2017.

**We estimate that earnings will advance 4% this year and next.** Rate relief will help each year. An increase of $133 million (4.8%) went into place at the start of 2013, and a boost of $28 million (1.0%) will take effect at the start of 2014. Average shares outstanding are declining thanks to a $300 million stock-buyback program. As of mid-2013, Wisconsin Energy had repurchased almost six million shares at a cost of $206.6 million. The authorization expires at yearend. Our 2013 earnings estimate is within the company's targeted range of $2.41-$2.48 a share.

**A capital project should be completed by yearend, and the company is seeking regulatory approvals for additional investments.** The utility is building a $265 million biomass plant that will provide 50 megawatts of generating capacity. Besides upgrading its natural gas infrastructure, it is proposing to expand gas capacity to western Wisconsin at a cost of $150 million-$170 million. On the electric side, the company wants to convert a plant from coal to natural gas at a cost of $65 million-$70 million and build a new powerhouse at a hydro facility at a cost of $60 million-$65 million.

**Finances are solid.** The fixed-charge coverage is well above average. The common-equity ratio and earned returns on equity are healthy. Wisconsin Energy merits a Financial Strength rating of A.

**This stock has a dividend yield that is only slightly below the industry average.** This is attractive for conservative income-oriented investors, given the superior dividend growth prospects and the stock's Safety rank of 1 (Highest). Total return potential to 2016-2018 is unspectacular, but comparable with the norm for utility issues.

*Paul E. Debbas, CFA* *September 20, 2013*

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(A) Diluted EPS. Excl. nonrec. gains (losses): '99, (5¢); '00, 10¢ net; '02, (44¢); '03, (10¢) net; '04, (42¢); gains on disc. ops.: '04, 77¢; '05, 2¢; '06, 2¢; '09, 2¢; '10, 1¢; '11, 6¢. '11 EPS don't add due to rounding. Next earnings report due late Oct. (B) Div'ds historically paid in early Mar., June, Sept. & Dec. ■ Div'd reinvestment plan avail. (C) Incl. intang. In '12: $7.78/sh. (D) In mill., adj. for split. (E) Rate base: Net orig. cost. Rate all'd on com. eq. in WI in '13: 10.4%-10.5%; earned on avg. com. eq., '12: 13.4%. Regulat. Climate: Above Avg.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 95 |
| **Earnings Predictability** | 95 |

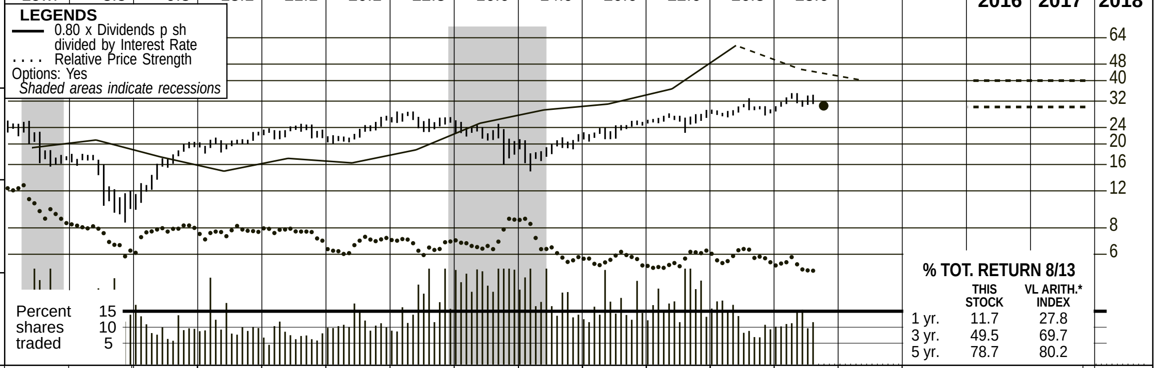
# WESTAR ENERGY NYSE-WR

| RECENT PRICE | P/E RATIO | RELATIVE P/E RATIO | DIV'D YLD |
|---|---|---|---|
| 30.38 | 14.1 (Trailing: 12.8 Median: 14.0) | 0.80 | 4.5% |

**VALUE LINE**

**TIMELINESS** 3 Lowered 1/18/13
**SAFETY** 2 Raised 4/1/05
TECHNICAL 3 Raised 9/13/13
**BETA** .75 (1.00 = Market)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 18.0 | 20.5 | 22.9 | 25.0 | 27.2 | 28.6 | 25.9 | 22.3 | 25.9 | 29.0 | 33.0 | 35.0 |
| Low: | 8.5 | 9.8 | 18.1 | 21.1 | 20.1 | 22.8 | 16.0 | 14.9 | 20.6 | 22.6 | 26.8 | 28.6 |



**2016-18 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 40 | (+30%) | 11% |
| Low | 30 | (Nil) | 5% |

**Insider Decisions**

| | O | N | D | J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 1 | 0 |

**Institutional Decisions**

| | 4Q2012 | 1Q2013 | 2Q2013 |
|---|---|---|---|
| to Buy | 142 | 130 | 151 |
| to Sell | 92 | 102 | 96 |
| Hld's(000) | 70088 | 73393 | 79010 |

**% TOT. RETURN 8/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 11.7 | 27.8 |
| 3 yr. | 49.5 | 69.7 |
| 5 yr. | 78.7 | 80.2 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32.90 | 30.86 | 30.21 | 33.80 | 31.20 | 24.77 | 20.06 | 17.02 | 18.23 | 18.37 | 18.09 | 16.98 | 17.04 | 18.34 | 17.27 | 17.88 | ***18.35*** | ***18.70*** | Revenues per sh | ***20.75*** |
| 3.47 | 6.35 | 7.51 | 6.96 | 5.32 | 4.77 | 3.77 | 3.12 | 3.28 | 3.94 | 3.77 | 3.14 | 3.59 | 4.24 | 3.97 | 4.30 | ***4.35*** | ***4.55*** | "Cash Flow" per sh | ***5.35*** |
| d.46 | 2.13 | 1.48 | .89 | d.58 | 1.00 | 1.48 | 1.17 | 1.55 | 1.88 | 1.84 | 1.31 | 1.28 | 1.80 | 1.79 | 2.15 | ***2.20*** | ***2.30*** | Earnings per sh A | ***2.70*** |
| 2.10 | 2.14 | 2.14 | 1.44 | 1.20 | 1.20 | .87 | .80 | .92 | .98 | 1.08 | 1.16 | 1.20 | 1.24 | 1.28 | 1.32 | ***1.36*** | ***1.40*** | Div'd Decl'd per sh B■† | ***1.52*** |
| 3.22 | 2.77 | 4.09 | 4.40 | 3.37 | 1.89 | 2.06 | 2.19 | 2.45 | 3.95 | 7.84 | 8.65 | 5.26 | 4.82 | 5.55 | 6.40 | ***6.65*** | ***7.10*** | Cap'l Spending per sh | ***8.15*** |
| 30.79 | 29.40 | 27.83 | 27.20 | 25.97 | 13.68 | 14.23 | 16.13 | 16.31 | 17.62 | 19.14 | 20.18 | 20.59 | 21.25 | 22.03 | 22.89 | ***24.20*** | ***25.40*** | Book Value per sh C | ***29.65*** |
| 65.41 | 65.91 | 67.40 | 70.08 | 70.08 | 71.51 | 72.84 | 86.03 | 86.84 | 87.39 | 95.46 | 108.31 | 109.07 | 112.13 | 125.70 | 126.50 | ***128.00*** | ***130.00*** | Common Shs Outst'g E | ***135.00*** |
| - - | 18.4 | 17.2 | 20.6 | - - | 14.0 | 10.8 | 17.4 | 14.8 | 12.2 | 14.1 | 17.0 | 14.9 | 13.0 | 14.8 | 13.4 | *Bold figures are* | | Avg Ann'l P/E Ratio | ***12.5*** |
| - - | .96 | .98 | 1.34 | - - | .76 | .62 | .92 | .79 | .66 | .75 | 1.02 | .99 | .83 | .93 | .86 | *Value Line* | | Relative P/E Ratio | ***.85*** |
| 6.3% | 5.5% | 8.4% | 7.9% | 5.8% | 8.6% | 5.5% | 3.9% | 4.0% | 4.3% | 4.2% | 5.2% | 6.3% | 5.3% | 4.8% | 4.6% | *estimates* | | Avg Ann'l Div'd Yield | ***4.5%*** |

**CAPITAL STRUCTURE as of 6/30/13**
**Total Debt** $3601.7 mill. **Due in 5 Yrs** $923.4 mill.
**LT Debt** $3163.9 mill. **LT Interest** $160.0 mill.
(LT interest earned: 3.5x)

**Pension Assets-12/12** $548 mill. **Oblig.** $929 mill.

**Pfd Stock** None

**Common Stock** 127,022,030 shs.
**as of 7/30/13**
**MARKET CAP: $3.9 billion (Mid Cap)**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1461.1 | 1464.5 | 1583.3 | 1605.7 | 1726.8 | 1839.0 | 1858.2 | 2056.2 | 2171.0 | 2261.5 | ***2350*** | ***2430*** | Revenues ($mill) | ***2800*** |
| 108.1 | 100.1 | 134.9 | 165.3 | 168.4 | 136.8 | 141.3 | 203.9 | 214.0 | 275.1 | ***280*** | ***300*** | Net Profit ($mill) | ***365*** |
| 43.1% | 25.0% | 31.0% | 25.4% | 27.5% | 24.8% | 29.4% | 29.0% | 35.2% | 30.9% | ***30.0%*** | ***30.0%*** | Income Tax Rate | ***30.0%*** |
| 5.0% | - - | - - | - - | 10.4% | - - | - - | - - | 10.4% | 10.0% | ***10.0%*** | ***10.0%*** | AFUDC % to Net Profit | ***10.0%*** |
| 66.2% | 53.8% | 52.1% | 50.0% | 50.6% | 49.8% | 53.4% | 53.6% | 49.5% | 51.2% | ***51.0%*** | ***50.5%*** | Long-Term Debt Ratio | ***50.0%*** |
| 33.2% | 45.5% | 47.2% | 49.3% | 48.9% | 49.7% | 46.1% | 46.0% | 50.1% | 48.8% | ***49.0%*** | ***49.5%*** | Common Equity Ratio | ***50.0%*** |
| 3127.3 | 3049.2 | 3000.4 | 3124.2 | 3738.3 | 4400.1 | 4866.8 | 5180.9 | 5531.0 | 5938.2 | ***6350*** | ***6700*** | Total Capital ($mill) | ***8000*** |
| 3909.5 | 3911.0 | 3947.7 | 4071.6 | 4803.7 | 5533.5 | 5771.7 | 6309.5 | 6745.4 | 7335.7 | ***7700*** | ***8000*** | Net Plant ($mill) | ***9000*** |
| 7.0% | 5.5% | 6.2% | 6.7% | 5.8% | 4.2% | 4.4% | 5.5% | 5.3% | 6.0% | ***5.5%*** | ***5.5%*** | Return on Total Cap'l | ***6.0%*** |
| 10.2% | 7.1% | 9.4% | 10.6% | 9.1% | 6.2% | 6.2% | 8.5% | 7.7% | 9.5% | ***9.0%*** | ***9.0%*** | Return on Shr. Equity | ***9.0%*** |
| 10.3% | 7.1% | 9.5% | 10.7% | 9.2% | 6.2% | 6.3% | 8.5% | 7.7% | 9.4% | ***9.0%*** | ***9.0%*** | Return on Com Equity D | ***9.0%*** |
| 4.9% | 3.2% | 4.3% | 5.5% | 4.3% | 1.2% | .8% | 3.1% | 2.7% | 4.0% | ***3.5%*** | ***3.5%*** | Retained to Com Eq | ***4.0%*** |
| 53% | 56% | 55% | 49% | 53% | 80% | 87% | 63% | 65% | 57% | ***62%*** | ***61%*** | All Div'ds to Net Prof | ***55%*** |

**ELECTRIC OPERATING STATISTICS**

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +6.2 | +1.0 | -1.5 |
| Avg. Indust. Use (MWH) | 5468 | 5589 | 5588 |
| Avg. Indust. Revs. per KWH (¢) | 5.82 | 6.22 | 6.60 |
| Capacity at Peak (Mw) | 6756 | 6784 | 6557 |
| Peak Load, Summer (Mw) | 5485 | 5549 | 5411 |
| Annual Load Factor (%) | 55.0 | 55.5 | 56.0 |
| % Change Customers (yr-end) | +.3 | +.1 | +.2 |
| Fixed Charge Cov. (%) | 267 | 297 | 319 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '10-'12 to '16-'18 |
|---|---|---|---|
| Revenues | -5.0% | -.5% | *2.5%* |
| "Cash Flow" | -3.0% | 2.5% | *4.5%* |
| Earnings | 16.0% | 1.5% | *6.0%* |
| Dividends | - - | 5.0% | *3.0%* |
| Book Value | - - | 4.5% | *5.0%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | 459.8 | 495.2 | 644.4 | 456.8 | 2056.2 |
| **2011** | 481.7 | 524.9 | 678.2 | 486.2 | 2171.0 |
| **2012** | 475.7 | 566.3 | 695.8 | 523.7 | 2261.5 |
| **2013** | 546.2 | 569.6 | ***700*** | ***534.2*** | ***2350*** |
| **2014** | ***550*** | ***600*** | ***730*** | ***550*** | ***2430*** |

| Cal-endar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2010** | .27 | .47 | 1.01 | .05 | 1.80 |
| **2011** | .27 | .38 | .98 | .16 | 1.79 |
| **2012** | .21 | .48 | 1.09 | .36 | 2.15 |
| **2013** | .40 | .52 | ***1.05*** | ***.23*** | ***2.20*** |
| **2014** | ***.35*** | ***.55*** | ***1.10*** | ***.30*** | ***2.30*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B■† Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| **2009** | .29 | .30 | .30 | .30 | 1.19 |
| **2010** | .30 | .31 | .31 | .31 | 1.23 |
| **2011** | .31 | .32 | .32 | .32 | 1.27 |
| **2012** | .32 | .33 | .33 | .33 | 1.31 |
| **2013** | .33 | .34 | .34 | | |

**BUSINESS:** Westar Energy, Inc., formerly Western Resources, is the parent of Kansas Gas & Electric Company. Westar supplies electricity to 690,000 customers in Kansas. Electric revenue sources: residential and rural, 34%; commercial, 38%; industrial, 28%. Sold investment in ONEOK in 2003 and 85% ownership in Protection One in 2004. 2012 depreciation rate: 3.7%. Estimated plant age: 15 years. Fuels: coal, 53%; nuclear, 8%; gas, 39%. Has 2,313 employees. BlackRock, Inc. owns 5.5% of common; The Vanguard Group, 5.5%; off. & dir., less than 1% (3/13 proxy). Chairman: Charles Q. Chandler IV. CEO and Pres.: Mark A. Ruelle. Inc.: Kansas. Addr.: 818 South Kansas Avenue, Topeka, Kansas 66612. Telephone: 785-575-6300. Internet: www.westarenergy.com.

**Westar Energy posted modest top-line improvement for the second quarter.** Weakness on the retail front (due to warmer-than-normal weather) was roughly offset by solid growth from the Wholesale and Transmission businesses. The bottom-line picture was somewhat rosier. A healthy share-net gain was driven by efforts to control operating expenses. Looking forward, modest revenue growth ought to continue in the second half of the year, though we expect share-net comparisons will prove less favorable.

**Prospects appear good for the pull to 2016-2018.** The retail business will probably experience better performance going forward, as its weather-adjusted residential and commercial sales have already been showing signs of modest growth. Moreover, the company should further benefit from a healthy Kansas economy, where unemployment remains somewhat below the national average. There is a fair amount of activity in the region that will benefit performance in the coming years. Demand ought to remain strong here, as existing businesses expand and outside firms look to relocate to the region. Efforts to control operating expenses should continue to benefit the bottom line. Overall, we anticipate moderate growth in revenues and earnings for Westar from 2014 onward.

**The company has received route approval from the Kansas Corporation Commission for a transmission project.** Upon completion in late 2016, the high-voltage 345-kilovolt transmission line will connect Westar Energy's Summit Substation to the Elm Creek Substation. Westar will construct and own the southern half of the line. ITG Great Plains and Mid-Kansas will construct and own the northern half of the line. It will improve electric reliability and efficiency in central Kansas.

**This issue offers decent, though relatively well-defined, risk-adjusted total return potential for the coming years.** Income-seeking accounts may find the healthy dividend yield attractive. Moreover, Westar earns good marks for Safety, Price Stability, and Earnings Predictability. The shares are neutrally ranked for year-ahead relative performance.

*Michael Napoli, CFA* *September 20, 2013*

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(A) EPS diluted from 2010 onward. Excl. nonrecur. gains (losses): '97, $7.97; '98, ($1.45); '99, ($1.31); '00, $1.07; '01, 27¢; '02, ($12.06); '03, 77¢; '08, 39¢; '11, 14¢. Earnings may not sum due to rounding. Next egs. rep't due early November. (B) Div'ds paid in early Jan., April, July, and Oct. ■ Div'd reinvest. plan avail. † Shareholder invest. plan avail. (C) Incl. reg. assets. In 2012: $7.93/sh. (D) Rate base determined: fair value; Rate allowed on common equity in '12: 10.0%; earned on avg. com. eq., '12: 9.4%. Regul. Clim.: Avg. (E) In mill.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 75 |
| **Earnings Predictability** | 75 |

# XCEL ENERGY NYSE-XEL

| RECENT PRICE | P/E RATIO | | RELATIVE P/E RATIO | DIV'D YLD | |
|---|---|---|---|---|---|
| 30.12 | 15.9 | (Trailing: 15.4<br>Median: 14.0) | 0.88 | 3.8% | VALUE LINE |

**TIMELINESS** 3 Lowered 2/8/13
**SAFETY** 2 Raised 5/14/04
TECHNICAL 2 Raised 7/12/13
**BETA** .60 (1.00 = Market)

### 2016-18 PROJECTIONS

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 35 | (+15%) | *8%* |
| Low | 25 | (-15%) | *Nil* |

### Insider Decisions

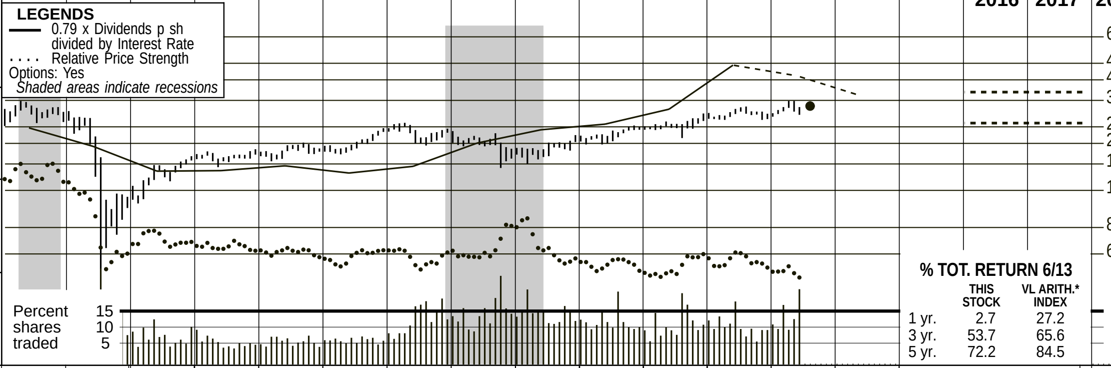
| | S | O | N | D | J | F | M | A | M |
|---|---|---|---|---|---|---|---|---|---|
| to Buy | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 |
| Options | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| to Sell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Institutional Decisions

| | 3Q2012 | 4Q2012 | 1Q2013 |
|---|---|---|---|
| to Buy | 212 | 230 | 204 |
| to Sell | 195 | 204 | 217 |
| Hld's(000) | 302513 | 308944 | 319904 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 28.5 | 17.4 | 18.8 | 20.2 | 23.6 | 25.0 | 22.9 | 21.9 | 24.4 | 27.8 | 29.9 | 31.8 |
| Low: | 5.1 | 10.4 | 15.5 | 16.5 | 17.8 | 19.6 | 15.3 | 16.0 | 19.8 | 21.2 | 25.8 | 26.8 |

**Target Price Range**
2016 2017 2018


**LEGENDS**
— 0.79 x Dividends p sh divided by Interest Rate
. . . . Relative Price Strength
Options: Yes
*Shaded areas indicate recessions*

**% TOT. RETURN 6/13**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 2.7 | 27.2 |
| 3 yr. | 53.7 | 65.6 |
| 5 yr. | 72.2 | 84.5 |

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | © VALUE LINE PUB. LLC | 16-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.32 | 18.46 | 18.42 | 34.11 | 43.56 | 23.89 | 19.90 | 20.84 | 23.86 | 24.16 | 23.40 | 24.69 | 21.08 | 21.38 | 21.90 | 20.76 | ***20.90*** | ***21.70*** | **Revenues per sh** | ***24.75*** |
| 3.92 | 4.30 | 4.13 | 4.12 | 5.09 | 3.14 | 3.35 | 3.27 | 3.28 | 3.61 | 3.45 | 3.50 | 3.48 | 3.51 | 3.79 | 4.00 | ***4.10*** | ***4.35*** | **"Cash Flow" per sh** | ***5.25*** |
| 1.61 | 1.84 | 1.43 | 1.60 | 2.27 | .42 | 1.23 | 1.27 | 1.20 | 1.35 | 1.35 | 1.46 | 1.49 | 1.56 | 1.72 | 1.85 | ***1.90*** | ***1.95*** | **Earnings per sh A** | ***2.25*** |
| 1.40 | 1.43 | 1.45 | 1.48 | 1.50 | 1.13 | .75 | .81 | .85 | .88 | .91 | .94 | .97 | 1.00 | 1.03 | 1.07 | ***1.11*** | ***1.15*** | **Div'd Decl'd per sh B ■** | ***1.35*** |
| 2.90 | 2.99 | 13.87 | 3.63 | 7.40 | 6.04 | 2.49 | 3.19 | 3.25 | 4.00 | 4.89 | 4.66 | 3.91 | 4.60 | 4.53 | 5.27 | ***6.30*** | ***5.45*** | **Cap'l Spending per sh** | ***4.75*** |
| 15.89 | 16.25 | 16.42 | 16.37 | 17.95 | 11.70 | 12.95 | 12.99 | 13.37 | 14.28 | 14.70 | 15.35 | 15.92 | 16.76 | 17.44 | 18.19 | ***19.30*** | ***20.20*** | **Book Value per sh C** | ***23.00*** |
| 149.24 | 152.70 | 155.73 | 339.79 | 345.02 | 398.71 | 398.96 | 400.46 | 403.39 | 407.30 | 428.78 | 453.79 | 457.51 | 482.33 | 486.49 | 487.96 | ***502.00*** | ***507.00*** | **Common Shs Outst'g D** | ***515.00*** |
| 15.5 | 15.2 | 16.6 | 14.3 | 12.4 | 40.8 | 11.6 | 13.6 | 15.4 | 14.8 | 16.7 | 13.7 | 12.7 | 14.1 | 14.2 | 14.8 | ***Bold figures are*** | | **Avg Ann'l P/E Ratio** | ***13.0*** |
| .89 | .79 | .95 | .93 | .64 | 2.23 | .66 | .72 | .82 | .80 | .89 | .82 | .85 | .90 | .89 | .95 | ***Value Line*** | | **Relative P/E Ratio** | ***.85*** |
| 5.6% | 5.1% | 6.1% | 6.4% | 5.3% | 6.6% | 5.2% | 4.7% | 4.6% | 4.4% | 4.0% | 4.7% | 5.1% | 4.5% | 4.2% | 3.9% | ***estimates*** | | **Avg Ann'l Div'd Yield** | ***4.7%*** |
| | | | | | | 7937.5 | 8345.3 | 9625.5 | 9840.3 | 10034 | 11203 | 9644.3 | 10311 | 10655 | 10128 | ***10500*** | ***11000*** | **Revenues ($mill)** | ***12750*** |
| | | | | | | 510.0 | 526.9 | 499.0 | 568.7 | 575.9 | 645.7 | 685.5 | 727.0 | 841.4 | 905.2 | ***935*** | ***995*** | **Net Profit ($mill)** | ***1200*** |
| | | | | | | 23.7% | 23.2% | 25.8% | 24.2% | 33.8% | 34.4% | 35.1% | 37.5% | 35.8% | 33.2% | ***35.0%*** | ***35.0%*** | **Income Tax Rate** | ***35.0%*** |
| | | | | | | 8.9% | 10.9% | 8.5% | 9.8% | 12.5% | 15.9% | 16.8% | 11.7% | 9.4% | 10.8% | ***12.0%*** | ***11.0%*** | **AFUDC % to Net Profit** | ***8.0%*** |
| | | | | | | 55.3% | 55.0% | 51.7% | 52.1% | 49.7% | 52.2% | 51.6% | 53.1% | 51.1% | 53.3% | ***52.5%*** | ***52.5%*** | **Long-Term Debt Ratio** | ***50.5%*** |
| | | | | | | 43.8% | 44.1% | 47.3% | 47.0% | 49.4% | 47.1% | 47.7% | 46.3% | 48.9% | 46.7% | ***47.5%*** | ***47.5%*** | **Common Equity Ratio** | ***49.5%*** |
| | | | | | | 11790 | 11801 | 11398 | 12371 | 12748 | 14800 | 15277 | 17452 | 17331 | 19018 | ***20500*** | ***21550*** | **Total Capital ($mill)** | ***24000*** |
| | | | | | | 13667 | 14096 | 14696 | 15549 | 16676 | 17689 | 18508 | 20663 | 22353 | 23809 | ***25850*** | ***27425*** | **Net Plant ($mill)** | ***30400*** |
| | | | | | | 6.1% | 6.2% | 6.2% | 6.2% | 6.3% | 6.0% | 6.2% | 5.7% | 6.5% | 6.1% | ***6.0%*** | ***6.0%*** | **Return on Total Cap'l** | ***6.5%*** |
| | | | | | | 9.7% | 9.9% | 9.1% | 9.6% | 9.0% | 9.1% | 9.3% | 8.9% | 9.9% | 10.2% | ***9.5%*** | ***9.5%*** | **Return on Shr. Equity** | ***10.0%*** |
| | | | | | | 9.8% | 10.0% | 9.2% | 9.7% | 9.1% | 9.2% | 9.4% | 8.9% | 9.9% | 10.2% | ***9.5%*** | ***9.5%*** | **Return on Com Equity E** | ***10.0%*** |
| | | | | | | 3.9% | 3.9% | 2.9% | 3.6% | 3.1% | 3.8% | 3.7% | 3.6% | 4.3% | 4.7% | ***4.0%*** | ***4.0%*** | **Retained to Com Eq** | ***4.0%*** |
| | | | | | | 60% | 62% | 69% | 63% | 66% | 59% | 61% | 59% | 56% | 54% | ***59%*** | ***58%*** | **All Div'ds to Net Prof** | ***58%*** |

**CAPITAL STRUCTURE as of 3/31/13**
**Total Debt** $11074 mill. **Due in 5 Yrs** $1814.2 mill.
**LT Debt** $10642 mill. **LT Interest** $566.5 mill.
Incl. $185.7 mill. capitalized leases.
(LT interest earned: 3.6x)

**Leases, Uncapitalized** Annual rentals $208.5 mill.
**Pension Assets-12/12** $2.94 bill.
**Oblig.** $3.64 bill.
**Pfd Stock** None

**Common Stock** 497,239,284 shs.
**as of 4/26/13**
**MARKET CAP: $15 billion (Large Cap)**

### ELECTRIC OPERATING STATISTICS

| | 2010 | 2011 | 2012 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.0 | +.4 | -.3 |
| Large C & I Use (MWH) | 24431 | 24286 | 24074 |
| Large C & I Revs. per KWH (¢) | 5.65 | 5.90 | 5.60 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 20517 | 21898 | 21429 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | - - | +.4 | +.7 |
| Fixed Charge Cov. (%) | 277 | 298 | 303 |

| **ANNUAL RATES** of change (per sh) | **Past 10 Yrs.** | **Past 5 Yrs.** | **Est'd '10-'12 to '16-'18** |
|---|---|---|---|
| Revenues | -4.5% | -2.0% | *2.5%* |
| "Cash Flow" | -1.0% | 2.0% | *5.5%* |
| Earnings | 2.0% | 5.5% | *4.5%* |
| Dividends | -3.0% | 3.0% | *4.5%* |
| Book Value | 1.5% | 4.5% | *4.5%* |

| Cal-endar | QUARTERLY REVENUES ($ mill.) | | | | Full Year |
|---|---|---|---|---|---|
| | Mar.31 | Jun.30 | Sep.30 | Dec.31 | |
| **2010** | 2807 | 2308 | 2629 | 2567 | 10311 |
| **2011** | 2817 | 2438 | 2832 | 2568 | 10655 |
| **2012** | 2578 | 2275 | 2724 | 2551 | 10128 |
| **2013** | 2783 | ***2350*** | ***2800*** | ***2567*** | ***10500*** |
| **2014** | ***2950*** | ***2450*** | ***2950*** | ***2650*** | ***11000*** |

| Cal-endar | EARNINGS PER SHARE A | | | | Full Year |
|---|---|---|---|---|---|
| | Mar.31 | Jun.30 | Sep.30 | Dec.31 | |
| **2010** | .36 | .29 | .62 | .29 | 1.56 |
| **2011** | .42 | .33 | .69 | .28 | 1.72 |
| **2012** | .38 | .38 | .81 | .29 | 1.85 |
| **2013** | .48 | ***.36*** | ***.75*** | ***.31*** | ***1.90*** |
| **2014** | ***.45*** | ***.39*** | ***.77*** | ***.34*** | ***1.95*** |

| Cal-endar | QUARTERLY DIVIDENDS PAID B ■ | | | | Full Year |
|---|---|---|---|---|---|
| | Mar.31 | Jun.30 | Sep.30 | Dec.31 | |
| **2009** | .238 | .238 | .245 | .245 | .97 |
| **2010** | .245 | .245 | .253 | .253 | 1.00 |
| **2011** | .253 | .253 | .26 | .26 | 1.03 |
| **2012** | .26 | .26 | .27 | .27 | 1.06 |
| **2013** | .27 | .27 | .28 | | |

**BUSINESS:** Xcel Energy Inc. is the parent of Northern States Power, which supplies electricity to Minnesota, Wisconsin, North Dakota, South Dakota, & Michigan & gas to Minnesota, Wisconsin, North Dakota, & Michigan; Public Service of Colorado, which supplies electricity & gas to Colorado; & Southwestern Public Service, which supplies electricity to Texas & New Mexico. Customers: 3.4 mill. electric, 1.9 mill. gas. Elec. rev. breakdown: residential, 31%; sm. commercial & industrial, 35%; lg. commercial & industrial, 18%; other, 16%. Generating sources not avail. Fuel costs: 45% of revs. '12 reported depr. rate: 2.8%. Has 11,200 empls. Chairman, Pres. & CEO: Ben Fowke. Inc.: MN. Address: 414 Nicollet Mall, Minneapolis, MN 55401. Tel.: 612-330-5500. Web: www.xcelenergy.com.

**Once again, Xcel Energy's utility subsidiary in Minnesota has revised its general rate case.** Initially, Northern States Power filed for a tariff hike of $285 million. Now, the utility has lowered its request to $209 million, based on a return of 10.6% on a common-equity ratio of 52.56%. The state Department of Commerce and an administrative law judge are recommending rate boosts of $98.6 million and $127 million, respectively, based on an ROE of 9.83%. An order is expected in September. NSP has been collecting an interim increase of $251 million since the start of the year, and is taking reserves for expected refunds to customers.

**This is not the company's only rate matter that has been contentious.** Public Service of Colorado is seeking a multiyear gas rate increase of $44.8 million in 2013, $9.0 million in 2014, and $10.9 million in 2015, based on a return of 10.3% on a common-equity ratio of 56%. However, the staff of the Colorado commission is recommending a *decrease* of $14.4 million, based on a 9% return on a 52% common-equity ratio. An order is expected soon.

**Rate cases are the engine of Xcel's profit growth.** The company files frequently in order to recover capital investment, recoup higher expenses, and lessen regulatory lag. Besides the aforementioned applications in Minnesota and Colorado, the company requested electric and gas increases of $40.0 million and $4.7 million, respectively, in Wisconsin, based on a 10.4% return on a 52.5% common-equity ratio. And Xcel is seeking electric rate relief in four other states.

**We are sticking with our 2013 share-net estimate,** despite a better-than-expected March-quarter tally. We are concerned about the contentious nature of some of the rate matters. Our estimate is at the midpoint of Xcel's earnings guidance of $1.85-$1.95. Our 2014 forecast remains at $1.95.

**The board of directors has hiked the quarterly dividend by a cent a share (3.7%).** This is within Xcel's dividend-growth target of 2%-4%.

**Xcel stock is an average utility selection.** The yield is comparable with the industry mean. Like most utility equities, 3- to 5-year total return potential is low.

*Paul E. Debbas, CFA* *August 2, 2013*

---

**(A)** Diluted EPS. Excl. nonrec. gain (loss): '02, ($6.27); '10, 5¢; gains (losses) on disc. ops.: '03, 27¢; '04, (30¢); '05, 3¢; '06, 1¢; '09, (1¢); '10, 1¢. '12 EPS don't add due to rounding. Next egs. report due early Nov. **(B)** Div'ds histor. paid mid-Jan., Apr., July, and Oct. ■ Div'd reinvestment plan avail. **(C)** Incl. intang. In '12: $5.66/sh. **(D)** In mill. **(E)** Rate base: Varies. Rate all'd on com. eq.: MN '11 10.37%; WI '13 10.4%; CO '12 (elec.) 10%; CO '07 (gas) 10.25%; TX '86 15.05%; earned on avg. com. eq., '12: 10.2%. Regulatory Climate: Average.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 70 |
| **Earnings Predictability** | 100 |

# CONSENSUS FORECASTS®

**Survey Date**
**October 8, 2012**

Every month, Consensus Economics surveys over 250 prominent financial and economic forecasters for their estimates of a range of variables including future growth, inflation, interest rates and exchange rates. More than 20 countries are covered and the reference data, together with analysis and polls on topical issues, is rushed to subscribers by express mail and e-mail.

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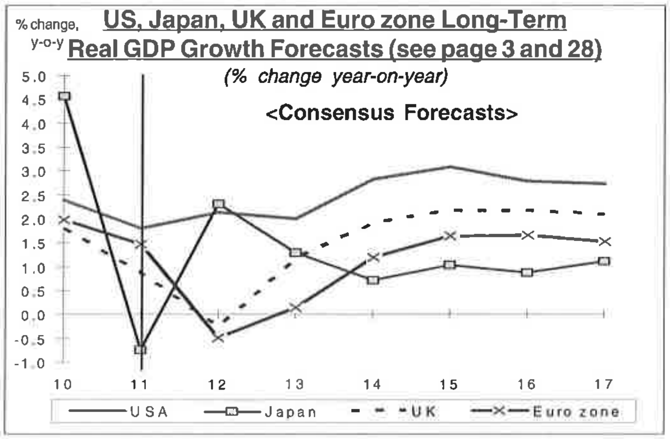
## Survey Highlights

◈ The mood in the **Euro zone** continues to deteriorate, with economic data suggesting that the region likely slipped deeper into recession during Q3. **Germany** became one of the last member countries to ratify the European Stability Mechanism (ESM), a permanent bailout fund that facilitates sovereign bond purchases by the ECB. Bond yields in **Spain** and **Italy** have eased recently but remain comparatively high. **Sweden** resisted the current rush to austerity by announcing a 2013 budget aimed at boosting growth through greater investment.

◈ Adverse external headwinds have contributed to the **UK** hitting a record current account deficit in Q2. Meanwhile, in the **US**, the Q2 national accounts showed GDP growth of 1.3% (q-o-q annualized) as opposed to the previous estimate of 1.7%.

◈ This month's special survey is our regular compilation of **Long-Term Forecasts** (pages 3, 28, and 29) for the next 5-10 years. Moreover, our **Significant Changes** section (page 2) contrasts long-term aggregate forecasts for 2018-2022 with previous aggregates going back to April 1996, allowing for an examination of trends in long-term GDP and inflation expectations.

The next issue of **Consensus Forecasts** will be available at the end of the day on **November 15** and will include **Corporate Profits and Real Interest Rates.**



**US, Japan, UK and Euro zone Long-Term Real GDP Growth Forecasts (see page 3 and 28)**

*(% change year-on-year)*

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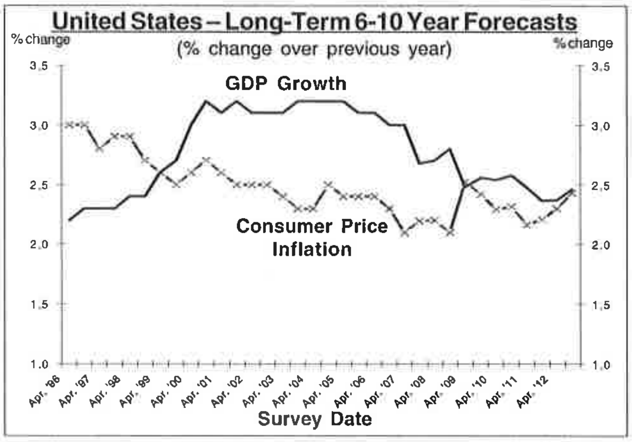
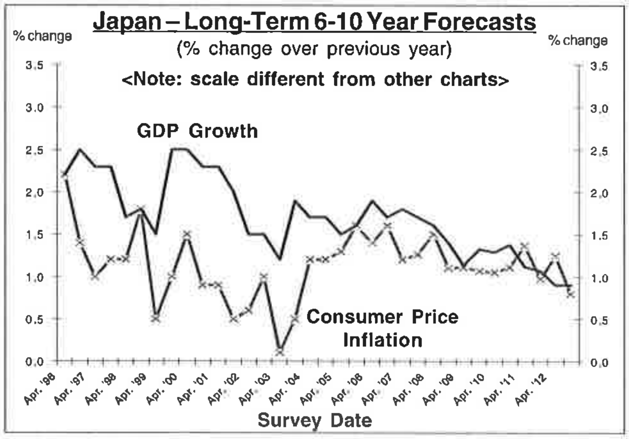
Publisher: Philip M. Hubbard

This month, we chart **Significant Changes in Long-Term Forecast Trends for GDP and Inflation** for the **US, Japan, Germany, France,** the **UK, Italy** and **Canada**. Long-term projections for the 6-10 year period average (in this case 2018-2022) are contrasted with those long-term aggregates published all the way back to April 1996. It is this rolling 6-10 year trendline average which we show in the charts below. The 6-10-year trend averages shown in these charts are a measure of changes in potential growth and inflation expectations. This construct has two problems, however. One is that the 6-10 year horizon is a moving target shifting forward one year, each year. The other is that the number of panellists responding to our long-term surveys is smaller and therefore less representative than the numbers responding to our one and two-year surveys on pages 4-24.

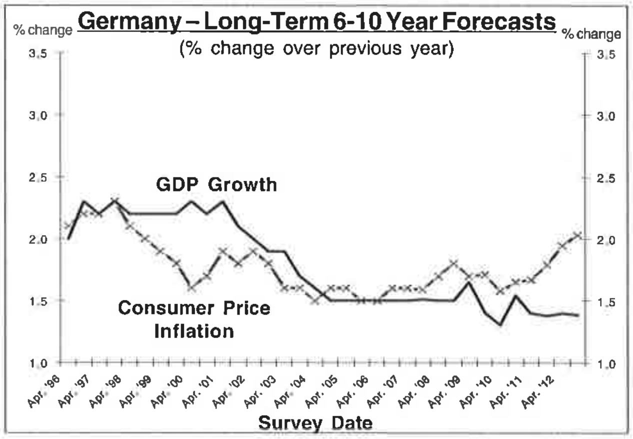

United States – Long-Term 6-10 Year Forecasts

(% change over previous year)

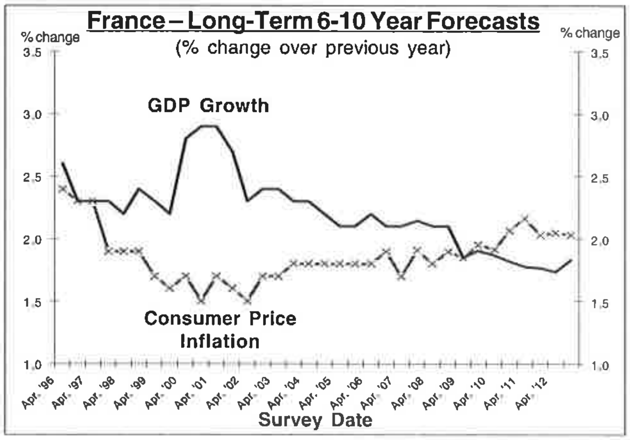

Japan – Long-Term 6-10 Year Forecasts

(% change over previous year)

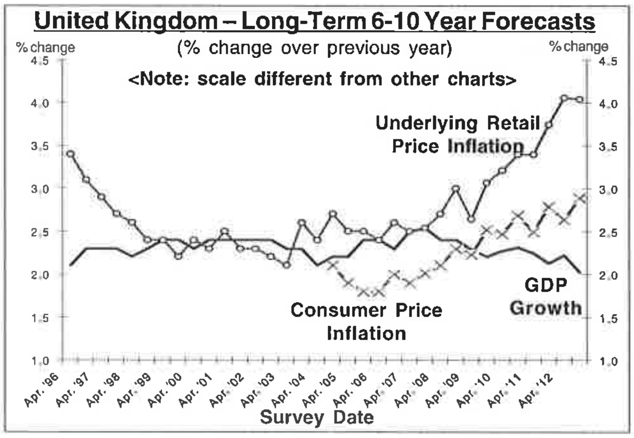
<Note: scale different from other charts>


Germany – Long-Term 6-10 Year Forecasts

(% change over previous year)

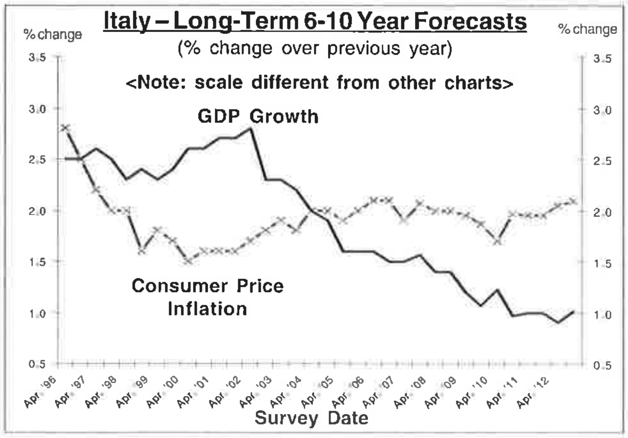

France – Long-Term 6-10 Year Forecasts

(% change over previous year)


United Kingdom – Long-Term 6-10 Year Forecasts

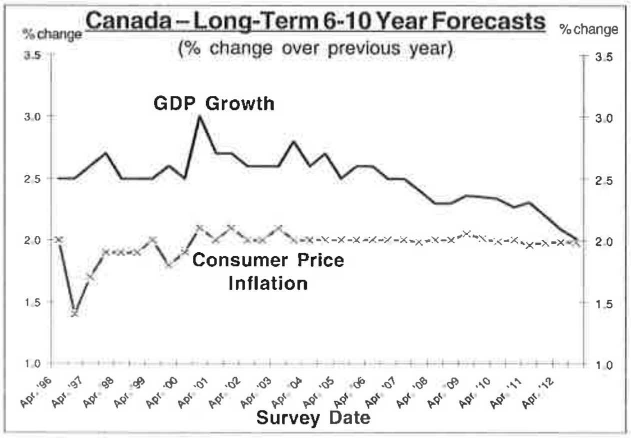
(% change over previous year)

<Note: scale different from other charts>


Italy – Long-Term 6-10 Year Forecasts

(% change over previous year)

<Note: scale different from other charts>


Canada – Long-Term 6-10 Year Forecasts

(% change over previous year)

*Our "Notes and Abbreviations" section has been temporarily moved to page 30.*

In addition to their regular forecasts, country panellists were asked to provide longer-term forecasts covering the period until 2022 for growth in real GDP, consumer spending, investment and industrial production, along with consumer price inflation, current account balances and long-term bond yields. All definitions correspond to those used in the individual country pages.

## United States

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -0.3 | -3.1 | 2.4 | 1.8 | 2.1 | 2.0 | 2.8 | 3.1 | 2.8 | 2.7 | 2.5 |
| **Personal Consumption*** | -0.6 | -1.9 | 1.8 | 2.5 | 1.9 | 2.0 | 2.6 | 2.6 | 2.6 | 2.5 | 2.3 |
| **Business Investment*** | -0.8 | -18.1 | 0.7 | 8.6 | 7.9 | 4.5 | 5.8 | 5.4 | 4.4 | 4.4 | 4.0 |
| **Industrial Production*** | -3.5 | -11.4 | 5.4 | 4.1 | 4.0 | 2.3 | 3.2 | 3.3 | 2.8 | 2.7 | 2.7 |
| **Consumer Prices*** | 3.8 | -0.3 | 1.6 | 3.1 | 2.1 | 2.0 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 |
| **Current Account Balance (USbn)** | -677 | -382 | -442 | -466 | -493 | -493 | -519 | -528 | -528 | -566 | -532 |
| **10 Year Treasury Bond Yield, %[2]** | 2.4 | 3.8 | 3.4 | 1.9 | 1.8 [3] | 2.2 [4] | 2.9 | 3.9 | 4.6 | 4.9 | 5.0 |

*[1] Signifies average for period [2] End period [3] End January 2013 [4] End October 2013*

The financial meltdown which hit the **G-7 and Western Europe** in 2008 was triggered by a massive build-up in housing and consumption-related debt, some of which was tied up with major banks. Since then, public sectors have added to the debt load. **Italy** and **Spain** have been hit by borrowing costs above 5% on their 10-year bonds, reflecting a widening risk premium on sovereign debt. Both public and private debt burdens will take years – if not decades – to unwind, and this drawn-out deleveraging process is weighing on the medium-term outlook for most of the economies surveyed here. Our panels' 2012-13 GDP forecasts for the **Euro zone** – as well as **Italy, Netherlands** and **Spain** – reflect a second recession in three years, and this time around, economies can no longer spend their way out of the downturn in the face of the default risk. The problem now facing regional governments is that deep public spending cuts could mean no chance of recovery on the horizon, as illustrated by **Greece's** four-year depression. Moreover, retirement is beckoning for **European** and **Japanese** baby-boomers, leaving a smaller pool of future workers to subsidize the pension shortfall and replenish their savings (which, in light of low interest rates and battered equity values, have diminished significantly in value since 2007-8). The **Euro area** rebound is expected to be minimal at best, indicating a "lost generation" in terms of youth unemployment. The **US** outlook appears to be on comparatively firmer ground, although its economy, too, has also found it difficult to generate jobs. Long-term GDP expectations mostly continue to hover below 3.0%, above those for **Japan, Germany, France,** the **UK** and the rest of **Western Europe** but still below Asia's dynamic rates of expansion. And after postponing its own fiscal adjustment, **US** policymakers are now facing a looming "fiscal cliff" in 2013. Failure to reach agreement on raising the debt ceiling could force an even sharper tightening of government budgetary conditions, and the prevailing lack of a medium-term debt reduction plan is not helping matters.

*Tables continued on pages 28-29*

## Japan

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -1.1 | -5.5 | 4.6 | -0.7 | 2.3 | 1.3 | 0.7 | 1.0 | 0.9 | 1.1 | 0.9 |
| **Private Consumption*** | -0.9 | -0.7 | 2.6 | 0.1 | 2.4 | 0.6 | 0.5 | 0.6 | 0.9 | 1.2 | 0.8 |
| **Business Investment*** | -2.9 | -14.3 | 1.1 | 1.2 | 3.5 | 2.6 | 2.2 | 1.7 | 1.7 | 2.1 | 1.6 |
| **Industrial Production*** | -3.4 | -21.8 | 16.6 | -2.4 | 1.1 | 1.4 | 2.3 | 1.7 | 2.5 | 2.1 | 1.4 |
| **Consumer Prices*** | 1.4 | -1.3 | -0.7 | -0.3 | 0.0 | -0.1 | 1.4 | 0.9 | 0.9 | 0.3 | 0.8 |
| **Current Account Balance (¥tn)** | 16.7 | 13.7 | 17.9 | 9.6 | 6.1 | 8.0 | 11.6 | 11.0 | 10.6 | 8.7 | 7.2 |
| **10 Year Treasury Bond Yield, %[2]** | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 1.1 | 1.2 | 1.5 | 1.6 | 1.6 | 1.8 |

## Germany

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 1.1 | -5.1 | 4.2 | 3.0 | 0.8 | 0.9 | 1.8 | 1.9 | 1.7 | 1.5 | 1.4 |
| **Private Consumption*** | 0.8 | 0.1 | 0.9 | 1.7 | 0.9 | 1.1 | 1.2 | 1.1 | 0.9 | 0.8 | 1.0 |
| **Machinery & Eqpt Investment*** | 2.9 | -22.5 | 10.3 | 7.0 | -1.9 | 1.2 | 4.3 | 4.2 | 3.3 | 2.1 | 2.6 |
| **Industrial Production*** | -0.1 | -15.4 | 10.1 | 8.0 | 0.1 | 1.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.7 |
| **Consumer Prices*** | 2.6 | 0.4 | 1.1 | 2.3 | 2.0 | 1.9 | 2.2 | 2.2 | 2.3 | 2.3 | 2.0 |
| **Current Account Balance (Euro bn)** | 154 | 141 | 151 | 147 | 156 | 152 | 158 | 158 | 163 | 176 | 174 |
| **10 Year Treasury Bond Yield, %[2]** | 3.0 | 3.4 | 3.0 | 1.8 | 1.6 [3] | 1.9 [4] | 2.6 | 3.1 | 3.5 | 3.8 | 3.3 |

*[1] Signifies average for period [2] End period [3] End January 2013 [4] End October 2013*

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | | | | Annual Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Personal Consumption | | Business Investment | | Pre - Tax Corporate Profits | | Industrial Production | | Consumer Prices | | Producer Prices | | Employment Costs | | Auto & Light Truck Sales (inc. imports, mn units) | | Housing Starts (mn units) | |
| Economic Forecasters | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| Barclays Capital | 2.2 | 2.0 | 1.9 | 2.0 | 8.2 | 6.8 | 6.4 | na | 4.6 | 4.4 | 2.2 | 2.3 | 1.6 | na | na | na | 14.4 | na | 0.74 | 0.85 |
| General Motors | 2.2 | 2.4 | 2.0 | 2.1 | 8.1 | 4.0 | 5.8 | 3.5 | 4.0 | 1.8 | 2.1 | 2.2 | 1.5 | 1.1 | na | na | na | na | 0.76 | 1.05 |
| RDQ Economics | 2.2 | 2.6 | 1.9 | 2.4 | 7.9 | 5.5 | 6.2 | 5.9 | 4.0 | 2.9 | 2.1 | 2.4 | na | na | na | na | 14.3 | 14.5 | 0.80 | 1.00 |
| Wells Capital Mgmt | 2.2 | 2.1 | 1.9 | 2.1 | 8.5 | 4.8 | 5.1 | 3.5 | 4.1 | 2.5 | 2.1 | 2.2 | 2.0 | 2.7 | 2.0 | 2.3 | 14.3 | 14.5 | 0.73 | 0.74 |
| American Int'l Group | 2.2 | 1.9 | 2.0 | 2.1 | na | na | na | na | na | na | 1.9 | 1.2 | na | na | na | na | na | na | 0.74 | 0.88 |
| Georgia State University | 2.2 | 1.6 | 1.9 | 1.9 | 8.0 | 4.3 | 3.8 | -2.3 | 4.1 | 2.3 | 2.0 | 1.9 | 1.6 | 1.9 | 2.0 | 2.2 | 14.2 | 14.2 | 0.72 | 0.73 |
| PNC Financial Services | 2.2 | 2.1 | 1.9 | 2.1 | 8.1 | 5.1 | na | na | 4.0 | 2.8 | 2.1 | 2.3 | 1.3 | 1.9 | na | na | 14.4 | 14.5 | 0.75 | 0.84 |
| Standard & Poor's | 2.2 | 1.8 | 2.0 | 2.3 | 8.0 | 4.8 | 3.9 | -0.3 | 4.0 | 2.2 | 2.3 | 2.3 | 1.9 | 2.0 | 1.2 | 1.2 | 14.2 | 14.8 | 0.76 | 0.94 |
| Goldman Sachs | 2.2 | 1.9 | 1.9 | 1.5 | 7.9 | 6.5 | 9.7 | 5.3 | 4.2 | 3.2 | 2.1 | 2.1 | 1.5 | 2.2 | 1.7 | 1.4 | 14.4 | 15.1 | 0.76 | 0.88 |
| Swiss Re | 2.2 | 2.7 | 2.0 | 2.6 | 8.3 | 6.2 | 5.9 | 6.4 | 3.9 | 2.6 | 2.0 | 2.0 | 1.4 | 0.7 | na | na | 14.4 | 15.2 | 0.76 | 0.96 |
| Credit Suisse | 2.2 | 2.0 | 1.9 | 1.7 | 7.4 | 4.8 | 5.5 | 3.7 | 3.7 | 2.7 | 2.0 | 1.0 | na | na | na | na | na | na | 0.73 | 0.88 |
| Moody's Analytics | 2.2 | 2.1 | 1.9 | 2.3 | 7.8 | 3.9 | 5.4 | 2.9 | 4.1 | 1.7 | 2.2 | 2.3 | 2.3 | 2.6 | 1.9 | 1.7 | 14.3 | 15.7 | 0.78 | 1.12 |
| Nat Assn of Home Builders | 2.1 | 2.3 | 1.8 | 1.8 | 7.8 | 3.0 | 5.8 | 5.2 | 4.1 | 2.9 | 2.0 | 1.8 | 1.1 | 0.2 | 2.0 | 2.3 | 14.1 | 14.5 | 0.75 | 0.90 |
| Univ of Michigan - RSQE | 2.1 | 2.1 | 1.9 | 1.9 | 8.9 | 6.1 | 5.2 | 4.2 | 4.0 | 1.8 | 2.0 | 1.9 | 1.3 | 2.2 | na | na | 14.3 | 14.9 | 0.76 | 1.00 |
| Macroeconomic Advisers | 2.1 | 2.4 | 1.9 | 2.2 | 7.6 | 3.6 | 5.8 | 3.5 | 3.6 | 2.6 | 2.1 | 1.7 | 1.8 | 1.0 | na | na | 14.4 | 15.4 | 0.76 | 1.10 |
| Ford Motor Company | 2.1 | 2.3 | 1.9 | 1.7 | 8.1 | 3.4 | na | na | 4.1 | 1.2 | 2.0 | 1.9 | 1.4 | 0.6 | na | na | na | na | 0.76 | 1.05 |
| The Conference Board | 2.1 | 1.4 | 1.9 | 1.5 | 7.4 | 3.1 | 3.6 | 0.2 | 3.7 | 1.3 | 1.9 | 1.8 | 1.1 | 1.3 | na | na | 14.5 | 14.8 | 0.75 | 0.88 |
| JP Morgan | 2.1 | 1.9 | 1.9 | 1.7 | 7.1 | 4.1 | 5.6 | 4.4 | 4.6 | 2.6 | 2.1 | 1.5 | 1.3 | 1.2 | 1.9 | 2.1 | 14.4 | 14.9 | 0.74 | 0.84 |
| Eaton Corporation | 2.1 | 1.9 | 2.0 | 1.7 | 8.0 | 4.9 | 7.3 | 4.4 | 4.3 | 2.5 | 2.0 | 1.9 | 1.4 | 1.1 | 1.8 | 1.9 | 14.3 | 14.8 | 0.76 | 0.86 |
| DuPont | 2.1 | 1.4 | 1.9 | 1.4 | 8.1 | 3.7 | 5.0 | 4.0 | 4.1 | 1.6 | 2.0 | 2.0 | 1.3 | 1.5 | 2.0 | 2.0 | 14.2 | 14.6 | 0.75 | 0.87 |
| Fannie Mae | 2.1 | 2.1 | 1.9 | 2.0 | 7.8 | 3.2 | 6.1 | 2.3 | 3.6 | 1.8 | 2.1 | 1.8 | 1.8 | 1.1 | na | na | 14.4 | 15.4 | 0.76 | 0.88 |
| First Trust Advisors | 2.1 | 2.1 | 1.9 | 2.9 | 7.8 | 6.9 | na | na | 3.7 | 0.9 | 2.1 | 2.8 | 1.9 | 2.6 | na | na | 14.5 | 15.5 | 0.75 | 0.87 |
| IHS Global Insight | 2.1 | 1.8 | 1.9 | 2.2 | 7.5 | 4.3 | 5.6 | -0.4 | 3.8 | 2.0 | 2.0 | 1.3 | 2.0 | 0.8 | 2.0 | 2.0 | 14.3 | 14.9 | 0.75 | 0.95 |
| Inforum - Univ of Maryland | 2.1 | 2.0 | 1.9 | 1.9 | 8.1 | 4.1 | 5.2 | 2.4 | 4.0 | 2.8 | 2.1 | 2.3 | 1.7 | 2.4 | na | na | 14.2 | 14.4 | 0.74 | 0.82 |
| Wells Fargo | 2.1 | 1.4 | 1.8 | 1.2 | 7.7 | 0.8 | 5.8 | 5.0 | 3.7 | 2.0 | 2.1 | 2.4 | 2.3 | 3.6 | 1.9 | 2.0 | 14.3 | 14.2 | 0.76 | 0.89 |
| Northern Trust | 2.1 | 1.7 | 1.9 | 2.0 | 8.1 | 3.7 | na | na | na | na | 2.0 | 1.8 | na | na | na | na | 14.3 | 14.3 | 0.75 | 0.81 |
| Consensus (Mean) | 2.1 | 2.0 | 1.9 | 2.0 | 7.9 | 4.5 | 5.7 | 3.2 | 4.0 | 2.3 | 2.1 | 2.0 | 1.6 | 1.6 | 1.9 | 1.9 | 14.3 | 14.8 | 0.75 | 0.91 |
| Last Month's Mean | 2.2 | 2.1 | 1.9 | 2.0 | 8.5 | 5.3 | 5.3 | 3.1 | 4.1 | 2.7 | 2.0 | 2.0 | 1.5 | 1.4 | 1.9 | 2.0 | 14.2 | 14.6 | 0.75 | 0.90 |
| 3 Months Ago | 2.1 | 2.3 | 2.1 | 2.2 | 6.1 | 6.0 | 4.4 | 3.4 | 4.2 | 2.8 | 2.0 | 1.9 | 1.4 | 1.1 | 1.9 | 2.1 | 14.3 | 14.7 | 0.74 | 0.89 |
| High | 2.2 | 2.7 | 2.0 | 2.9 | 8.9 | 6.9 | 9.7 | 6.4 | 4.6 | 4.4 | 2.3 | 2.8 | 2.3 | 3.6 | 2.0 | 2.3 | 14.5 | 15.7 | 0.80 | 1.12 |
| Low | 2.1 | 1.4 | 1.8 | 1.2 | 7.1 | 0.8 | 3.6 | -2.3 | 3.6 | 0.9 | 1.9 | 1.0 | 1.1 | 0.2 | 1.2 | 1.2 | 14.1 | 14.2 | 0.72 | 0.73 |
| Standard Deviation | 0.0 | 0.3 | 0.0 | 0.4 | 0.4 | 1.4 | 1.3 | 2.3 | 0.3 | 0.8 | 0.1 | 0.4 | 0.3 | 0.8 | 0.2 | 0.4 | 0.1 | 0.4 | 0.02 | 0.10 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | | | |
| CBO (Aug. '12) | 2.1 | -0.3 | | | | | | | | | 1.8 | 1.4 | | | 2.2 | 2.5 | | | | |
| OMB (Aug. '12) | 2.3 | 2.7 | | | | | | | | | 2.1 | 1.9 | | | | | | | | |
| IMF (Oct. '12) | 2.2 | 2.1 | 1.9 | 2.2 | | | | | | | 2.0 | 1.8 | | | | | | | | |
| OECD (May '12) | 2.4 | 2.6 | 2.3 | 2.6 | 5.4 | 7.3 | | | | | 2.3 | 1.9 | | | | | | | | |

## Government and Background Data

**President** - Mr. Barack Obama (Democrat). **Congress** - Republicans have a majority in the House of Representatives (lower house) while the Democrats have a 2-seat majority in the Senate (upper house). **Next Elections** - November 6, 2012 (Presidential and Congressional). **Nominal GDP** - US$15,094bn (2011). **Population** - 313.1mn (mid-year, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 2.4 | 2.3 | ***2.4*** | ***1.8*** | ***1.8*** | ***2.0*** | ***2.2*** | ***2.4*** | ***2.7*** | ***2.9*** |
| Personal Consumption | 1.8 | 2.0 | ***2.0*** | ***2.0*** | ***1.8*** | ***2.0*** | ***2.1*** | ***2.2*** | ***2.4*** | ***2.5*** |
| Consumer Prices | 2.8 | 1.9 | ***1.6*** | ***1.8*** | ***1.7*** | ***2.0*** | ***2.1*** | ***2.1*** | ***2.2*** | ***2.2*** |

*Percentage Change (year-on-year).*

## Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Gross Domestic Product* | -0.3 | -3.1 | 2.4 | 1.8 |
| Personal Consumption* | -0.6 | -1.9 | 1.8 | 2.5 |
| Business Investment* | -0.8 | -18.1 | 0.7 | 8.6 |
| Pre - Tax Corporate Profits* | -17.4 | 7.5 | 26.8 | 7.3 |
| Industrial Production* | -3.5 | -11.4 | 5.4 | 4.1 |
| Consumer Prices* | 3.8 | -0.3 | 1.6 | 3.1 |
| Producer Prices* | 6.4 | -2.5 | 4.2 | 6.0 |
| Employment Costs* | 3.0 | 1.7 | 1.9 | 2.0 |
| Auto & Light Truck Sales (inc. imports), mn | 13.2 | 10.4 | 11.6 | 12.7 |
| Housing Starts, mn | 0.90 | 0.55 | 0.59 | 0.61 |
| Unemployment Rate, % | 5.8 | 9.3 | 9.6 | 9.0 |
| Current Account, US$ bn | -677 | -382 | -442 | -466 |
| Federal Budget Balance, fiscal years, US$ bn | -459 | -1426 | -1294 | -1300 |
| 3 mth Treasury Bill, % (end yr) | 0.1 | 0.1 | 0.2 | 0.0 |
| 10 Year Trsy Bond, % (end yr) | 2.4 | 3.8 | 3.4 | 1.9 |

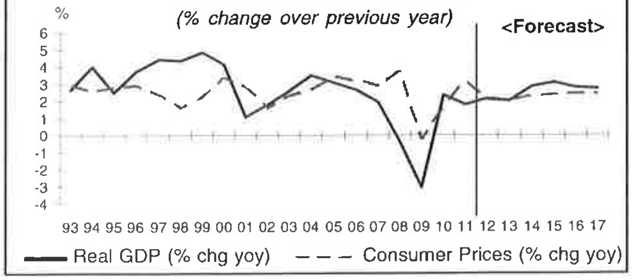
| Year Average | | Annual Total | | Fiscal Years (Oct-Sep) | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.1% | | 1.7% | |
| Unemployment Rate (%) | | Current Account (US$ bn) | | Federal Budget Balance (US$ bn) | | 3 month Treasury Bill Rate (%) | | 10 Year Treasury Bond Yield (%) | |
| 2012 | 2013 | 2012 | 2013 | FY 11-12 | FY 12-13 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 8.1 | 7.4 | -490 | -479 | -1100 | -1000 | 0.1 | na | 1.5 | na |
| 8.1 | 7.9 | -489 | -467 | -1171 | -919 | 0.2 | 0.3 | 2.0 | 2.3 |
| 8.2 | 8.0 | na | na | -1100 | na | 0.1 | 0.1 | 2.3 | 2.9 |
| 8.2 | 7.8 | -491 | -475 | -1160 | -1000 | 0.2 | 0.3 | 2.0 | 2.5 |
| 8.2 | 7.9 | na | na | na | na | na | na | na | na |
| 8.2 | 7.9 | -490 | -422 | -1137 | -902 | 0.1 | 0.1 | 2.0 | 2.3 |
| 8.1 | 7.7 | na | na | na | na | 0.1 | 0.1 | 1.8 | 1.9 |
| 8.2 | 8.0 | -496 | -435 | -1058 | -810 | 0.1 | 0.1 | 1.8 | 2.2 |
| 8.1 | 7.8 | -500 | -551 | -1125 | -950 | 0.0 | 0.0 | 2.0 | 2.4 |
| 8.2 | 7.6 | -491 | -489 | -1129 | -1000 | 0.1 | 0.1 | 2.1 | 2.3 |
| 8.2 | 8.0 | -501 | -520 | -1128 | -1037 | na | na | 1.5 | 1.8 |
| 8.1 | 7.9 | -488 | -515 | -1145 | -821 | 0.1 | 0.2 | 1.8 | 2.8 |
| 8.2 | 8.0 | -471 | -464 | -1200 | -1160 | 0.2 | 0.3 | 1.9 | 2.5 |
| 8.2 | 8.2 | na | na | na | na | 0.1 | 0.1 | 1.7 | 2.0 |
| 8.1 | 7.8 | -490 | -468 | -1297 | -1171 | 0.1 | 0.3 | 1.7 | 2.2 |
| 8.3 | 8.4 | na | na | -1146 | -840 | 0.1 | 0.1 | 1.7 | 2.0 |
| 8.1 | 8.3 | -514 | -486 | na | na | 0.1 | 0.1 | 1.6 | 2.1 |
| 8.1 | 7.9 | -511 | -558 | -1200 | -1000 | na | na | na | na |
| 8.1 | 7.9 | na | na | -1200 | -965 | 0.1 | 0.1 | 1.8 | 2.1 |
| 8.2 | 8.3 | na | na | -1200 | -1000 | 0.1 | 0.1 | 1.9 | 2.5 |
| 8.1 | 7.8 | -486 | -518 | -1175 | -937 | 0.2 | 0.3 | 1.7 | 1.9 |
| 8.1 | 7.5 | -479 | -517 | -1090 | -875 | 0.1 | 0.1 | 2.3 | 2.8 |
| 8.2 | 8.0 | -467 | -408 | -1135 | -913 | 0.1 | 0.1 | 1.8 | 2.4 |
| 8.2 | 8.0 | na | na | na | na | 0.1 | 0.2 | 1.7 | 2.2 |
| 8.0 | 7.9 | -526 | -605 | -1100 | -950 | 0.1 | 0.2 | 1.7 | 1.8 |
| 8.1 | 7.5 | na | na | na | na | 0.1 | 0.1 | 1.9 | 2.0 |
| | | | | | | | | | |
| 8.1 | 7.9 | -493 | -493 | -1150 | -961 | 0.1 | 0.2 | 1.8 | 2.2 |
| | | | | | | | | | |
| 8.2 | 8.0 | -496 | -474 | -1157 | -931 | | | | |
| 8.1 | 7.8 | -497 | -485 | -1170 | -922 | | | | |
| 8.3 | 8.4 | -467 | -408 | -1058 | -810 | 0.2 | 0.3 | 2.3 | 2.9 |
| 8.0 | 7.4 | -526 | -605 | -1297 | -1171 | 0.0 | 0.0 | 1.5 | 1.8 |
| 0.1 | 0.2 | 15 | 51 | 53 | 97 | 0.0 | 0.1 | 0.2 | 0.3 |
| | | | | | | | | | |
| 8.2 | 8.8 | | | -1128 | -641 | | | | |
| 8.0 | 7.7 | | | -1211 | -991 | | | | |
| 8.2 | 8.1 | -487 | -499 | -1358 | -1179 | | | | |
| 8.1 | 7.6 | | | | | | | | |

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| Canada | 19.0 | China | 18.4 |
| Mexico | 13.3 | Canada | 14.2 |
| China | 7.0 | Mexico | 11.7 |
| *Latin America* | *24.7* | *Asia (ex. Japan)* | *25.2* |
| *EU* | *18.2* | *Latin America* | *19.6* |
| *Asia (ex. Japan)* | *12.0* | *EU* | *16.6* |

### Real Growth and Inflation

*(% change over previous year)*



## Outlook Weakens on Back of Drought and Fiscal Cliff

Q2 GDP growth was even softer than previously announced. The economy grew by 1.3% (q-o-q annualized), down from 1.7% posted in the previous release. Consumer and business spending were also revised down while stockbuilding subtracted from activity on the back of the worst US drought in 50 years. The 2012 and 2013 GDP outlook has slipped this month as a result. Given that the drought extended into the summer months, Q3 likely also saw a retrenchment. Farming is not the only sector to have traversed a rough patch: industrial production contracted by 1.2% (m-o-m) in August, reined in by a 3.6% (m-o-m) drop in utilities output. The global downturn, coupled with shaky domestic demand, is not helping matters. There was some modest good news in the form of September's ISM survey for manufacturing where the headline index rebounded from a contractionary 49.6 reading in August to 51.5 in the following month. Still, the 2013 production forecast remains gloomy, and next year's GDP outlook is clouded by political uncertainty.

With US$600bn in tax hikes and public spending cuts to be introduced on January 1, 2013, Washington had been hoping for an extension to the borrowing limit to help offset the worst effects of the looming "fiscal cliff." However, a tightly polarized Congress, coupled with November elections, means that neither side is currently prepared to give way. The onus is on the Fed and, on September 13 Governor Bernanke agreed to buy US$40bn a month in mortgage-backed securities. The difference with previous quantitative easing is that the Fed set a more specific target: QE3 will continue indefinitely until the job market is judged to have improved significantly. September's 114,000 pace in payrolls is currently not robust enough.

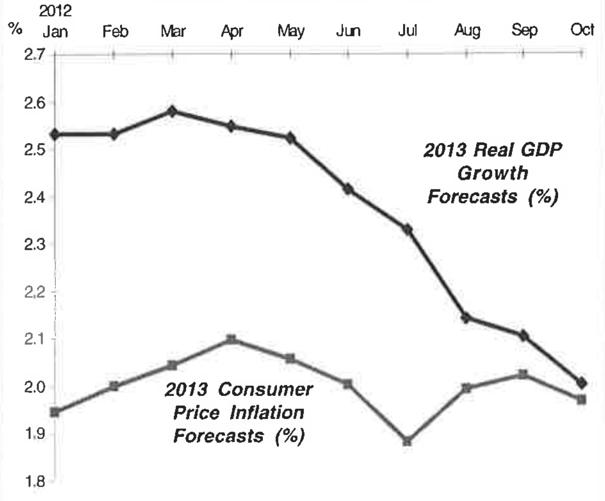
### US Interest Rates (in %)

| | Fed funds | ------ US Treasury securities[1] ------ 2-year | 10-year | 30-year |
|---|---|---|---|---|
| **Oct. 8, 2012** | 0.15% | 0.27% | 1.75% | 2.96% |
| **1 month ago [2]** | 0.15% | 0.25% | 1.68% | 2.83% |
| **6 months ago [2]** | 0.15% | 0.28% | 2.01% | 3.13% |
| **12 months ago [2]** | 0.07% | 0.32% | 2.10% | 3.02% |

*[1] Nominal Treasury constant maturities. [2] On survey date.*

### 2013 GDP Growth and Inflation Forecasts

Consensus Forecasts from Survey of:



| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | | Annual Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Private Consump-tion | | Business Investment | | Industrial Production | | Consumer Prices | | Domestic Corporate Goods Prices | | Total Cash Earnings (nominal) | | New Car Registra-tions (mn) | | Housing Starts (mn) | |
| | 国内総生産 | | 民間消費 | | 民間設備投資 | | 鉱工業生産 | | 消費者物価 | | 卸売物価 | | 現金給与総額（名目） | | 新車登録台数（百万台） | | 新設住宅着工（百万戸） | |
| Economic Forecasters | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| Nippon Steel & Sumikin Res Inst | 3.2 | 2.7 | 2.5 | 1.6 | 4.5 | 5.7 | 2.4 | 3.3 | 0.1 | -0.3 | -0.2 | 0.1 | -0.2 | 2.2 | 4.1 | 2.8 | 0.88 | 0.93 |
| Bank of Tokyo-Mitsubishi UFJ | 2.8 | 1.2 | 2.6 | 0.7 | 3.9 | 2.2 | 0.9 | 1.5 | -0.1 | -0.2 | -0.5 | -0.2 | na | na | na | na | 0.88 | 0.93 |
| Toyota Motor Corporation | 2.5 | 1.0 | 2.6 | 0.6 | 3.7 | 2.3 | 2.5 | 2.3 | -0.1 | -0.0 | na | na | na | na | na | na | na | na |
| Mitsubishi Research Institute | 2.4 | 1.2 | 2.5 | 0.2 | 3.8 | 2.5 | 1.1 | 1.2 | -0.1 | -0.1 | -0.6 | -0.1 | na | na | na | na | 0.86 | 0.89 |
| Goldman Sachs | 2.4 | 1.1 | 2.6 | 0.5 | 3.8 | 3.1 | 1.4 | 1.5 | 0.1 | 0.2 | 0.0 | 1.0 | na | na | na | na | na | na |
| Deutsche Securities | 2.4 | 0.8 | 2.3 | 0.4 | 3.1 | 0.2 | 0.0 | -2.7 | 0.0 | -0.4 | -1.3 | -1.2 | -0.5 | 0.4 | na | na | 0.87 | 0.90 |
| IHS Global Insight | 2.3 | 1.1 | 2.5 | 0.0 | 3.7 | 4.1 | 0.6 | 2.1 | 0.0 | -0.7 | -0.8 | -0.4 | na | na | na | na | 0.88 | 0.94 |
| Mitsubishi UFJ Research | 2.3 | 1.5 | 2.5 | 0.7 | 3.9 | 3.5 | 0.2 | 0.1 | 0.0 | -0.2 | -0.7 | -0.7 | -0.3 | 0.6 | na | na | 0.87 | 0.90 |
| UBS | 2.3 | 2.0 | 2.6 | 1.2 | 4.5 | 7.5 | 3.7 | 4.5 | 0.0 | 0.3 | 0.9 | 1.0 | 0.1 | 1.0 | na | na | na | na |
| Daiwa Institute of Research | 2.3 | 0.9 | 2.3 | -0.2 | 3.4 | 1.9 | 2.0 | 2.2 | 0.0 | 0.1 | -0.3 | 0.2 | na | na | na | na | na | na |
| Merrill Lynch - Japan | 2.3 | 1.2 | 2.5 | 1.1 | 3.3 | 1.0 | 1.9 | 0.6 | -0.1 | 0.0 | na | na | na | na | na | na | na | na |
| Japan Ctr for Econ Research | 2.3 | 0.9 | 2.5 | 0.2 | 3.4 | 2.0 | -0.2 | -0.5 | 0.0 | 0.2 | -0.7 | 0.0 | -0.3 | 0.2 | na | na | 0.85 | 0.91 |
| ITOCHU Institute | 2.2 | 1.5 | 2.4 | 1.0 | 3.2 | 2.4 | 0.4 | -0.1 | na | na | -1.0 | 0.6 | 0.1 | 0.4 | 3.0 | 2.7 | 0.89 | 1.01 |
| Mizuho Research Institute | 2.2 | 0.9 | 2.4 | 0.3 | 3.3 | 1.6 | 0.5 | 1.0 | 0.1 | -0.2 | -1.0 | -1.1 | -0.4 | 0.1 | na | na | 0.86 | 0.92 |
| NLI Research Institute | 2.2 | 1.4 | 2.3 | 0.1 | 3.3 | 2.4 | 0.6 | 2.3 | 0.1 | 0.2 | -0.9 | -0.2 | -0.1 | -0.2 | na | na | 0.87 | 0.96 |
| Citigroup Japan | 2.1 | 1.3 | 2.3 | 0.8 | 3.0 | 2.2 | 0.2 | 0.5 | 0.0 | 0.0 | na | na | na | na | na | na | na | na |
| Econ Intelligence Unit | 2.0 | 1.2 | 1.3 | 0.8 | na | na | 3.1 | 2.7 | 0.2 | -0.1 | 0.2 | 0.3 | na | na | 4.8 | 4.9 | na | na |
| Credit Suisse | 2.0 | 1.1 | 2.5 | 0.7 | 3.1 | 2.4 | -0.2 | -1.6 | -0.1 | -0.4 | na | na | na | na | na | na | na | na |
| HSBC | 2.0 | 1.6 | 2.3 | 0.6 | na | na | 1.4 | 5.6 | 0.0 | -0.1 | -0.9 | -0.1 | na | na | na | na | na | na |
| Mizuho Securities | 2.0 | 1.0 | 2.7 | 1.0 | 3.0 | 0.2 | 0.3 | 1.4 | 0.1 | -0.5 | -0.8 | -0.6 | 0.1 | 0.3 | na | na | 0.85 | 0.92 |
| Consensus (Mean) | 2.3 | 1.3 | 2.4 | 0.6 | 3.5 | 2.6 | 1.1 | 1.4 | 0.0 | -0.1 | -0.5 | -0.1 | -0.2 | 0.6 | 4.0 | 3.5 | 0.87 | 0.93 |
| Last Month's Mean | 2.4 | 1.3 | 2.4 | 0.7 | 3.7 | 2.9 | 2.0 | 2.1 | 0.1 | 0.0 | -0.3 | 0.2 | 0.0 | 0.8 | 3.8 | 3.5 | 0.87 | 0.92 |
| 3 Months Ago | 2.5 | 1.4 | 2.4 | 0.7 | 3.2 | 3.2 | 3.8 | 3.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.8 | 3.3 | 3.2 | 0.87 | 0.90 |
| High | 3.2 | 2.7 | 2.7 | 1.6 | 4.5 | 7.5 | 3.7 | 5.6 | 0.2 | 0.3 | 0.9 | 1.0 | 0.1 | 2.2 | 4.8 | 4.9 | 0.89 | 1.01 |
| Low | 2.0 | 0.8 | 1.3 | -0.2 | 3.0 | 0.2 | -0.2 | -2.7 | -0.1 | -0.7 | -1.3 | -1.2 | -0.5 | -0.2 | 3.0 | 2.7 | 0.85 | 0.89 |
| Standard Deviation | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 1.8 | 1.1 | 1.9 | 0.1 | 0.3 | 0.5 | 0.6 | 0.2 | 0.7 | 0.9 | 1.2 | 0.01 | 0.03 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | |
| IMF (Oct. '12) | 2.2 | 1.2 | 2.5 | 1.0 | | | | | 0.0 | -0.2 | | | | | | | | |
| OECD (May '12) | 2.0 | 1.5 | 2.2 | 1.2 | 1.3 | 5.4 | | | -0.2 | -0.2 | | | | | | | | |

## Government and Background Data

**Prime Minister** - Mr. Yoshihiko Noda of the Democratic Party of Japan (DPJ). **Parliament** - The DPJ has formed a coalition with the People's New Party in the lower House of Representatives, or Shugiin (310 out of 480 seats) but lost its majority in the upper house. **Next Elections** - 2013. **Nominal GDP** - ¥468.4tn (2011). **Population** - 126.5mn (mid-year, 2011). **Yen/$ Exchange Rate** - 79.81 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 2.8 | 3.6 | ***1.8*** | ***2.0*** | ***1.0*** | ***1.1*** | ***1.4*** | ***1.8*** | ***2.4*** | ***0.3*** |
| Private Consumption | 3.7 | 3.3 | ***2.0*** | ***1.1*** | ***0.1*** | ***0.2*** | ***0.6*** | ***1.4*** | ***3.0*** | ***-0.5*** |
| Consumer Prices | 0.3 | 0.2 | ***-0.1*** | ***0.0*** | ***-0.2*** | ***-0.1*** | ***0.1*** | ***0.1*** | ***0.2*** | ***2.1*** |

*Percentage Change (year-on-year).*

## Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **Gross Domestic Product*** | -1.1 | -5.5 | 4.6 | -0.7 |
| **Private Consumption*** | -0.9 | -0.7 | 2.6 | 0.1 |
| **Business Investment*** | -2.9 | -14.3 | 1.1 | 1.2 |
| **Industrial Production*** | -3.4 | -21.8 | 16.6 | -2.4 |
| **Consumer Prices*** | 1.4 | -1.3 | -0.7 | -0.3 |
| **Domestic Corporate Goods Prices*** | 4.6 | -5.3 | -0.1 | 1.5 |
| **Total Cash Earnings (nominal)*** | -0.3 | -4.0 | 0.5 | -0.2 |
| **New Car Registrations, mn** | 2.8 | 2.6 | 2.9 | 2.4 |
| **Housing Starts, mn** | 1.09 | 0.79 | 0.81 | 0.83 |
| **Unemployment Rate, %** | 4.0 | 5.1 | 5.1 | 4.6 |
| **Current Account, ¥tn** | 16.7 | 13.7 | 17.9 | 9.6 |
| **General Govt Budget Balance, SNA basis, fisc. years, ¥tn** | -16.5 | -42.9 | -40.7 | -48.0 *e* |
| **3 mth TIBOR, % (end yr)** | 0.7 | 0.5 | 0.3 | 0.3 |
| **10 Yr Govt Bond, % (end yr)** | 1.2 | 1.3 | 1.1 | 1.0 |

*e = consensus estimate based on latest survey*

| Year Average | | Annual Total | | Fiscal Years (Apr-Mar) | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.3% | | 0.8% | |
| Unemployment Rate (%) | | Current Account (¥tn) | | General Government Budget Balance (¥tn) | | 3 month Yen TIBOR Rate(%) | | 10 Year Govt Bond Yield (%) | |
| 失業率 | | 経常収支 | | 一般政府 財政収支 (SNA ベース、兆円) | | 3ヵ月物 円建 譲渡性預金 | | 10年物 国債利回り | |
| 2012 | 2013 | 2012 | 2013 | FY 12-13 | FY 13-14 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 4.1 | 2.8 | 5.4 | 9.6 | na | na | 0.3 | 0.3 | 1.0 | 1.6 |
| 4.4 | 4.2 | 7.1 | 10.6 | na | na | 0.3 | 0.3 | 0.8 | 1.3 |
| 4.4 | 4.4 | na | na | na | na | na | na | na | na |
| 4.4 | 4.1 | 5.7 | 6.4 | na | na | na | na | 0.9 | 0.9 |
| 4.4 | 4.3 | 5.2 | 5.4 | na | na | 0.3 | 0.3 | 1.0 | 1.2 |
| 4.4 | 4.4 | 7.7 | 10.9 | -46.7 | -44.0 | 0.3 | 0.3 | 0.9 | 1.0 |
| 4.5 | 4.8 | 6.7 | 8.3 | na | na | 0.3 | 0.3 | 0.8 | 0.8 |
| 4.4 | 4.2 | 6.2 | 7.8 | na | na | 0.3 | 0.3 | 0.8 | 1.1 |
| 4.3 | 4.1 | 7.8 | 12.1 | na | na | na | na | na | na |
| 4.4 | 4.2 | 5.7 | 6.7 | na | na | 0.3 | 0.3 | 0.9 | 1.0 |
| 4.4 | 4.0 | 7.0 | 10.0 | -41.1 | -40.3 | na | na | 0.8 | 0.9 |
| 4.3 | 4.1 | 5.9 | 7.7 | -46.0 | -44.5 | na | na | 0.9 | 1.1 |
| 4.4 | 4.1 | 7.0 | 7.5 | -45.8 | -50.1 | 0.3 | 0.3 | 0.8 | 1.0 |
| 4.4 | 4.2 | 6.6 | 10.2 | na | na | 0.3 | 0.3 | 0.8 | 0.9 |
| 4.4 | 4.2 | 5.7 | 9.4 | na | na | 0.3 | 0.3 | 0.9 | 1.1 |
| 4.4 | 4.2 | 4.8 | 5.2 | -50.7 | -38.7 | na | na | 1.1 | 1.3 |
| 4.4 | 4.1 | na | na | na | na | na | na | na | na |
| 4.4 | 4.3 | 4.7 | 4.3 | na | na | 0.3 | 0.3 | 0.9 | 1.0 |
| 4.7 | 5.0 | 4.6 | 5.2 | na | na | 0.2 | 0.2 | 1.0 | 1.0 |
| 4.4 | 4.1 | 6.7 | 6.5 | -40.0 | -40.0 | 0.3 | 0.3 | 0.9 | 1.0 |
| 4.4 | 4.2 | 6.1 | 8.0 | -45.1 | -42.9 | 0.3 | 0.3 | 0.9 | 1.1 |
| 4.4 | 4.2 | 6.4 | 8.1 | -43.0 | -41.5 | | | | |
| 4.5 | 4.3 | 7.7 | 9.4 | -47.7 | -46.1 | | | | |
| 4.7 | 5.0 | 7.8 | 12.1 | -40.0 | -38.7 | 0.3 | 0.3 | 1.1 | 1.6 |
| 4.1 | 2.8 | 4.6 | 4.3 | -50.7 | -50.1 | 0.2 | 0.2 | 0.8 | 0.8 |
| 0.1 | 0.4 | 1.0 | 2.3 | 3.9 | 4.2 | 0.0 | 0.0 | 0.1 | 0.2 |
| 4.5 | 4.4 | | | | | | | | |
| 4.5 | 4.4 | | | | | | | | |

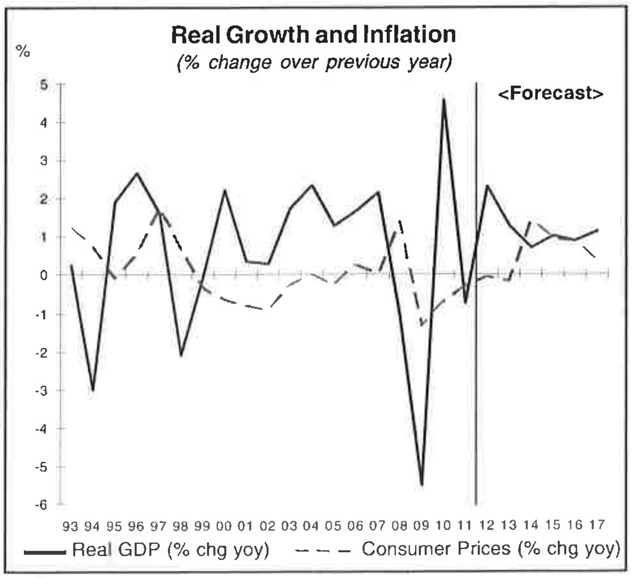
## Outlook Deteriorates

Key monthly data releases for August and September provided further evidence that the Japanese economy started to contract in Q3. For example, industrial production fell by 1.3% (m-o-m) in August, representing a fourth consecutive monthly decline, with weakening auto and electronics output the main factors behind the fall. September's Tankan survey also mirrored this declining bent, reporting worsening business sentiment in the three months to September. Mood deteriorated to -3, compared to the -1 witnessed in the June survey, with the continued strong yen as well as lower growth in China thought to be reasons for the worsening in confidence. Our panel's production outlook has been significantly downgraded this month. On a positive note, core household spending rose by 1.7% (y-o-y) in August, thanks to government subsidies on environmentally friendly cars. However, with large declines in household spending seen in previous months – a contraction of 0.4% (y-o-y) was reported in June and then -0.6% in July – this points to a quarterly decline for Q3 as a whole. On the external front, exports declined by 5.8% in August (y-o-y) on the back of a strong yen and growing territorial dispute between China and Japan. A decrease in imports by 5.4% (y-o-y) in August was also posted, though the drop in exports outweighed the fall in imports in real terms; this caused a trade deficit of ¥-754.1bn compared with ¥-518.9bn in July.

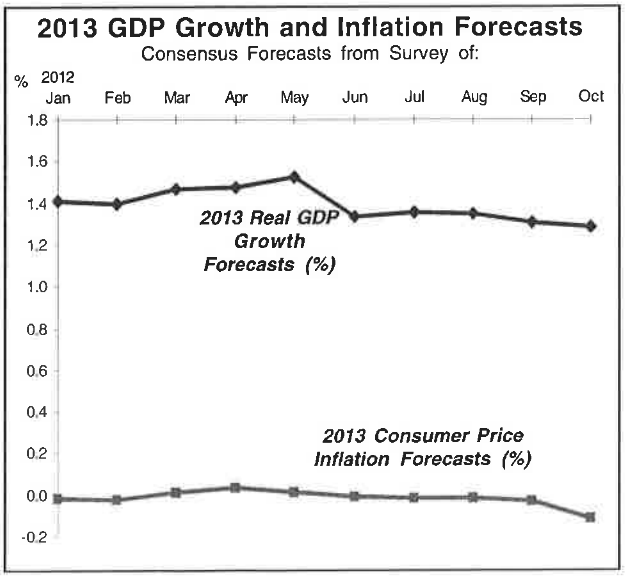
The August CPI fell by 0.3% (m-o-m), its steepest decline in 16 months. This was worse than expected and adds pressure on the Bank of Japan to take stronger anti-deflation steps. As illustrated by our panel's forecasts for consumer prices, the bank's 1% inflation target remains far from reach.

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| China | 18.1 | China | 21.5 |
| United States | 15.5 | United States | 8.9 |
| South Korea | 8.0 | Australia | 6.6 |
| *Asia (inc. the above)* | *33.4* | *Asia (inc. the above)* | *36.3* |
| *EU* | *11.6* | *Middle East* | *18.8* |
| *Latin America* | *5.1* | *EU* | *9.4* |


### Real Growth and Inflation

*(% change over previous year)*


### 2013 GDP Growth and Inflation Forecasts

Consensus Forecasts from Survey of:

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Private Consumption | | Machinery & Equipment Investment | | Industrial Production | | Consumer Prices | | Producer Prices | | Negotiated Wages and Salaries | |
| | *Bruttoinlandsprodukt* | | *Privater Verbrauch* | | *Ausrüstungsinvestitionen* | | *Produktion im Produzierenden Gewerbe* | | *Preisindex für die Lebenshaltung* | | *Index für Erzeugerpreise* | | *Tariflohn- und -gehaltsniveau* | |
| **Economic Forecasters** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** |
| **DZ Bank** | 1.2 | 0.8 | 1.0 | 1.1 | -1.8 | 0.7 | 0.5 | 2.8 | 2.0 | 2.1 | 2.1 | 2.8 | na | na |
| **Bank Julius Baer** | 1.0 | 1.0 | 1.0 | 0.9 | -1.1 | 1.9 | 0.5 | 4.4 | 2.1 | 2.7 | 2.1 | 1.7 | 3.3 | 3.0 |
| **BayernLB** | 1.0 | 1.1 | 1.0 | 1.3 | -1.4 | 3.0 | 0.5 | 1.2 | 2.0 | 1.8 | 2.9 | 2.6 | 2.9 | 2.9 |
| **Goldman Sachs** | 1.0 | 1.2 | 1.2 | 1.6 | 1.2 | 2.4 | 2.1 | 2.4 | 2.1 | 2.0 | 2.3 | 0.0 | na | na |
| **Helaba Frankfurt** | 1.0 | 1.6 | 1.0 | 1.2 | 2.0 | 4.0 | 0.5 | 2.5 | 2.0 | 2.0 | 2.0 | 2.0 | na | na |
| **Kiel Economics** | 1.0 | 0.8 | 0.8 | 0.7 | -1.2 | -0.5 | na | na | 2.1 | 1.9 | na | na | 2.7 | 2.8 |
| **Feri EuroRatings** | 0.9 | 1.5 | 1.3 | 1.3 | 0.0 | 3.7 | 0.0 | 1.5 | 2.0 | 2.1 | 2.0 | 2.1 | 2.5 | 2.2 |
| **HSBC Trinkaus** | 0.9 | 0.9 | 0.9 | 1.2 | -3.6 | -2.1 | 0.1 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.8 |
| **UBS** | 0.9 | 1.1 | 1.0 | 1.0 | -2.4 | 0.3 | -0.8 | -0.4 | 1.9 | 1.6 | 2.0 | 3.2 | na | na |
| **Bank of America - Merrill** | 0.9 | 0.6 | 0.8 | 0.5 | na | na | 0.2 | 2.2 | 2.0 | 1.9 | na | na | na | na |
| **Morgan Stanley** | 0.9 | 0.8 | 1.0 | 1.3 | -1.2 | 1.9 | -0.4 | -0.2 | 1.9 | 1.5 | na | na | na | na |
| **Allianz** | 0.8 | 1.5 | 0.8 | 1.6 | -2.9 | 2.1 | 0.2 | 2.3 | 1.9 | 1.8 | 2.0 | 1.9 | 2.8 | 2.8 |
| **BHF-Bank** | 0.8 | 1.3 | 0.8 | 0.8 | -2.2 | 1.6 | 0.0 | 1.5 | 2.0 | 1.9 | 2.0 | 1.0 | 3.0 | 2.8 |
| **Citigroup** | 0.8 | 0.5 | 0.8 | 0.8 | 0.0 | 2.8 | na | na | 2.0 | 2.2 | na | na | na | na |
| **IfW - Kiel Institute** | 0.8 | 1.1 | 1.1 | 1.6 | -3.2 | 1.8 | na | na | 2.0 | 2.1 | na | na | na | na |
| **RWI Essen** | 0.8 | 1.0 | 0.9 | 0.6 | -2.5 | 1.0 | na | na | 2.0 | 2.0 | na | na | 3.2 | 3.5 |
| **Sal Oppenheim** | 0.8 | 0.8 | 0.8 | 1.2 | -2.8 | -1.0 | na | na | 1.9 | 2.0 | na | na | na | na |
| **IFO - Munich Institute** | 0.7 | 1.3 | 1.3 | 1.5 | -1.6 | 4.9 | na | na | 2.0 | 2.0 | na | na | na | na |
| **DekaBank** | 0.7 | 1.0 | 0.9 | 1.2 | -2.5 | 0.6 | -0.7 | 1.5 | 2.0 | 1.7 | 2.0 | 1.8 | 3.0 | 2.8 |
| **HWWI** | 0.7 | 0.5 | 1.0 | 1.0 | -3.1 | 1.1 | 0.0 | 1.0 | 2.0 | 1.9 | 2.0 | 1.9 | 2.5 | 2.6 |
| **IHS Global Insight** | 0.7 | 0.5 | 0.9 | 1.0 | -4.4 | -2.0 | 0.0 | 3.0 | 2.0 | 1.6 | 2.0 | 1.8 | 3.2 | 2.8 |
| **MM Warburg** | 0.7 | 0.6 | 0.9 | 0.8 | -2.1 | 0.5 | 0.5 | 2.0 | 2.0 | 1.6 | 2.0 | 1.4 | 2.5 | 2.0 |
| **UniCredit** | 0.7 | 1.3 | 0.8 | 0.8 | -2.8 | 0.1 | na | na | 2.0 | 1.8 | na | na | 2.9 | 2.7 |
| **WGZ Bank** | 0.7 | 0.6 | 1.0 | 1.0 | -2.5 | 0.0 | -0.5 | 0.0 | 2.0 | 1.8 | 2.0 | 1.5 | 2.5 | 3.0 |
| **Econ Intelligence Unit** | 0.7 | 0.6 | 1.0 | 0.6 | na | na | -0.3 | 1.0 | 1.9 | 1.6 | 2.2 | 2.2 | na | na |
| **Landesbank Berlin** | 0.6 | 0.8 | 0.8 | 0.9 | -3.2 | 1.3 | -0.3 | 0.8 | 2.0 | 1.5 | 2.0 | 1.4 | 2.8 | 2.8 |
| **Commerzbank** | 0.5 | 0.5 | 0.9 | 1.3 | -3.1 | 0.2 | -0.3 | -0.3 | 2.0 | 1.9 | 2.5 | 2.4 | 2.8 | 3.0 |
| **Consensus (Mean)** | 0.8 | 0.9 | 0.9 | 1.1 | -1.9 | 1.2 | 0.1 | 1.6 | 2.0 | 1.9 | 2.1 | 1.9 | 2.8 | 2.8 |
| **Last Month's Mean** | 0.8 | 1.0 | 1.0 | 1.1 | -1.1 | 2.2 | 0.1 | 1.9 | 2.0 | 1.9 | 2.2 | 1.9 | 2.7 | 2.7 |
| **3 Months Ago** | 0.9 | 1.3 | 1.1 | 1.2 | 0.6 | 4.0 | 0.3 | 2.3 | 2.0 | 1.8 | 2.4 | 2.1 | 2.7 | 2.8 |
| **High** | 1.2 | 1.6 | 1.3 | 1.6 | 2.0 | 4.9 | 2.1 | 4.4 | 2.1 | 2.7 | 2.9 | 3.2 | 3.3 | 3.5 |
| **Low** | 0.5 | 0.5 | 0.8 | 0.5 | -4.4 | -2.1 | -0.8 | -0.4 | 1.9 | 1.5 | 2.0 | 0.0 | 2.4 | 2.0 |
| **Standard Deviation** | 0.2 | 0.3 | 0.1 | 0.3 | 1.5 | 1.7 | 0.6 | 1.2 | 0.1 | 0.3 | 0.2 | 0.7 | 0.3 | 0.3 |
| **Comparison Forecasts** | | | | | | | | | | | | | | |
| **Government (Mar. '12)** | 0.7 | 1.6 | 1.0 | 1.3 | 2.6 | 5.6 | | | 2.3 | 1.9 | | | | |
| **Eur Commission (May '12)** | 0.7 | 1.7 | 0.9 | 1.2 | 2.1 | 4.7 | | | | | | | | |
| **IMF (Oct. '12)** | 0.9 | 0.9 | 0.7 | 1.0 | | | | | 2.2 | 1.9 | | | | |
| **OECD (May '12)** | 1.2 | 2.0 | 1.1 | 1.7 | | | | | 2.3 | 2.0 | | | | |

## Government and Background Data

**Chancellor -** Mrs. Angela Merkel (Christian Democratic Party or CDU). **Parliament -** A coalition of the CDU/CSU and FPD has a small majority in the 622-seat Bundestag (lower house); the CDU/CSU has a majority in the Bundesrat (upper house). **Next Elections -** By September 2013 (Bundestag). **Nominal GDP -** Euro 2,567bn (2011). **Population -** 82.2mn mid-year (2011). **$/Euro Exchange Rate -** 1.390 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 1.2 | 1.0 | ***0.7*** | ***1.0*** | ***0.8*** | ***0.9*** | ***1.1*** | ***1.4*** | ***1.6*** | ***1.6*** |
| Private Consumption | 0.6 | 1.5 | ***0.6*** | ***1.1*** | ***1.2*** | ***1.2*** | ***1.0*** | ***1.0*** | ***1.0*** | ***1.0*** |
| Consumer Prices | 2.2 | 1.9 | ***1.9*** | ***1.9*** | ***1.8*** | ***1.9*** | ***2.0*** | ***2.0*** | ***1.9*** | ***1.9*** |

*Percentage Change (year-on-year)*

## Historical Data

| ** % change on previous year* | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|
| **Gross Domestic Product*** | 1.1 | -5.1 | 4.2 | 3.0 |
| **Private Consumption*** | 0.8 | 0.1 | 0.9 | 1.7 |
| **Machinery & Eqpt Investment*** | 2.9 | -22.5 | 10.3 | 7.0 |
| **Industrial Production*** | -0.1 | -15.4 | 10.1 | 8.0 |
| **Consumer Prices*** | 2.6 | 0.4 | 1.1 | 2.3 |
| **Producer Prices*** | 5.5 | -4.2 | 1.6 | 5.6 |
| **Negotiated Wages & Salaries*** | 3.0 | 2.3 | 1.8 | 1.5 |
| **Unemployment Rate, %** | 7.8 | 8.1 | 7.7 | 7.1 |
| **Current Account, Euro bn** | 154 | 141 | 151 | 147 |
| **General Govt. Budget Balance (Maastricht definition), Euro bn** | -1.4 | -76.3 | -106 | -25.8 |
| **3 mth Euro, % (end yr)** | 2.8 | 0.7 | 1.0 | 1.4 |
| **10 Yr German Govt Bond, % (end yr)** | 3.0 | 3.4 | 3.0 | 1.8 |

| Year Average | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.2% | | 1.5% | |
| Unemployment Rate (%) | | Current Account (Euro bn) | | General Govt Budget Bal (Maastricht) (Euro bn) | | 3 month Euro Rate (%) | | 10 Year German Govt Bond Yield (%) | |
| *Arbeitslosenquote, % der Erwerbspers. Insgesamt* | | *Leistungsbilanz (€ bn)* | | *Finanzierungssaldo des Staates (Maastricht) (€ bn)* | | *3 Monate Euro (%)* | | *Rendite von Bundesanleihen, 10 Jahre (%)* | |
| 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 6.8 | 7.0 | 150 | 120 | -8.0 | -20.0 | 0.2 | 0.3 | 1.6 | 1.8 |
| 6.8 | 6.9 | na | na | na | na | 0.2 | 0.2 | 1.4 | 1.8 |
| 6.8 | 6.8 | 150 | 140 | -15.0 | -10.0 | 0.2 | 0.1 | 1.7 | 1.8 |
| 7.0 | 7.0 | 112 | 106 | -26.3 | -19.0 | na | na | na | na |
| 6.8 | 7.0 | 155 | 160 | -13.0 | 0.0 | 0.4 | 0.5 | 2.0 | 2.0 |
| 6.5 | 6.5 | 152 | 143 | -2.0 | 5.0 | 0.3 | 0.8 | 1.7 | 2.1 |
| 6.8 | 6.7 | 182 | 207 | -8.5 | -9.4 | 0.3 | 0.8 | 1.8 | 2.4 |
| 6.8 | 6.7 | 151 | 144 | -20.0 | -15.0 | 0.2 | 0.2 | 1.4 | 1.2 |
| 6.9 | 6.9 | 161 | 153 | -26.4 | -18.9 | 0.8 | 0.8 | 1.9 | 2.2 |
| 6.8 | 6.7 | 168 | 163 | -5.3 | -2.7 | na | na | na | na |
| 6.8 | 6.8 | 148 | 141 | -25.2 | -23.3 | 0.4 | 0.5 | 1.8 | 1.7 |
| 6.8 | 6.8 | 157 | 154 | 0.0 | 4.0 | 0.3 | 0.8 | 1.7 | 2.1 |
| 6.8 | 7.0 | 160 | 170 | -15.0 | -10.0 | 0.3 | 0.3 | 1.8 | 2.1 |
| 6.8 | 6.9 | 150 | 108 | -7.8 | -8.8 | 0.1 | 0.0 | 1.6 | 2.0 |
| 6.8 | 6.9 | na | na | -3.3 | -3.3 | na | na | 1.5 | 1.7 |
| 6.8 | 6.8 | 161 | 160 | -1.0 | -3.0 | 0.3 | 0.3 | 1.5 | 1.5 |
| 6.8 | 6.8 | na | na | na | na | 0.3 | 0.3 | 1.5 | 2.3 |
| 6.7 | 6.6 | na | na | -9.2 | 0.6 | 0.5 | 0.5 | 1.5 | 1.5 |
| 6.8 | 6.7 | 163 | 179 | -13.1 | -8.0 | 0.2 | 0.2 | 1.6 | 1.8 |
| 6.9 | 6.7 | 165 | 155 | -7.6 | -7.3 | 0.2 | 0.4 | 1.5 | 1.8 |
| 6.8 | 6.8 | 159 | 152 | -6.5 | -10.0 | 0.2 | 0.2 | 1.5 | 1.5 |
| 7.0 | 7.0 | 165 | 172 | -10.0 | -5.0 | 0.2 | 0.3 | 1.8 | 2.2 |
| 6.8 | 7.0 | 155 | 150 | 2.0 | 0.0 | 0.5 | 0.7 | 1.8 | 1.9 |
| 6.8 | 6.8 | 160 | 155 | na | na | 0.2 | 0.2 | 1.5 | 1.8 |
| 5.5 | 5.7 | na | na | na | na | na | na | na | na |
| 6.8 | 6.8 | 162 | 171 | -40.0 | -54.0 | 0.3 | 0.5 | 1.6 | 2.0 |
| 6.8 | 6.9 | 146 | 132 | -24.1 | -33.2 | 0.3 | 0.3 | 1.8 | 2.1 |
| 6.8 | 6.8 | 156 | 152 | -12.4 | -10.9 | 0.3 | 0.4 | 1.6 | 1.9 |
| 6.8 | 6.7 | 152 | 143 | -14.6 | -12.7 | | | | |
| 6.7 | 6.6 | 147 | 140 | -18.8 | -13.2 | | | | |
| 7.0 | 7.0 | 182 | 207 | 2.0 | 5.0 | 0.8 | 0.8 | 2.0 | 2.4 |
| 5.5 | 5.7 | 112 | 106 | -40.0 | -54.0 | 0.1 | 0.0 | 1.4 | 1.2 |
| 0.3 | 0.3 | 13 | 23 | 10.4 | 13.2 | 0.1 | 0.2 | 0.2 | 0.3 |
| 5.5 | 5.3 | 122 | 122 | | | | | | |
| | | | | -10.3 | -11.7 | | | | |

## Possibility of Q3 Floundering

Concerns over a possible dip in Q3 GDP are mounting as investment is constricted by fast-dwindling business confidence. Indeed, the consensus forecast for 2012 machinery and equipment investment slid from -1.1% in September to -1.9% this month. The IFO business index declined for a fifth consecutive month in September, while manufacturing orders registered a 1.3% (m-o-m) contraction in August as a consequence of deteriorating business sentiment and collapsed demand from the Euro zone. Meanwhile, retail sales grew by a modest 0.3% (m-o-m) in August following a 1% contraction in July. The manufacturing PMI was slightly more encouraging as September data was 2.7 points up on the previous month. However, the 47.4 figure represents a noticeable downturn in the industry, and our panel's expectations for this year and next have been scaled back. The 2012 consensus predicts minimal growth in the sector.

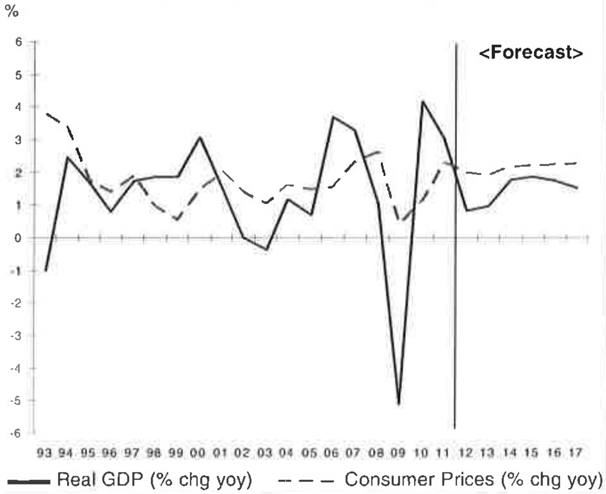
Germany's constitutional court finally ratified the European Stability Mechanism (ESM) last month. The permanent bailout fund is set to provide additional lending capacity to facilitate sovereign bond purchases by the ECB. Angela Merkel reiterated her support of the central bank's Outright Monetary Transactions (OMT) programme which had been subject to criticism from the Bundesbank for potentially risking accelerated inflation. Flash estimates show that the German CPI is expected to ease from a 2.1% (y-o-y) pace in August to 2% in September and flatline in m-o-m terms. Food and travel prices have been moderating, while Germany's endorsement of the ESM recently helped the euro appreciate to a four-month high against the dollar, although it has since fallen back on renewed doubts over Spain.

### Direction of Trade – 2011

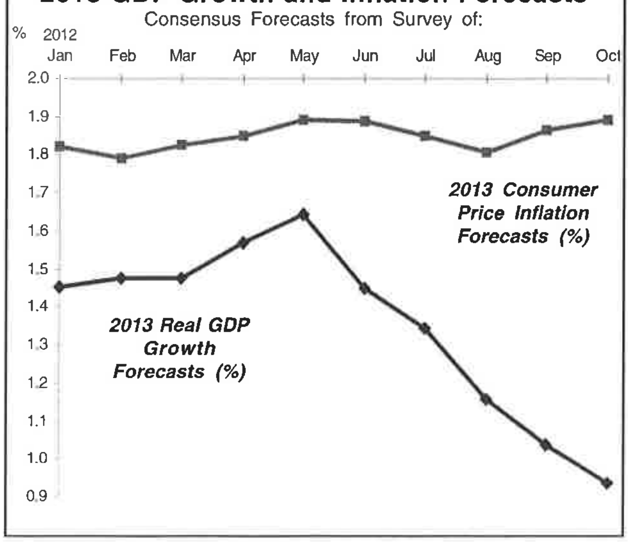
| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| France | 10.1 | Netherlands | 14.0 |
| Netherlands | 6.9 | France | 7.7 |
| United Kingdom | 6.5 | China | 7.1 |
| *EU* | *62.7* | *EU* | *64.3* |
| *Eastern Europe* | *14.1* | *Eastern Europe* | *13.9* |
| *Asia (ex. Japan)* | *7.6* | *Asia (ex. Japan)* | *10.2* |

### Real Growth and Inflation

*(% change over previous year)*



### 2013 GDP Growth and Inflation Forecasts



# FRANCE

## OCTOBER 2012

| | Average % Change on Previous Calendar Year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Household Consumption | | Business Investment | | Manufacturing Production | | Consumer Prices | | Hourly Wage Rates | |
| | *Produit Intérieur Brut* | | *Consommation des Ménages* | | *Investissements des Entreprises* | | *Production Manufacturière* | | *Prix à la Consommation* | | *Taux de Salaire Horaire* | |
| **Economic Forecasters** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** |
| Barclays Capital | 0.3 | 1.1 | -0.2 | 0.2 | 0.5 | 0.8 | na | na | 2.3 | 1.7 | na | na |
| Morgan Stanley | 0.3 | 0.5 | 0.0 | 0.6 | 0.1 | 0.9 | -2.2 | 0.5 | 2.0 | 1.5 | na | na |
| BIPE | 0.2 | 0.5 | -0.1 | 0.2 | 0.6 | 1.9 | na | na | 2.1 | 2.0 | 2.2 | 2.3 |
| Goldman Sachs | 0.2 | 0.6 | 0.8 | 0.4 | 0.8 | 1.4 | na | na | 2.2 | 1.8 | na | na |
| HSBC France | 0.2 | 0.9 | 0.1 | 0.5 | -0.1 | 2.7 | -2.4 | 0.5 | 2.1 | 1.6 | 2.3 | 2.5 |
| Societe Generale | 0.2 | 0.5 | 0.0 | 0.2 | 0.5 | 1.8 | na | na | 2.1 | 1.7 | 2.3 | 2.1 |
| Total | 0.2 | 0.9 | 0.1 | 0.7 | 0.2 | 1.0 | na | na | 2.0 | 1.7 | na | na |
| UBS | 0.2 | 0.4 | -0.1 | 0.3 | na | na | na | na | 2.0 | 1.3 | na | na |
| Credit Agricole | 0.2 | 0.7 | 0.1 | 0.5 | -0.8 | 0.2 | -2.3 | 0.7 | 2.0 | 1.7 | na | na |
| BNP Paribas | 0.1 | 0.4 | 0.0 | 0.6 | -0.5 | 0.1 | na | na | 2.1 | 1.7 | 2.2 | 2.1 |
| Exane | 0.1 | 0.0 | -0.1 | -0.3 | 0.9 | 1.0 | -3.0 | -2.5 | 2.0 | 1.8 | 1.9 | 1.7 |
| GAMA | 0.1 | -0.1 | -0.1 | -0.3 | -0.2 | -0.5 | na | na | 2.0 | 1.8 | 2.0 | 1.8 |
| Natixis | 0.1 | -0.4 | -0.1 | -0.6 | -0.2 | -3.3 | -2.7 | -2.0 | 2.1 | 1.5 | na | na |
| OFCE | 0.1 | 0.0 | -0.2 | -0.5 | -0.2 | -1.4 | na | na | 1.9 | 1.6 | na | na |
| UniCredit | 0.1 | 0.5 | -0.1 | 0.4 | 0.3 | 1.6 | na | na | 2.1 | 1.9 | 2.0 | 2.1 |
| Bank of America - Merrill | 0.1 | -0.2 | -0.2 | -0.2 | na | na | -1.8 | 1.1 | 2.2 | 2.2 | na | na |
| Euler Hermes | 0.1 | 0.3 | -0.1 | 0.1 | 0.0 | -0.5 | na | na | 1.9 | 1.6 | 1.7 | 1.7 |
| Econ Intelligence Unit | 0.1 | 0.4 | -0.1 | 0.2 | na | na | na | na | 2.2 | 2.1 | na | na |
| Coe-Rexecode | 0.0 | 0.2 | -0.2 | 0.0 | -0.6 | -1.9 | na | na | 2.0 | 1.5 | 2.2 | 1.9 |
| ING Financial Markets | 0.0 | 0.2 | -0.2 | -0.1 | 0.8 | 1.3 | -2.8 | 0.5 | 2.1 | 2.0 | 1.8 | 2.0 |
| Oddo Securities | 0.0 | -0.7 | -0.1 | -0.4 | -0.9 | -4.1 | -3.7 | -2.9 | 2.0 | 1.4 | 2.0 | 1.4 |
| Citigroup | -0.1 | -0.2 | -0.2 | 0.2 | 0.3 | -0.3 | -3.3 | -2.5 | 2.1 | 1.4 | 1.9 | 1.5 |
| IHS Global Insight | -0.1 | -0.3 | -0.1 | 0.1 | -0.7 | -1.0 | -2.9 | -3.7 | 2.1 | 1.7 | 2.0 | 1.6 |
| AXA Investment Managers | -0.3 | 0.3 | 0.0 | 0.6 | 0.9 | 2.4 | -2.5 | 0.5 | 2.5 | 2.0 | na | na |
| Consensus (Mean) | 0.1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.2 | -2.7 | -0.9 | 2.1 | 1.7 | 2.0 | 1.9 |
| Last Month's Mean | 0.1 | 0.4 | 0.0 | 0.3 | 0.1 | 0.8 | -2.5 | -0.5 | 2.0 | 1.7 | 2.0 | 2.0 |
| 3 Months Ago | 0.2 | 0.7 | 0.3 | 0.7 | -0.1 | 1.5 | -1.3 | 0.7 | 2.0 | 1.6 | 1.9 | 1.8 |
| High | 0.3 | 1.1 | 0.8 | 0.7 | 0.9 | 2.7 | -1.8 | 1.1 | 2.5 | 2.2 | 2.3 | 2.5 |
| Low | -0.3 | -0.7 | -0.2 | -0.6 | -0.9 | -4.1 | -3.7 | -3.7 | 1.9 | 1.3 | 1.7 | 1.4 |
| Standard Deviation | 0.1 | 0.4 | 0.2 | 0.4 | 0.6 | 1.8 | 0.5 | 1.8 | 0.1 | 0.2 | 0.2 | 0.3 |
| Comparison Forecasts | | | | | | | | | | | | |
| Government (Sep. '12) | 0.3 | 0.8 | 0.2 | 0.3 | 0.1 | 1.5 | | | 2.0 | 1.8 | | |
| Eur Commission (May '12) | 0.5 | 1.3 | 0.7 | 1.5 | | | | | | | | |
| IMF (Oct. '12) | 0.1 | 0.4 | -0.2 | 0.2 | | | | | 1.9 | 1.0 | | |
| OECD (May '12) | 0.6 | 1.2 | 0.6 | 1.0 | 0.9 | 4.0 | | | 2.4 | 1.8 | | |

### Government and Background Data

**President** - Mr. François Hollande (Parti Socialiste). **Prime Minister** - Mr. Jean-Marc Ayrault (Parti Socialiste). **Parliament** - The Socialists currently have 278 out of the 577 seats in the National Assembly. **Next Elections** - Legislative – first round: May, 2017. Presidential – first round: April, 2017. **Nominal GDP** - Euro1,996bn (2011). **Population** - 63.1mn (mid-year, 2011). **$/Euro Exchange Rate** - 1.390 (average, 2011).

### Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 0.3 | 0.3 | ***-0.1*** | ***-0.1*** | ***0.0*** | ***0.2*** | ***0.5*** | ***0.7*** | ***0.9*** | ***1.1*** |
| Household Consumption | -0.5 | 0.2 | ***-0.1*** | ***0.0*** | ***0.0*** | ***0.2*** | ***0.4*** | ***0.6*** | ***0.8*** | ***1.0*** |
| Consumer Prices | 2.3 | 2.0 | ***2.0*** | ***1.8*** | ***1.7*** | ***1.6*** | ***1.7*** | ***1.7*** | ***1.7*** | ***1.8*** |

*Percentage Change (year-on-year).*

### Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Gross Domestic Product* | -0.2 | -3.1 | 1.6 | 1.7 |
| Household Consumption* | 0.2 | 0.2 | 1.4 | 0.2 |
| Business Investment* | 2.3 | -13.5 | 5.9 | 5.1 |
| Manufacturing Production* | -3.5 | -13.9 | 4.5 | 3.2 |
| Consumer Prices* | 2.8 | 0.1 | 1.5 | 2.1 |
| Hourly Wage Rates* | 3.1 | 2.3 | 1.8 | 2.1 |
| Unemployment Rate (ILO), % | 7.4 | 9.2 | 9.3 | 9.2 |
| Current Account, Euro bn | -33.7 | -25.1 | -30.2 | -38.9 |
| General Govt. Budget Balance | | | | |
| (Maastricht definition), Euro bn | -64.3 | -142 | -137 | -103 |
| 3 mth Euro, % (end yr) | 2.8 | 0.7 | 1.0 | 1.4 |
| 10 Yr French Govt Bond, | | | | |
| % (end yr) | 3.5 | 3.6 | 3.4 | 3.2 |

| Year Average | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.2% | | 2.2% | |
| Unemployment Rate, ILO (%) | | Current Account (Euro bn) | | General Govt Budget Balance (Maastricht) (Euro bn) | | 3 month Euro Rate (%) | | 10 Year French Govt Bond Yield (%) | |
| *Taux de Chômage, BIT (%)* | | *Solde Courant (€ md)* | | *Balance Budgétaire (Maastricht) (€ md)* | | *Taux d'intéret 3 mois Euro (%)* | | *Rendement des obligations d'Etat, 10 ans (%)* | |
| 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 10.1 | 10.4 | na | na | -91.0 | -65.0 | 0.2 | na | 1.8 | na |
| 9.7 | 9.9 | -39.2 | -34.7 | -92.1 | -78.7 | 0.4 | 0.6 | 2.5 | 2.6 |
| 9.9 | 10.3 | -43.0 | -46.0 | -94.0 | -81.0 | 0.2 | 0.2 | 2.1 | 2.2 |
| 9.5 | 9.6 | -40.6 | -37.9 | -97.9 | -82.9 | na | na | na | na |
| 9.8 | 9.9 | -45.6 | -44.5 | -93.0 | -73.0 | 0.2 | 0.2 | 2.0 | 1.6 |
| 9.9 | 10.6 | -49.0 | -50.0 | -95.0 | -73.0 | 0.5 | 0.6 | 2.3 | 2.6 |
| 9.8 | 10.0 | -40.0 | -40.0 | -95.0 | -75.0 | 0.5 | 0.5 | 2.5 | 2.8 |
| 9.8 | 10.1 | -30.5 | -26.5 | -91.4 | -70.3 | 0.8 | 0.8 | 2.7 | 3.0 |
| 9.8 | 10.0 | -36.1 | -38.5 | -91.6 | -62.7 | 0.3 | 0.3 | 2.2 | 2.6 |
| 9.9 | 10.9 | -46.0 | -48.0 | -92.0 | -68.0 | 0.2 | 0.2 | 2.2 | 2.2 |
| 10.0 | 10.8 | -43.0 | -45.0 | -90.0 | -65.0 | 0.8 | 1.4 | 2.5 | 3.0 |
| 9.9 | 10.5 | na | na | -94.0 | -73.0 | 0.5 | 0.7 | 2.2 | 2.5 |
| 9.8 | 10.6 | -45.0 | -40.0 | -90.0 | -70.0 | na | na | na | na |
| 9.9 | 10.7 | -40.0 | -45.0 | -90.0 | -76.0 | 0.5 | 0.5 | 2.5 | 2.5 |
| 9.8 | 10.0 | -38.0 | -40.0 | -91.0 | -71.0 | na | na | na | na |
| 10.4 | 11.2 | -49.8 | -45.4 | -86.0 | -69.0 | na | na | na | na |
| 9.7 | 9.9 | -47.6 | -40.4 | -91.2 | -72.3 | na | na | na | na |
| 10.0 | 10.5 | na | na | na | na | na | na | na | na |
| 9.8 | 10.4 | -47.4 | -38.8 | -97.4 | -72.5 | 0.2 | 0.2 | 2.5 | 2.8 |
| 10.1 | 10.8 | -50.0 | -42.0 | -90.0 | -71.0 | na | na | na | na |
| 9.9 | 10.4 | -49.4 | -50.0 | -91.0 | -77.0 | 0.3 | 0.3 | 2.6 | 3.5 |
| 9.8 | 10.0 | -34.3 | -17.7 | -89.8 | -77.6 | 0.2 | 0.0 | 2.3 | 2.6 |
| 9.9 | 10.4 | -39.9 | -34.7 | -93.0 | -80.0 | na | na | na | na |
| 10.0 | 10.5 | -45.0 | -40.0 | -97.0 | -75.0 | 0.3 | 0.3 | 2.2 | 2.4 |
| 9.9 | 10.3 | -42.8 | -40.2 | -92.3 | -73.0 | 0.4 | 0.4 | 2.3 | 2.6 |
| 9.8 | 10.1 | -42.4 | -40.5 | -92.8 | -74.9 | | | | |
| 9.8 | 9.9 | -44.6 | -41.8 | -94.1 | -76.1 | | | | |
| 10.4 | 11.2 | -30.5 | -17.7 | -86.0 | -62.7 | 0.8 | 1.4 | 2.7 | 3.5 |
| 9.5 | 9.6 | -50.0 | -50.0 | -97.9 | -82.9 | 0.2 | 0.0 | 1.8 | 1.6 |
| 0.2 | 0.4 | 5.4 | 7.6 | 2.8 | 5.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 10.2 | 10.3 | -49.2 | -44.4 | | | | | | |
| 10.1 | 10.5 | | | -95.8 | -72.7 | | | | |
| 9.8 | 10.0 | | | | | | | | |

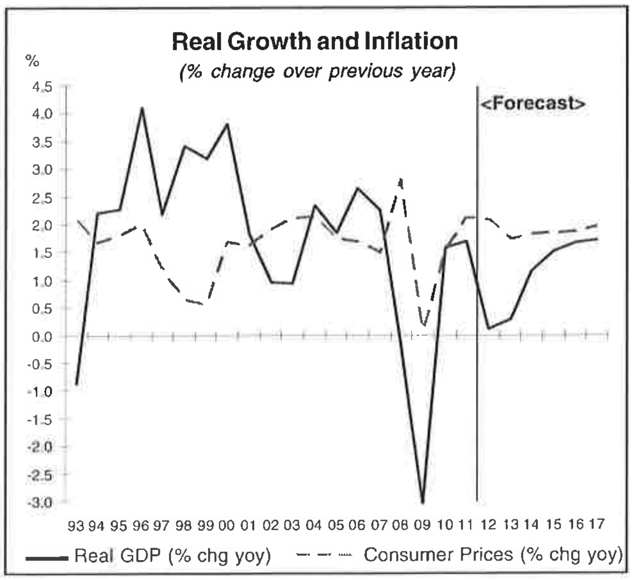
## Tax and Spending Plans

Latest economic data have been mostly overshadowed by the new government's budget for 2013. In keeping with the tough economic situation facing the Euro zone, the French budget aims to recoup €36bn. Approximately €10bn will be sought in public spending cuts, but the remaining two-thirds are to come from tax increases. Some business owners have cited the tax hike on capital gains generated from selling a business as a major disincentive. Others believe that raising the marginal top rate of tax and levying a sizeable 75% on incomes over €1mn will chase away top entrepreneurial talent. A few economists have argued that tax increases might not bring in much additional revenue anyway in light of the stagnant economy and unemployment approaching 10%. Even plans to cut state spending have been criticized (by the right) as not going far enough or (by the left) as deviating from campaign promises to support growth. The budget foresees modest GDP growth of 0.8% in 2013, down from June's 1.2% estimate. However, in light of the recent downturn in activity, even 0.8% seems overly positive: the consensus forecast is at 0.3%. The past three quarters have seen 0% growth in q-o-q terms, and the y-o-y trend in manufacturing output continues to decline. Indeed, the PMI for the sector suffered a further sizeable drop into contractionary territory, from August's 46.0 reading to a mere 42.6 outturn in September. This suggests that Q3 GDP could be in recession, while the decline in manufacturing is expected to seep into 2013.

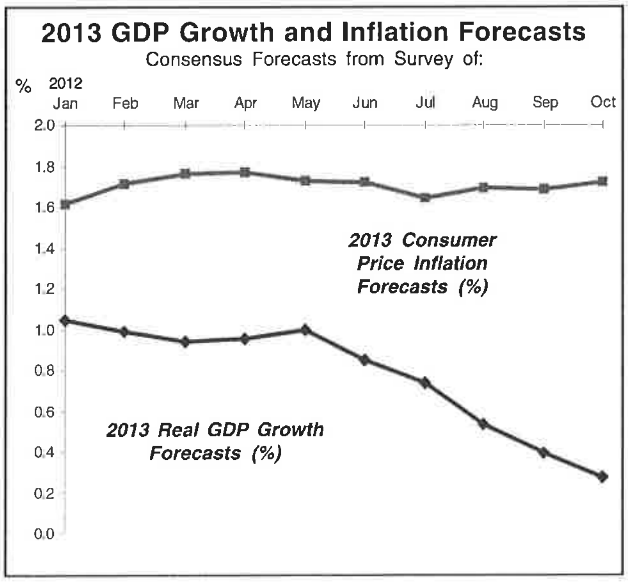
Goods' consumption saw July's 0.4% (m-o-m) increase wiped out by a 0.8% contraction in August, underscoring the ongoing weakness in consumer activity. 2012 and 2013 are expected to see stagnant consumption growth.

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| Germany | 16.7 | Germany | 19.1 |
| Italy | 8.3 | Belgium | 11.3 |
| Spain | 7.4 | Italy | 7.7 |
| *EU* | *62.0* | *EU* | *68.8* |
| *Eastern Europe* | *7.3* | *Eastern Europe* | *8.7* |
| *Africa* | *6.1* | *Asia (ex. Japan)* | *7.2* |


**Real Growth and Inflation**

*(% change over previous year)*


**2013 GDP Growth and Inflation Forecasts**

Consensus Forecasts from Survey of:

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Household Consump-tion | | Gross Fixed Investment | | Company Trading Profits | | Manufactur-ing Produc-tion | | Retail Prices (RPI-X, underly-ing rate) | | Consumer Prices Index (HICP) | | Output Prices | | Average Weekly Earnings | |
| Economic Forecasters | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| Economic Perspectives | 0.3 | 1.9 | 0.2 | 0.5 | 2.5 | 7.3 | -3.0 | -5.0 | -0.3 | 1.8 | 3.3 | 3.8 | 2.9 | 3.3 | 3.7 | 4.2 | 2.8 | 3.5 |
| Goldman Sachs | 0.1 | 1.9 | 0.1 | 1.8 | 1.5 | 4.1 | na | na | 1.6 | 4.1 | 3.2 | 2.7 | 2.7 | 2.0 | na | na | 1.6 | 2.3 |
| Liverpool Macro Research | 0.0 | 2.0 | 0.4 | 1.5 | na | na | na | na | na | na | 3.5 | 2.9 | 2.8 | 2.3 | na | na | 2.1 | 3.5 |
| HSBC | -0.1 | 1.1 | -0.1 | 1.3 | 1.1 | 4.7 | na | na | -1.0 | 0.3 | na | na | 2.7 | 2.5 | na | na | 2.0 | 2.5 |
| RBS Markets | -0.1 | 1.1 | 0.4 | 0.8 | 1.7 | 2.8 | na | na | -0.9 | 0.4 | 3.2 | 1.8 | 2.7 | 1.9 | 2.8 | 1.5 | 1.8 | 2.8 |
| Societe Generale | -0.1 | 1.2 | 0.6 | 0.9 | 1.2 | 1.7 | 6.0 | 8.0 | -1.1 | 0.5 | 3.1 | 2.2 | 2.8 | 2.1 | 2.7 | 2.3 | 1.5 | 1.8 |
| Beacon Econ Forecasting | -0.2 | 2.0 | 0.9 | 2.9 | 1.4 | 6.7 | na | na | -1.5 | 1.4 | 3.1 | 2.4 | 2.7 | 1.6 | 1.9 | 2.8 | 1.5 | 2.4 |
| IHS Global Insight | -0.2 | 0.9 | 0.7 | 1.1 | 1.6 | 1.6 | na | na | -1.1 | 1.2 | 3.2 | 2.6 | 2.8 | 2.1 | 2.8 | 2.0 | 1.6 | 2.3 |
| ITEM Club | -0.2 | 1.2 | 0.6 | 0.8 | 1.9 | -1.5 | 5.0 | 8.0 | -0.7 | 2.7 | 3.1 | 2.6 | 2.8 | 2.0 | 2.0 | 1.5 | 2.0 | 2.8 |
| Nomura | -0.3 | 0.3 | 0.4 | 0.6 | 1.7 | -0.7 | na | na | -1.4 | -1.0 | 3.2 | 3.0 | 2.8 | 2.6 | 2.2 | 2.2 | 2.2 | 2.8 |
| Barclays Capital | -0.3 | 1.4 | 0.2 | 0.8 | 1.7 | 5.4 | na | na | -1.1 | 1.8 | 3.3 | 3.4 | 2.8 | 2.7 | na | na | na | na |
| Bank of America - Merrill | -0.3 | 1.0 | 0.4 | 0.4 | 2.1 | 3.3 | na | na | -1.1 | 1.2 | na | na | 2.8 | 2.2 | na | na | na | na |
| BNP Paribas | -0.3 | 1.1 | -0.1 | 1.4 | 0.1 | 1.9 | na | na | -0.7 | -0.7 | 3.3 | 2.9 | 2.7 | 2.3 | na | na | 1.4 | 1.9 |
| Confed of British Industry | -0.3 | 1.2 | -0.1 | 1.4 | 1.1 | 3.7 | -2.9 | 4.8 | -1.0 | 2.5 | 3.1 | 2.7 | 2.6 | 2.2 | 2.7 | 1.9 | 1.3 | 1.7 |
| Credit Suisse | -0.3 | 1.5 | -0.2 | 1.4 | 0.5 | 3.0 | na | na | na | na | 3.1 | 2.8 | 2.7 | 2.1 | na | na | na | na |
| Deutsche Bank | -0.3 | 1.0 | -0.2 | 1.1 | 1.0 | 3.9 | na | na | -0.7 | 1.1 | na | na | 2.8 | 2.3 | 2.8 | 1.9 | 1.6 | 2.6 |
| ING Financial Markets | -0.3 | 1.1 | 0.4 | 1.0 | 2.1 | 3.9 | na | na | -1.8 | 1.5 | 3.0 | 2.3 | 2.7 | 1.9 | 2.6 | 1.9 | 1.4 | 2.2 |
| JP Morgan | -0.3 | 1.5 | -0.1 | 1.4 | na | na | na | na | na | na | 3.2 | 2.8 | 2.9 | 2.4 | 3.0 | 2.1 | na | na |
| Oxford Economics | -0.3 | 1.1 | 0.1 | 0.7 | 1.1 | 2.3 | -0.9 | 4.6 | -0.9 | 1.4 | 3.1 | 2.6 | 2.8 | 2.1 | 1.8 | 1.0 | 1.4 | 2.0 |
| Experian | -0.4 | 0.8 | 0.4 | 1.0 | 1.0 | 1.7 | na | na | -1.0 | 1.5 | 3.0 | 2.6 | 2.6 | 2.1 | na | na | 1.6 | 2.8 |
| Cambridge Econometrics | -0.5 | 1.3 | -0.1 | 1.3 | -0.3 | 3.7 | na | na | -2.2 | 1.8 | 2.9 | 2.4 | 2.2 | 1.6 | na | na | 1.8 | 2.8 |
| Capital Economics | -0.5 | 0.5 | 0.3 | 0.5 | 2.0 | 3.0 | 0.0 | -1.5 | -2.5 | -1.0 | 3.0 | 1.4 | 2.4 | 1.8 | na | na | 1.5 | 1.5 |
| Citigroup | -0.5 | 0.3 | -0.2 | 1.6 | -1.7 | -6.2 | -2.0 | 2.3 | -2.0 | 0.7 | 3.2 | 2.7 | 2.6 | 2.1 | na | na | 1.4 | 1.6 |
| Econ Intelligence Unit | -0.5 | 0.5 | -0.4 | 0.3 | na | na | na | na | -2.0 | 0.5 | 2.9 | 3.4 | 2.8 | 3.1 | na | na | na | na |
| Consensus (Mean) | -0.2 | 1.2 | 0.2 | 1.1 | 1.2 | 2.7 | 0.3 | 3.0 | -1.1 | 1.1 | 3.1 | 2.7 | 2.7 | 2.2 | 2.6 | 2.1 | 1.7 | 2.4 |
| Last Month's Mean | -0.3 | 1.3 | -0.1 | 1.2 | 1.3 | 2.9 | -0.7 | 2.4 | -1.1 | 1.6 | 3.1 | 2.6 | 2.7 | 2.1 | 2.8 | 2.3 | 1.7 | 2.5 |
| 3 Months Ago | 0.1 | 1.6 | 0.4 | 1.4 | 0.9 | 3.3 | 1.2 | 4.0 | -0.7 | 1.7 | 3.1 | 2.4 | 2.7 | 2.0 | 2.8 | 2.4 | 1.9 | 2.7 |
| High | 0.3 | 2.0 | 0.9 | 2.9 | 2.5 | 7.3 | 6.0 | 8.0 | 1.6 | 4.1 | 3.5 | 3.8 | 2.9 | 3.3 | 3.7 | 4.2 | 2.8 | 3.5 |
| Low | -0.5 | 0.3 | -0.4 | 0.3 | -1.7 | -6.2 | -3.0 | -5.0 | -2.5 | -1.0 | 2.9 | 1.4 | 2.2 | 1.6 | 1.8 | 1.0 | 1.3 | 1.5 |
| Standard Deviation | 0.2 | 0.5 | 0.3 | 0.6 | 0.9 | 2.9 | 3.7 | 4.8 | 0.8 | 1.2 | 0.1 | 0.5 | 0.2 | 0.4 | 0.5 | 0.8 | 0.4 | 0.6 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | |
| Treasury - OBR (Mar. '12) | 0.8 | 2.0 | 0.5 | 1.3 | -0.3 | 6.2 | | | | | | | 2.8 | 1.9 | | | 2.6 | 3.1 |
| Eur Commission (May '12) | 0.5 | 1.7 | 0.3 | 1.0 | -0.6 | 3.2 | | | | | | | | | | | | |
| IMF (Oct. '12) | -0.4 | 1.1 | -0.2 | 0.9 | 0.4 | 1.6 | | | | | | | 2.7 | 1.9 | | | | |
| OECD (May '12) | 0.5 | 1.9 | 0.8 | 1.4 | -0.9 | 2.8 | | | | | | | 2.6 | 1.9 | | | | |

## Government and Background Data

**Prime Minister** - Mr. David Cameron (Conservative Party). **Parliament** -The Conservative party has formed a coalition with the Liberal Democrat party, with a working majority in the 650-seat House of Commons (lower house). **Next Election** - By May 2015 (general election). **Nominal GDP** - £1,508bn (2011). **Population** - 62.4mn (mid-year, 2011). **$/£ Exchange Rate** - 1.604 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | -0.2 | -0.5 | ***-0.6*** | ***0.0*** | ***0.6*** | ***1.3*** | ***1.2*** | ***1.4*** | ***1.6*** | ***1.8*** |
| Household Consumption | -0.9 | -0.8 | ***0.5*** | ***0.3*** | ***0.8*** | ***1.4*** | ***1.4*** | ***1.5*** | ***1.7*** | ***1.8*** |
| Consumer Prices (HICP) | 3.5 | 2.8 | ***2.4*** | ***2.2*** | ***2.0*** | ***2.3*** | ***2.3*** | ***2.2*** | ***2.3*** | ***2.3*** |

*Percentage Change (year-on-year).*

## Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Gross Domestic Product* | -1.0 | -4.0 | 1.8 | 0.9 |
| Household Consumption* | -1.6 | -3.0 | 1.3 | -1.1 |
| Gross Fixed Investment* | -4.6 | -13.7 | 3.5 | -2.4 |
| Company Trading Profits* | -4.7 | -6.5 | 5.8 | 7.7 |
| Manufacturing Production* | -2.5 | -9.7 | 3.9 | 2.0 |
| Retail Prices (RPI-X underlying rate)* | 4.3 | 2.0 | 4.8 | 5.3 |
| Consumer Prices Index (HICP)* | 3.6 | 2.2 | 3.3 | 4.5 |
| Output Prices* | 6.7 | 1.5 | 4.2 | 5.6 |
| Average Weekly Earnings* | 3.5 | 0.0 | 2.2 | 2.4 |
| Unemployment Rate %(Claimant Count) | 2.8 | 4.6 | 4.6 | 4.7 |
| Current Account, £ bn | -14.4 | -17.7 | -37.3 | -29.0 |
| Public Sector Net Borrowing (excl. financial interventions), fiscal yrs, £ bn | -69.0 | -156 | -149 | -121 |
| 3 mth Interbank, % (end yr) | 2.6 | 0.7 | 0.8 | 1.1 |
| 10 Yr Gilt Yields, % (end yr) | 3.0 | 4.0 | 3.6 | 2.1 |

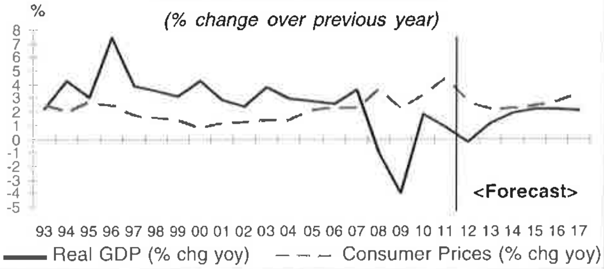
| Year Average | | Annual Total | | Fiscal Years (Apr-Mar) | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.6% | | 1.7% | |
| Unemployment Rate (%) (Claimant Count) | | Current Account (£ bn) | | Public Sector Net Borrowing (£ bn) | | 3 month Interbank Rate (%) | | 10 Year Gilt Yield (%) | |
| 2012 | 2013 | 2012 | 2013 | FY 12-13 | FY 13-14 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 5.2 | 5.2 | -24.0 | -18.0 | 120 | 110 | 1.0 | 1.4 | 1.8 | 2.5 |
| 4.8 | 4.8 | -42.7 | -38.6 | 96 | 108 | na | na | na | na |
| 4.6 | 4.0 | -31.6 | -32.5 | 108 | 97 | 1.4 | 1.4 | na | na |
| na | na | na | na | na | na | na | na | na | na |
| 4.9 | 5.2 | -44.0 | -24.0 | 116 | 105 | 0.5 | 0.6 | 1.3 | 1.4 |
| 4.9 | 5.3 | -55.6 | -16.0 | 101 | 119 | na | 0.3 | na | 2.1 |
| 4.7 | 4.6 | -71.3 | -80.8 | 84 | 125 | 0.4 | 1.6 | 1.7 | 1.9 |
| 4.9 | 5.1 | -58.0 | -35.0 | 107 | 119 | 0.7 | 0.7 | 1.9 | 1.9 |
| 4.8 | 4.8 | -51.0 | -15.0 | 124 | 103 | 0.6 | 0.6 | 1.8 | 2.1 |
| na | na | -65.3 | -40.1 | 107 | 123 | 0.7 | 0.7 | 1.6 | 1.6 |
| na | na | -68.8 | -64.1 | 100 | 115 | na | na | 1.8 | na |
| 4.9 | 5.2 | -53.0 | -32.0 | 135 | 115 | na | na | na | na |
| 4.8 | 4.9 | -33.5 | -29.0 | 104 | 112 | 0.5 | 0.5 | 1.9 | 2.2 |
| 4.9 | 4.9 | -43.5 | -40.8 | 137 | 125 | na | na | na | na |
| na | na | -26.4 | -20.9 | na | na | na | na | 2.0 | 2.4 |
| na | na | -35.0 | -33.0 | na | na | 0.7 | 0.7 | na | na |
| 4.9 | 5.0 | -30.0 | -25.0 | 102 | 110 | 0.6 | 0.7 | 1.4 | 1.7 |
| na | na | -25.7 | -11.1 | na | na | na | na | na | na |
| 4.9 | 5.0 | -63.5 | -52.4 | 107 | 118 | 0.7 | 0.7 | 1.8 | 2.1 |
| 5.0 | 5.1 | -59.0 | -26.0 | 115 | 126 | 0.8 | 0.8 | 1.8 | 1.9 |
| 4.8 | 5.1 | -36.4 | -24.0 | 85 | 93 | 0.5 | 0.8 | na | na |
| 5.1 | 5.5 | -65.0 | -45.0 | 135 | 125 | 0.6 | 0.6 | 1.5 | 1.5 |
| 4.8 | 4.7 | -37.5 | -22.9 | 102 | 119 | 0.8 | 0.8 | 1.7 | 2.0 |
| na | na | na | na | na | na | na | na | na | na |
| 4.9 | 5.0 | -46.4 | -33.0 | 110 | 114 | 0.7 | 0.8 | 1.7 | 1.9 |
| 4.9 | 5.0 | -34.7 | -29.5 | 107 | 114 | | | | |
| 5.0 | 5.2 | -29.0 | -22.7 | 102 | 106 | | | | |
| 5.2 | 5.5 | -24.0 | -11.1 | 137 | 126 | 1.4 | 1.6 | 2.0 | 2.5 |
| 4.6 | 4.0 | -71.3 | -80.8 | 84 | 93 | 0.4 | 0.3 | 1.3 | 1.4 |
| 0.1 | 0.3 | 15.2 | 16.6 | 15 | 10 | 0.2 | 0.4 | 0.2 | 0.3 |
| | | -27.0 | -21.0 | 92 | 98 | | | | |

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| Germany | 11.6 | Germany | 13.2 |
| United States | 10.5 | China | 8.7 |
| Netherlands | 8.4 | Netherlands | 7.5 |
| *EU* | *56.8* | *EU* | *52.8* |
| *Eastern Europe* | *5.8* | *Asia (ex. Japan)* | *13.1* |
| *Asia (ex. Japan)* | *5.6* | *Eastern Europe* | *6.8* |

### Real Growth and Inflation

*(% change over previous year)*



## Few Signs of an End to Recession

Q2 GDP figures were subject to a second upward revision in the final release from the Office of National Statistics. GDP contracted by 0.4% (q-o-q) rather than the previously announced -0.5%. Household consumption shrank by 0.2% (q-o-q) as opposed to -0.4%, while construction activity was upgraded from -3.9% (q-o-q) to -3%, though it remained in deep contractionary territory. The construction industry rebounded in July, displaying 2.2% (m-o-m) growth, although the data were likely distorted by two public holidays in June. September's PMI survey for construction highlighted the headwinds faced by the industry. While a headline figure of 49.5 was a 0.5-point improvement on August's survey, it still pointed to a contraction. A decline in online purchases caused a 0.2% (m-o-m) downtick in retail sales in August. The goods and services trade deficit of £-10.1bn for Q2 contributed to the current account deficit hitting a record £20.8bn in Q2. Consequently, the consensus for the current account in 2012 has been downgraded from £-34.7bn to £-46.4bn. 2013 should see a £-33bn shortfall in this variable.

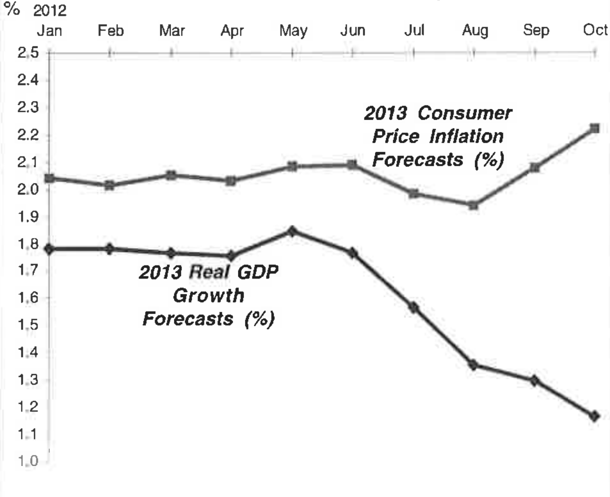
Inflation eased to 2.5% (y-o-y) in August, from 2.6% in July, largely due to downward pressure on gas and electricity prices. This deceleration has stoked expectations that the Bank of England could boost stimulus efforts by authorising a further £50bn in quantitative easing when current bond purchases have concluded in November. The labour market continues to fare relatively well as the number of people claiming jobseekers allowance declined by their largest amount in over two years in August. However, there was an uptick in the unemployment rate as it reached 8.1% for the three months to July on the back of a strong labour supply.

**UK Official Bank Rate – October 8, 2012 = 0.50%**

| **FORECASTS** | End Dec. 2012 | End Mar. 2013 | End June 2013 | End Sep. 2013 |
|---|---|---|---|---|
| **Consensus Mean Average:** | 0.45% | 0.44% | 0.48% | 0.53% |
| **Mode (most frequent forecast):** | 0.50% | 0.50% | 0.50% | 0.50% |

### 2013 GDP Growth and Inflation Forecasts

Consensus Forecasts from Survey of:



| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Household Consumption | | Gross Fixed Investment | | Industrial Production | | Consumer Prices | | Producer Prices | | Contractual Hourly Earnings | |
| | *Prodotto Interno Lordo* | | *Consumi delle Famiglie* | | *Investimenti Fissi Lordi* | | *Produzione Industriale* | | *Prezzi al Consumo* | | *Prezzi alla Produzione* | | *Retribuzione Orarie Contrattuali* | |
| **Economic Forecasters** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** |
| **Goldman Sachs** | -2.2 | -0.7 | -2.3 | -0.6 | -3.1 | -0.1 | -5.3 | -2.3 | 3.5 | 2.7 | 1.0 | 0.7 | 1.5 | 1.9 |
| **Banca Nzle del Lavoro** | -2.3 | -0.8 | -3.4 | -1.7 | -8.9 | -3.4 | -7.9 | -2.6 | 3.2 | 2.3 | 2.8 | 2.0 | 1.5 | 1.5 |
| **REF Ricerche** | -2.3 | -0.4 | -3.1 | -0.8 | -8.9 | -3.0 | -6.5 | -1.5 | 3.0 | 2.2 | 2.4 | 2.0 | 1.3 | 1.2 |
| **Econ Intelligence Unit** | -2.3 | -0.3 | -3.6 | -1.2 | -8.5 | -2.0 | -5.5 | -2.5 | 3.1 | 1.2 | 2.2 | 1.2 | na | na |
| **Intesa Sanpaolo** | -2.4 | -0.5 | -3.5 | -1.0 | -8.1 | -1.3 | -6.7 | -2.5 | 3.1 | 2.5 | 2.1 | 1.3 | 1.5 | 1.6 |
| **Centro Europa Ricerche** | -2.4 | -0.5 | -2.9 | -0.9 | -9.1 | -1.4 | na | na | 3.3 | 2.4 | na | na | na | na |
| **Confindustria** | -2.4 | -0.6 | -3.2 | -1.0 | -8.8 | -0.5 | na | na | 3.1 | 2.3 | na | na | na | na |
| **ING Financial Markets** | -2.4 | -0.5 | -3.5 | -1.5 | -8.7 | -2.6 | na | na | 3.2 | 2.0 | 2.6 | 1.8 | 1.4 | 1.3 |
| **Prometeia** | -2.4 | -0.3 | -3.4 | -1.1 | -7.9 | 0.4 | -6.6 | -0.3 | 3.1 | 1.6 | 2.4 | 0.4 | 1.5 | 1.3 |
| **UBS** | -2.4 | -0.2 | -3.2 | -0.1 | -8.6 | -1.4 | na | na | 3.1 | 2.7 | 2.6 | 2.2 | na | na |
| **UniCredit** | -2.4 | -0.5 | -3.4 | -1.2 | -8.6 | -1.0 | na | na | 3.1 | 1.7 | na | na | na | na |
| **Citigroup** | -2.5 | -2.1 | -3.3 | -2.3 | -9.4 | -8.1 | na | na | 3.2 | 2.3 | na | na | na | na |
| **HSBC** | -2.5 | -1.1 | -3.4 | -1.3 | -9.4 | -4.8 | -6.7 | -1.5 | 3.4 | 2.3 | na | na | 1.4 | 1.4 |
| **Bank of America - Merrill** | -2.6 | -1.3 | -3.6 | -3.3 | -9.0 | -5.9 | -6.6 | -0.2 | 3.6 | 3.7 | na | na | na | na |
| **Consensus (Mean)** | -2.4 | -0.7 | -3.3 | -1.3 | -8.4 | -2.5 | -6.5 | -1.7 | 3.2 | 2.3 | 2.3 | 1.4 | 1.4 | 1.5 |
| **Last Month's Mean** | -2.2 | -0.6 | -2.8 | -1.1 | -8.1 | -2.3 | -6.6 | -1.2 | 3.1 | 2.2 | 2.3 | 1.4 | 1.5 | 1.5 |
| **3 Months Ago** | -2.0 | -0.3 | -2.7 | -0.8 | -7.8 | -1.7 | -5.9 | -0.8 | 3.0 | 2.0 | 2.5 | 1.3 | 1.4 | 1.5 |
| **High** | -2.2 | -0.2 | -2.3 | -0.1 | -3.1 | 0.4 | -5.3 | -0.2 | 3.6 | 3.7 | 2.8 | 2.2 | 1.5 | 1.9 |
| **Low** | -2.6 | -2.1 | -3.6 | -3.3 | -9.4 | -8.1 | -7.9 | -2.6 | 3.0 | 1.2 | 1.0 | 0.4 | 1.3 | 1.2 |
| **Standard Deviation** | 0.1 | 0.5 | 0.3 | 0.8 | 1.6 | 2.4 | 0.8 | 1.0 | 0.2 | 0.6 | 0.6 | 0.7 | 0.1 | 0.2 |
| **Comparison Forecasts** | | | | | | | | | | | | | | |
| **Government (Apr. '12)** | -1.2 | 0.5 | -1.7 | 0.2 | -3.5 | 1.7 | | | 3.0 | 2.2 | | | | |
| **Eur Commission (May '12)** | -1.4 | 0.4 | -2.3 | -0.4 | -3.8 | 1.3 | | | | | | | | |
| **IMF (Oct. '12)** | -2.3 | -0.7 | -3.3 | -1.2 | -7.8 | 1.0 | | | 3.0 | 1.8 | | | | |
| **OECD (May '12)** | -1.7 | -0.4 | -1.6 | -1.0 | -4.7 | -0.8 | | | 3.3 | 2.3 | | | | |

## Government and Background Data

**Prime Minister** - Mr. Mario Monti. **Parliament** - An emergency government was formed in November 2011 to address the current economic instability. The cabinet is comprised of technocrats and is supported by 85% of parliament. **Next Elections** - April 2013 (parliamentary); May 2013 (presidential). **Nominal GDP** - Euro1,581bn (2011). **Population** - 60.8mn (mid-year, 2011). **$/Euro Exchange Rate** - 1.390 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| **Gross Domestic Product** | -1.4 | -2.5 | ***-2.8*** | ***-2.4*** | ***-1.6*** | ***-0.9*** | ***-0.4*** | ***0.0*** | ***0.7*** | ***0.9*** |
| **Household Consumption** | -2.4 | ***-3.2*** | ***-3.4*** | ***-2.9*** | ***-2.2*** | ***-1.4*** | ***-1.1*** | ***-0.7*** | ***0.5*** | ***0.8*** |
| **Consumer Prices** | 3.3 | 3.3 | ***3.1*** | ***2.7*** | ***2.1*** | ***1.8*** | ***2.2*** | ***2.3*** | ***2.4*** | ***2.5*** |

*Percentage Change (year-on-year).*

## Historical Data

| ** % change on previous year* | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|
| **Gross Domestic Product*** | -1.2 | -5.5 | 1.8 | 0.5 |
| **Household Consumption*** | -0.8 | -1.6 | 1.2 | 0.2 |
| **Gross Fixed Investment*** | -3.8 | -11.7 | 1.7 | -1.2 |
| **Industrial Production*** | -3.4 | -18.8 | 6.8 | 0.1 |
| **Consumer Prices*** | 3.3 | 0.8 | 1.5 | 2.8 |
| **Producer Prices*** | 5.1 | -4.7 | 3.0 | 4.7 |
| **Contractual Hourly Earnings*** | 3.5 | 3.1 | 2.1 | 1.8 |
| **Unemployment Rate,%** | 6.8 | 7.8 | 8.4 | 8.4 |
| **Current Account, Euro bn** | -44.9 | -30.2 | -54.7 | -51.5 |
| **General Govt. Budget Balance (Maastricht definition), Euro bn** | -42.7 | -82.7 | -71.5 | -62.4 |
| **3 mth Euro, % (end yr)** | 2.8 | 0.7 | 1.0 | 1.4 |
| **10 yr Italian Govt Bond, % (end yr)** | 4.3 | 4.2 | 4.9 | 7.0 |

| Year Average | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.2% | | 5.1% | |
| Unemployment Rate (%) | | Current Account (Euro bn) | | General Govt Budget Bal (Maastricht) (Euro bn) | | 3 month Euro Rate (%) | | 10 Year Italian Govt Bond Yield (%) | |
| *Tasso di Disoccupazione (%)* | | *Partite Correnti (€ mld)* | | *Indebitamento netto (Maastricht) (€ mld)* | | *Interessi Euro Trimestrali (%)* | | *Buoni del Tesoro Decennali (%)* | |
| 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 10.3 | 11.0 | -24.4 | -22.6 | -51.0 | -35.3 | na | na | na | na |
| 10.6 | 11.3 | na | na | na | na | na | na | na | na |
| 10.5 | 11.2 | -27.0 | -19.0 | -35.8 | -15.8 | 0.2 | 0.2 | na | na |
| 10.9 | 11.1 | na | na | na | na | na | na | na | na |
| 10.9 | 11.8 | -15.6 | 6.3 | -40.2 | -30.7 | 0.3 | 0.3 | 5.1 | 4.9 |
| 10.6 | 11.4 | -44.5 | -31.7 | -39.7 | -23.7 | 0.5 | 0.6 | 5.6 | 4.8 |
| 10.7 | 12.1 | -20.5 | -12.6 | -33.4 | -21.7 | na | na | na | na |
| 10.6 | 11.3 | -22.9 | -13.0 | -40.8 | -28.5 | 0.3 | 0.5 | na | na |
| 10.6 | 11.3 | -22.5 | -17.3 | -41.9 | -32.1 | 0.3 | 0.3 | 5.6 | 5.2 |
| 10.5 | 10.4 | na | na | -34.5 | -7.9 | 0.8 | 0.8 | 4.9 | 5.2 |
| 10.6 | 11.5 | -35.2 | -24.0 | -39.4 | -20.8 | na | na | na | na |
| 10.6 | 11.9 | -26.8 | -20.1 | -46.0 | -44.8 | 0.1 | 0.0 | na | na |
| 10.6 | 11.5 | -20.5 | -17.0 | na | na | 0.2 | 0.2 | 4.8 | 4.6 |
| 10.6 | 11.9 | -3.4 | 41.2 | -35.8 | -21.2 | na | na | na | na |
| 10.6 | 11.4 | -23.9 | -11.8 | -39.9 | -25.7 | 0.3 | 0.4 | 5.2 | 4.9 |
| 10.5 | 11.2 | -30.5 | -19.4 | -38.7 | -24.9 | | | | |
| 10.2 | 10.7 | -36.4 | -25.2 | -35.5 | -20.7 | | | | |
| 10.9 | 12.1 | -3.4 | 41.2 | -33.4 | -7.9 | 0.8 | 0.8 | 5.6 | 5.2 |
| 10.3 | 10.4 | -44.5 | -31.7 | -51.0 | -44.8 | 0.1 | 0.0 | 4.8 | 4.6 |
| 0.1 | 0.4 | 10.4 | 19.9 | 5.2 | 10.1 | 0.2 | 0.2 | 0.4 | 0.3 |
| 9.3 | 9.2 | | | | | | | | |
| 9.5 | 9.7 | -34.9 | -20.8 | | | | | | |
| 10.6 | 11.1 | | | -42.6 | -28.9 | | | | |
| 9.4 | 9.9 | | | | | | | | |

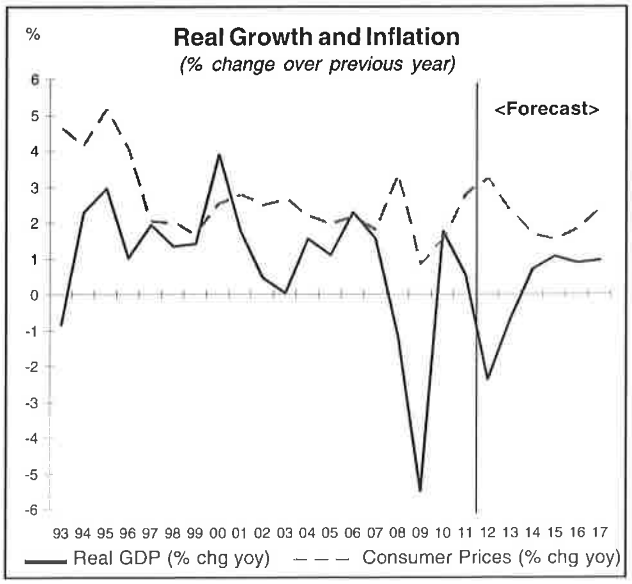
## Bailout Pressures Ease Slightly

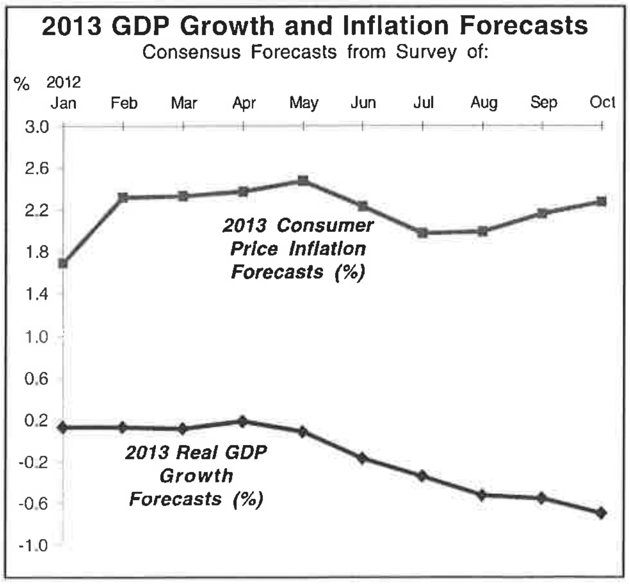
The final release of Q2 GDP figures pointed to a 2.6% (y-o-y) contraction, a 0.1% downgrade on the first estimate. Household consumption fell by 1% (y-o-y) while investment plummeted by a massive 9.5%. An 8.2% (y-o-y) decline in Q2 imports conveyed flailing domestic demand, although this has helped to counter some of the subtraction from exports. Austerity measures, including slashed government spending and the introduction of a property tax, have indirectly helped to reduce the current account shortfall: the Q2 deficit totalled €1.6bn, compared with €13bn in Q1. The consensus forecast for the 2012 current account now stands at €-23.9bn as a result, compared with €-30.5bn last month. Industrial production unexpectedly grew by 1.7% (m-o-m) in August after a 0.2% contraction in July. The PMI for manufacturing increased by 2.1 points to 45.7 in September following a 0.7-point fall in August. Manufacturing remains in the doldrums, however, and our panel predicts that this year's deep recession in the sector will extend well into 2013.

In July, Italian sovereign yields were approaching the 7% danger zone, but last month the ECB moved to bring down long-term borrowing costs via its Outright Monetary Transactions (OMT) programme. While Italy has not taken advantage of this, it signals to the markets that the ECB is prepared to do what it takes to support individual Euro area governments' solvency. The unveiling of the scheme, which allows potentially unlimited purchases of short-term government bonds, has eased the pressure as yields have fallen to 5.1%. Still, they remain high and Italy is not completely out of danger yet, particularly while its economic outlook remains so weak.

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| Germany | 13.3 | Germany | 16.5 |
| France | 11.8 | France | 8.9 |
| United States | 5.9 | China | 7.7 |
| *EU* | *56.7* | *EU* | *56.6* |
| *Eastern Europe* | *13.6* | *Eastern Europe* | *13.8* |
| *Asia (ex. Japan)* | *5.0* | *Asia (ex. Japan)* | *11.2* |





| | Average % Change on Previous Calendar Year | | | | | | | | | | | | | | | | Annual Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Personal Expenditure | | Machinery & Equipment Investment | | Pre - Tax Corporate Profits | | Industrial Production | | Consumer Prices | | Industrial Product Prices | | Average Hourly Earnings | | Housing Starts (thousand units) | |
| | *Produit Intérieur Brut* | | *Dépenses de Consommation des Ménages* | | *Investissement Productif* | | *Bénéfices des Sociétés avant impôts* | | *Production Industrielle* | | *Prix à la Consommation* | | *Prix des Produits Industriels* | | *Rémunération Horaire Moyenne* | | *Construction de Logements mises en chantier, milliers* | |
| **Economic Forecasters** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** | **2012** | **2013** |
| Royal Bank of Canada | 2.3 | 2.4 | 1.7 | 2.3 | 4.1 | 6.3 | na | na | na | na | 1.6 | 1.7 | na | na | na | na | 212 | 189 |
| CIBC World Markets | 2.2 | 2.0 | 1.7 | 2.2 | 5.8 | 5.9 | na | na | na | na | 1.8 | 2.1 | na | na | na | na | 214 | 202 |
| BMO Capital Markets | 2.2 | 2.0 | 1.7 | 2.0 | 4.0 | 7.3 | 2.5 | 3.5 | 1.5 | 2.5 | 1.6 | 1.8 | 0.8 | 1.5 | 2.0 | 2.3 | 210 | 185 |
| Desjardins | 2.2 | 2.2 | 1.7 | 2.2 | 4.3 | 6.7 | 2.7 | 5.2 | na | na | 1.7 | 1.8 | 1.5 | 2.5 | 2.2 | 2.7 | 212 | 180 |
| JP Morgan | 2.2 | 2.1 | 1.6 | 2.0 | 4.3 | 6.9 | na | na | 1.4 | 2.1 | 2.2 | 2.1 | na | na | na | na | na | na |
| Toronto Dominion Bank | 2.2 | 2.1 | 1.7 | 2.1 | 2.7 | 5.0 | -1.6 | 4.6 | na | na | 1.6 | 2.0 | na | na | na | na | 213 | 187 |
| Economap | 2.0 | 2.1 | 1.8 | 2.0 | 2.5 | 8.0 | 1.0 | 4.0 | 1.7 | 2.6 | 1.6 | 1.8 | 0.8 | 1.3 | 2.0 | 2.2 | 208 | 185 |
| EDC Economics | 2.0 | 2.2 | 1.6 | 1.5 | 4.2 | 7.6 | na | na | na | na | 2.4 | 2.0 | na | na | na | na | 210 | 160 |
| Informetrica | 2.0 | 2.0 | 1.6 | 2.0 | 1.8 | 4.0 | -3.0 | 8.0 | 1.5 | 2.5 | 1.7 | 2.2 | 0.2 | 2.0 | 2.9 | 3.0 | 201 | 185 |
| Capital Economics | 1.9 | 1.2 | 1.7 | 1.9 | 2.3 | 4.2 | na | na | na | na | 1.6 | 1.2 | na | na | na | na | 195 | 150 |
| National Bank of Canada | 1.9 | 1.7 | 1.7 | 1.8 | 2.4 | 4.2 | -1.1 | 4.4 | na | na | 1.7 | 2.1 | na | na | na | na | 209 | 185 |
| Scotia Economics | 1.9 | 1.7 | 1.7 | 1.9 | 4.0 | 6.0 | 0.0 | 5.5 | 1.9 | 2.8 | 1.7 | 2.0 | na | na | na | na | 210 | 190 |
| Conf Board of Canada | 1.8 | 2.3 | 1.8 | 2.6 | 3.0 | 8.5 | -2.1 | 3.5 | na | na | 2.3 | 2.4 | 0.8 | 1.7 | na | na | 212 | 194 |
| University of Toronto | 1.7 | 1.5 | 1.6 | 1.9 | 2.3 | 7.8 | -3.8 | -0.6 | na | na | 1.7 | 1.9 | na | na | na | na | 211 | 171 |
| Consensus (Mean) | 2.0 | 2.0 | 1.7 | 2.0 | 3.4 | 6.3 | -0.6 | 4.2 | 1.6 | 2.5 | 1.8 | 1.9 | 0.8 | 1.8 | 2.3 | 2.6 | 209 | 182 |
| Last Month's Mean | 2.0 | 2.0 | 1.7 | 2.0 | 3.0 | 6.2 | 0.5 | 4.5 | 1.9 | 3.1 | 1.8 | 1.9 | 0.9 | 1.9 | 2.3 | 2.6 | 206 | 181 |
| 3 Months Ago | 2.1 | 2.2 | 1.9 | 2.1 | 3.1 | 6.6 | 4.0 | 4.8 | 2.0 | 2.8 | 1.9 | 2.0 | 1.1 | 1.9 | 2.2 | 2.5 | 201 | 183 |
| High | 2.3 | 2.4 | 1.8 | 2.6 | 5.8 | 8.5 | 2.7 | 8.0 | 1.9 | 2.8 | 2.4 | 2.4 | 1.5 | 2.5 | 2.9 | 3.0 | 214 | 202 |
| Low | 1.7 | 1.2 | 1.6 | 1.5 | 1.8 | 4.0 | -3.8 | -0.6 | 1.4 | 2.1 | 1.6 | 1.2 | 0.2 | 1.3 | 2.0 | 2.2 | 195 | 150 |
| Standard Deviation | 0.2 | 0.3 | 0.1 | 0.3 | 1.1 | 1.5 | 2.3 | 2.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 5 | 14 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | |
| IMF (Oct. '12) | 1.9 | 2.0 | 1.7 | 2.0 | | | | | | | 1.8 | 2.0 | | | | | | |
| OECD (May '12) | 2.2 | 2.6 | 2.4 | 2.9 | | | | | | | 2.3 | 2.2 | | | | | | |

## Government and Background Data

**Prime Minister** - Mr. Stephen Harper (Conservative). **Government** - The Conservatives hold 167 out of 308 seats in parliament (155 seats are needed for a clear majority). **Next Election** - by May 2015 (general election). **Nominal GDP** - C$1,721bn (2011). **Population** - 34.4mn (mid-year, 2011). **C$/$ Exchange Rate** - 0.989 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 1.8 | 2.5 | ***1.8*** | ***1.8*** | ***1.8*** | ***2.0*** | ***2.1*** | ***2.3*** | ***2.4*** | ***2.5*** |
| Personal Expenditure | 1.9 | 1.7 | ***1.7*** | ***1.6*** | ***1.9*** | ***2.1*** | ***2.2*** | ***2.2*** | ***2.2*** | ***2.2*** |
| Consumer Prices | 2.4 | 1.6 | ***1.3*** | ***1.6*** | ***1.7*** | ***1.8*** | ***2.1*** | ***2.0*** | ***2.0*** | ***2.0*** |

*Percentage Change (year-on-year).*

## Historical Data

| ** % change on previous year* | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|
| **Gross Domestic Product*** | 1.1 | -2.8 | 3.2 | 2.6 |
| **Personal Expenditure*** | 2.9 | 0.1 | 3.5 | 2.4 |
| **Machinery & Eqpt Investment*** | 0.1 | -20.4 | 13.7 | 10.7 |
| **Pre - Tax Corporate Profits*** | 11.0 | -33.1 | 21.2 | 15.4 |
| **Industrial Production*** | -3.1 | -9.5 | 4.9 | 3.5 |
| **Consumer Prices*** | 2.4 | 0.3 | 1.8 | 2.9 |
| **Industrial Product Prices*** | 4.3 | -3.5 | 1.0 | 4.6 |
| **Average Hourly Earnings*** | 3.5 | 3.0 | 3.0 | 2.0 |
| **Housing Starts, '000 units** | 211 | 149 | 190 | 194 |
| **Unemployment Rate, %** | 6.2 | 8.3 | 8.0 | 7.5 |
| **Current Account, C$ bn** | 1.9 | -46.4 | -60.2 | -52.3 |
| **Federal Govt Budget Balance, fiscal years, C$ bn** | -5.8 | -55.6 | -33.4 | -25.7 *e* |
| **3 mth Trsy Bill, % (end yr)** | 0.9 | 0.2 | 1.0 | 0.8 |
| **10 Yr Govt Bond, % (end yr)** | 2.9 | 3.6 | 3.2 | 1.9 |

*e = consensus estimate based on latest survey*

| Year Average | | Annual Total | | Fiscal Years (Apr-Mar) | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1.0% | | 1.8% | |
| **Unemploy - ment Rate (%)** | | **Current Account (C$ bn)** | | **Federal Govt Budget Balance (C$ bn)** | | **3 month Treasury Bill Rate (%)** | | **10 Year Government Bond Yield (%)** | |
| *Taux de Chômage (%)* | | *Balance Courante (C$ md)* | | *Balance Budgétaire (C$ md)* | | *Rendement sur les Bons du Trésor de 3 mois %* | | *Rendement des Obligations d'État de 10 ans %* | |
| 2012 | 2013 | 2012 | 2013 | FY 12-13 | FY 13-14 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| 7.3 | 7.1 | -61.0 | -41.7 | na | na | 1.1 | 1.9 | 1.9 | 2.5 |
| 7.3 | 7.1 | -66.2 | -63.5 | na | na | 1.0 | 1.0 | 1.8 | 2.6 |
| 7.3 | 7.3 | -70.0 | -69.0 | -20.0 | -15.0 | 1.0 | 1.2 | 1.8 | 2.2 |
| 7.3 | 7.1 | -60.8 | -44.3 | -18.0 | -8.0 | 1.0 | 1.0 | 1.9 | 2.2 |
| 7.3 | 7.2 | -58.5 | -61.6 | -27.0 | -23.0 | na | na | na | na |
| 7.3 | 7.0 | -52.9 | -38.3 | na | na | 1.1 | 1.6 | 2.0 | 2.4 |
| 7.3 | 7.2 | -55.0 | -57.0 | -22.0 | -11.0 | 1.0 | 1.1 | 1.7 | 1.9 |
| 7.2 | 7.1 | -56.0 | -42.0 | na | na | na | na | na | na |
| 7.3 | 7.1 | -58.0 | -35.0 | -18.5 | -8.6 | 1.0 | 1.4 | 1.8 | 2.2 |
| 7.4 | 7.9 | na | na | na | na | 1.0 | 1.0 | 1.7 | 1.7 |
| 7.3 | 7.2 | -49.4 | -43.5 | -20.2 | -10.4 | 1.0 | 1.1 | 1.7 | 2.4 |
| 7.3 | 7.2 | -60.0 | -62.0 | -20.0 | -12.5 | 1.0 | 1.0 | 1.8 | 2.1 |
| 7.3 | 7.3 | -61.0 | -61.0 | -17.0 | -6.0 | 1.0 | 1.1 | 1.8 | 1.8 |
| 7.3 | 7.3 | -60.4 | -57.1 | na | na | 1.0 | 1.1 | 2.0 | 2.5 |
| 7.3 | 7.2 | -59.2 | -52.0 | -20.3 | -11.8 | 1.0 | 1.2 | 1.8 | 2.2 |
| 7.3 | 7.2 | -50.9 | -47.3 | -19.2 | -9.5 | | | | |
| 7.3 | 7.1 | -42.6 | -39.9 | -20.1 | -11.1 | | | | |
| 7.4 | 7.9 | -49.4 | -35.0 | -17.0 | -6.0 | 1.1 | 1.9 | 2.0 | 2.6 |
| 7.2 | 7.0 | -70.0 | -69.0 | -27.0 | -23.0 | 1.0 | 1.0 | 1.7 | 1.7 |
| 0.0 | 0.2 | 5.3 | 11.4 | 3.1 | 5.3 | 0.0 | 0.3 | 0.1 | 0.3 |
| 7.3 | 7.3 | | | | | | | | |
| 6.9 | 6.6 | | | | | | | | |

## Solid on Balance, Though Profits and Production Fading

A modest 0.2% (m-o-m) pickup in GDP growth in July – from rates of 0.1% in both May and June – came on the back of 0.2% rises in both goods and services output. Industrial production jumped by 0.4% (m-o-m), buoyed by a 0.2% advance in the energy sector and a 2.0% monthly surge in utilities output (warmer weather helped to lift usage of electricity and natural gas). Manufacturing, meanwhile, recorded an upbeat 0.6% increase. However, the goods-producing sector did see declines in construction (-0.1%), agriculture (-0.1%) and mining, oil & gas extraction (-0.3%). On the services side, retail trade and the finance & insurance industry helped to shore up activity. Q3 as a whole, though, did see a moderation in GDP growth on a y-o-y basis, from a 2.4% outturn in May and 2.2% increase in June to 1.9% in July. The economy remains relatively solid, if muted, although by no means with the same deceleration seen in the US or the Euro area's spiralling recession. In fact, on the domestic demand front, Canadian retail sales reported an upbeat July, with total sales rising by 0.6% (m-o-m) after a flat June showing, helped by strong automobile trade. However, manufacturing sales reported a second straight month of decline, from a 0.8% (m-o-m) fall in June to -1.5%. New manufacturing orders tumbled even more sharply, by a massive -5.6% over the month. Production expectations have been downgraded this month.

The US Fed's latest foray into quantitative easing should have little bearing on the Bank of Canada's domestic-oriented policy. However, some observers suggest that worsening global economic conditions, easing domestic demand and a benign inflation outlook will prompt the bank to hold off from hiking its overnight lending rate for now.

**Canada Overnight Lending Rate – Oct. 8, 2012 = 1.00%**

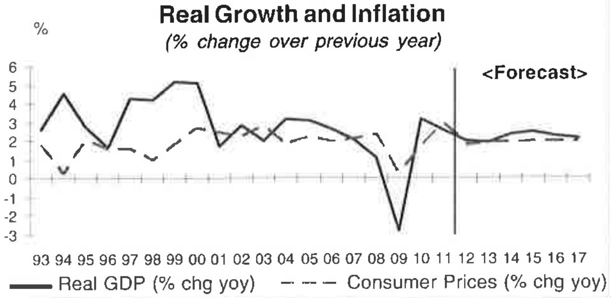
| FORECASTS | End Dec. 2012 | End Mar. 2013 | End June 2013 | End Sep. 2013 |
|---|---|---|---|---|
| Consensus Mean Average: | 1.00% | 1.02% | 1.04% | 1.17% |
| Mode (most frequent forecast): | 1.00% | 1.00% | 1.00% | 1.00% |

### Direction of Trade – 2011

| Major Export Markets (% of Total) | | Major Import Suppliers (% of Total) | |
|---|---|---|---|
| United States | 73.7 | United States | 49.5 |
| United Kingdom | 4.2 | China | 10.8 |
| China | 3.7 | Mexico | 5.5 |
| *EU* | *8.9* | *Asia (ex. Japan)* | *13.7* |
| *Asia (ex. Japan)* | *5.6* | *EU* | *11.7* |
| *Latin America* | *3.1* | *Latin America* | *9.5* |

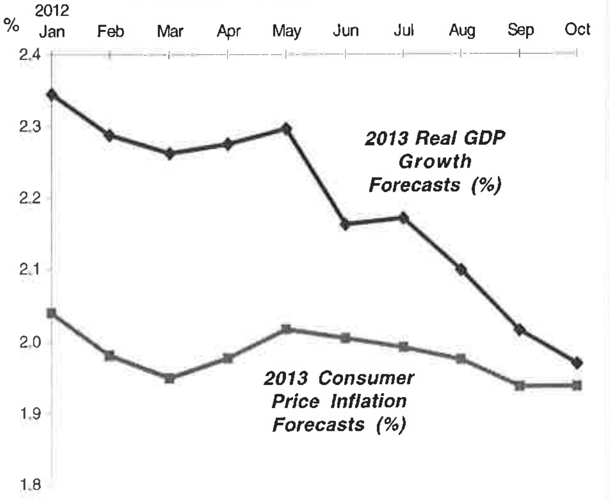
### Real Growth and Inflation

*(% change over previous year)*



### 2013 GDP Growth and Inflation Forecasts

Consensus Forecasts from Survey of:



| *The EURO ZONE is: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Spain, Slovakia and Slovenia.* | Average % Change on Previous Calendar Year | | | | | | | | | | | | | | | | Year Average | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Private Consumption | | Govt Consumption | | Gross Fixed Investment | | Industrial Production | | Consumer Prices (HICP) | | Industrial Producer Prices | | Hourly Labour Costs – Total | | Unemployment Rate (%) | |
| Economic Forecasters | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| European F'cast Network | -0.2 | 0.7 | -0.7 | 0.3 | -0.2 | -0.7 | -3.3 | -1.0 | -1.9 | 1.4 | 2.6 | 1.9 | na | na | 2.3 | 2.3 | 11.3 | 11.8 |
| Allianz | -0.3 | 0.8 | -0.6 | 0.4 | 0.2 | 0.2 | -2.3 | 1.5 | -1.7 | 1.5 | 2.5 | 2.0 | 2.7 | 2.3 | na | na | 11.3 | 11.4 |
| BBVA | -0.3 | 0.3 | -0.6 | 0.0 | -0.4 | -0.5 | -2.9 | -0.1 | na | na | 2.3 | 1.4 | na | na | na | na | 11.2 | 11.5 |
| Credit Suisse | -0.4 | 0.7 | -0.8 | 0.4 | 0.1 | -0.6 | -2.9 | 0.4 | -2.0 | 0.8 | 2.6 | 2.0 | na | na | na | na | 11.2 | 11.5 |
| Bank Julius Baer | -0.4 | 0.3 | -1.2 | -1.4 | 0.1 | 0.4 | -3.8 | -1.7 | -1.6 | 2.8 | 2.5 | 1.5 | 2.2 | 0.4 | 1.4 | 0.0 | 11.4 | 11.4 |
| Commerzbank | -0.4 | 0.0 | -0.8 | 0.1 | 0.2 | 0.2 | -2.7 | -2.4 | -1.7 | 1.0 | 2.6 | 1.9 | 2.9 | 1.8 | 2.5 | 2.3 | 11.2 | 11.8 |
| Societe Generale | -0.4 | -0.2 | -0.7 | 0.0 | 0.1 | -0.2 | -3.2 | -1.2 | na | na | 2.6 | 2.3 | na | na | na | na | 11.2 | 11.6 |
| UBS | -0.4 | 0.2 | -0.7 | 0.1 | 0.3 | -0.8 | -3.4 | -0.3 | na | na | 2.4 | 1.9 | 2.4 | 2.5 | na | na | 11.1 | 11.3 |
| Intesa Sanpaolo | -0.4 | 0.3 | -0.9 | 0.3 | -0.1 | 0.0 | -2.9 | 0.4 | -2.0 | 0.5 | 2.5 | 1.9 | 2.6 | 1.4 | 2.2 | 1.9 | 11.3 | 11.5 |
| BNP-Paribas | -0.4 | 0.0 | -0.9 | -0.2 | 0.0 | -0.4 | -2.8 | -0.2 | -2.3 | 0.3 | 2.5 | 1.8 | na | na | na | na | 11.3 | 12.3 |
| Credit Agricole | -0.4 | 0.3 | -1.0 | 0.0 | 0.0 | -0.4 | -3.6 | -0.7 | na | na | 2.4 | 1.9 | na | na | na | na | 11.3 | 11.7 |
| Morgan Stanley | -0.5 | 0.0 | -0.5 | 0.2 | 0.2 | -0.2 | -2.7 | -0.6 | na | na | 2.2 | 1.2 | na | na | na | na | 11.2 | 11.9 |
| ABN Amro | -0.5 | 0.2 | -0.9 | -0.2 | 0.1 | -0.4 | -3.9 | -2.8 | na | na | 2.4 | 1.5 | na | na | 2.0 | 1.2 | 11.2 | 11.8 |
| Goldman Sachs | -0.5 | 0.2 | -0.5 | 0.6 | -0.3 | -0.2 | -1.5 | 0.8 | -1.6 | 0.3 | 2.5 | 2.1 | 1.2 | 0.7 | 1.5 | 1.6 | 11.5 | 11.8 |
| IHS Global Insight | -0.5 | -0.3 | -1.0 | -0.2 | -0.1 | -0.3 | -3.8 | -1.3 | -2.3 | -0.4 | 2.4 | 1.9 | 2.5 | 2.0 | 1.8 | 2.0 | 11.3 | 11.8 |
| JP Morgan | -0.5 | 0.3 | -1.0 | -0.2 | -0.1 | -0.2 | -3.4 | -0.4 | -2.3 | 0.8 | 2.6 | 1.8 | 2.3 | 0.7 | na | na | 11.3 | 11.5 |
| Lloyds TSB Financial Mrkts | -0.5 | 0.5 | -0.7 | 0.1 | -0.6 | -0.7 | -3.1 | 0.5 | -2.4 | 1.2 | 2.4 | 2.1 | 2.6 | 2.2 | na | na | 11.8 | 11.9 |
| Natixis | -0.5 | -0.4 | -0.9 | -0.7 | 0.0 | -0.6 | -3.2 | -1.8 | na | na | 2.5 | 2.0 | na | na | na | na | 11.3 | 11.9 |
| UniCredit | -0.5 | 0.3 | -0.9 | -0.3 | 0.0 | -0.6 | -3.1 | -0.5 | na | na | 2.6 | 2.0 | 2.7 | 2.2 | 2.0 | 1.8 | 11.3 | 11.6 |
| Grupo Santander | -0.5 | 0.2 | -0.8 | 0.2 | -0.1 | -0.1 | -3.4 | -0.4 | na | na | na | na | na | na | na | na | 11.4 | 11.8 |
| Oxford Economics | -0.6 | -0.1 | -0.9 | -0.3 | 0.0 | -0.7 | -3.2 | -0.8 | -3.0 | 0.0 | 2.5 | 1.7 | 2.4 | 1.3 | na | na | 11.3 | 12.1 |
| Bank of America - Merrill | -0.6 | -0.4 | -1.1 | -0.9 | -0.3 | -1.2 | -3.2 | -1.7 | -2.0 | 0.2 | 2.6 | 2.4 | na | na | na | na | 11.3 | 11.8 |
| Citigroup | -0.6 | -0.9 | -1.1 | -1.0 | -0.3 | -1.1 | -3.2 | -2.2 | -2.2 | -1.3 | 2.5 | 2.2 | na | na | na | na | 11.2 | 11.5 |
| ETLA | -0.6 | 0.5 | -0.5 | 0.2 | -0.9 | 0.5 | -2.4 | -0.1 | -2.8 | 0.5 | 2.1 | 1.8 | na | na | na | na | 10.2 | 11.0 |
| HSBC | -0.6 | -0.1 | -0.8 | -0.2 | 0.1 | -0.8 | -3.3 | -1.5 | -2.0 | 1.1 | 2.5 | 1.8 | na | na | na | na | 11.4 | 12.1 |
| Econ Intelligence Unit | -1.2 | 0.7 | -1.0 | -0.2 | -1.0 | -0.2 | -0.5 | 0.4 | na | na | 1.9 | 1.9 | 0.0 | 2.0 | na | na | 10.7 | 11.0 |
| Consensus (Mean) | -0.5 | 0.2 | -0.8 | -0.1 | -0.1 | -0.4 | -3.0 | -0.7 | -2.1 | 0.7 | 2.4 | 1.9 | 2.2 | 1.6 | 2.0 | 1.6 | 11.2 | 11.7 |
| Last Month's Mean | -0.5 | 0.2 | -0.7 | 0.0 | -0.2 | -0.4 | -2.9 | -0.1 | -2.2 | 0.7 | 2.4 | 1.8 | 2.3 | 1.4 | 2.1 | 1.8 | 11.2 | 11.6 |
| 3 Months Ago | -0.5 | 0.5 | -0.6 | 0.2 | -0.5 | -0.4 | -2.5 | 0.5 | -2.1 | 0.9 | 2.3 | 1.7 | 2.4 | 1.8 | 2.0 | 2.0 | 11.1 | 11.4 |
| High | -0.2 | 0.8 | -0.5 | 0.6 | 0.3 | 0.5 | -0.5 | 1.5 | -1.6 | 2.8 | 2.6 | 2.4 | 2.9 | 2.5 | 2.5 | 2.3 | 11.8 | 12.3 |
| Low | -1.2 | -0.9 | -1.2 | -1.4 | -1.0 | -1.2 | -3.9 | -2.8 | -3.0 | -1.3 | 1.9 | 1.2 | 0.0 | 0.4 | 1.4 | 0.0 | 10.2 | 11.0 |
| Standard Deviation | 0.2 | 0.4 | 0.2 | 0.5 | 0.3 | 0.4 | 0.7 | 1.1 | 0.4 | 0.9 | 0.2 | 0.3 | 0.8 | 0.7 | 0.4 | 0.8 | 0.3 | 0.3 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | |
| Eur Commission (May '12) | -0.3 | 1.0 | -0.6 | 0.5 | -0.8 | 0.0 | -1.5 | 1.9 | | | 2.4 | 1.8 | | | | | 11.0 | 11.0 |
| ECB - midpoint (Sep. '12) | -0.4 | 0.5 | -0.9 | 0.0 | -0.5 | -0.2 | -3.3 | 0.5 | | | 2.5 | 1.9 | | | | | | |
| IMF (Oct. '12) | -0.4 | 0.2 | -1.1 | -0.3 | -0.2 | -0.6 | -3.1 | 0.2 | | | 2.3 | 1.6 | | | | | 11.2 | 11.5 |
| OECD (May '12) | -0.1 | 0.9 | -0.5 | 0.3 | -0.8 | -0.5 | -1.8 | 1.3 | | | 2.4 | 1.9 | | | | | | |

## European Monetary Union

**Euro zone** - The seventeen European countries (listed at the top of this page) are united by a common currency (the euro), monetary policy and adherence to the Maastricht Treaty. **Monetary Policy** - is set by the European Central Bank's (ECB) governing board, headed by Mario Draghi. **Nominal GDP** - Euro 9,422bn (2011). **Population** - 332.0mn (mid-year, 2011). **$/Euro Exchange Rate** - 1.390 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | 0.0 | -0.5 | ***-0.8*** | ***-0.5*** | ***-0.4*** | ***-0.1*** | ***0.4*** | ***0.8*** | ***1.3*** | ***1.3*** |
| Private Consumption | -1.0 | -0.7 | ***-1.0*** | ***-0.7*** | ***-0.6*** | ***-0.3*** | ***-0.1*** | ***0.3*** | ***1.1*** | ***1.0*** |
| Consumer Prices | 2.7 | 2.5 | ***2.5*** | ***2.2*** | ***1.9*** | ***1.8*** | ***1.8*** | ***1.8*** | ***2.1*** | ***2.2*** |

*Percentage Change (year-on-year).*

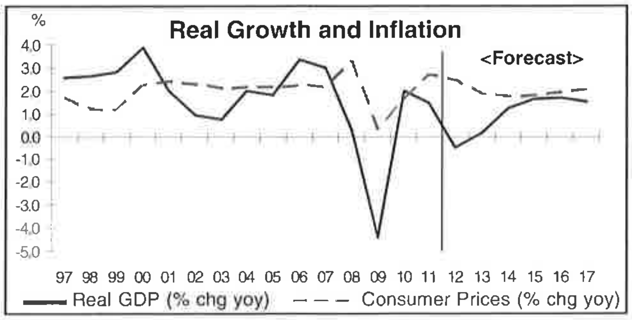
## Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Gross Domestic Product* | 0.3 | -4.4 | 2.0 | 1.5 |
| Private Consumption* | 0.4 | -1.0 | 1.0 | 0.1 |
| Government Consumption* | 2.3 | 2.6 | 0.8 | -0.1 |
| Gross Fixed Capital Formation* | -1.4 | -12.7 | -0.3 | 1.6 |
| Industrial Production* | -1.8 | -14.9 | 7.3 | 3.5 |
| Consumer Prices* | 3.3 | 0.3 | 1.6 | 2.7 |
| Industrial Producer Prices* | 6.1 | -5.1 | 2.9 | 5.9 |
| Hourly Labour Costs – Total* | 3.5 | 2.7 | 1.6 | 2.7 |
| Unemployment Rate, (%) | 7.6 | 9.6 | 10.1 | 10.2 |
| Exports - Goods & Services* | 0.9 | -12.4 | 10.9 | 6.3 |
| Imports - Goods & Services* | 0.8 | -10.9 | 9.3 | 4.1 |
| Current Account, Euro bn | -144 | -21.9 | -6.8 | -2.3 |
| General Govt. Budget Balance (Maastricht definition), Euro bn | -196 | -570 | -571 | -388 |
| Money Supply, M3, end period* | 7.6 | -0.4 | 1.7 | 1.5 |

| Average % Change on Previous Calendar Year | | | | Annual Total | | | | Average % Change on Prev. Year | |
|---|---|---|---|---|---|---|---|---|---|
| Exports of Goods & Services | | Imports of Goods & Services | | Current Account (€ bn) | | General Govt Budget Balance (Maastricht) (€ bn) | | Money Supply, M3, end period | |
| 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| 3.1 | 4.5 | 0.2 | 3.2 | na | na | na | na | na | na |
| 3.0 | 4.0 | 0.6 | 3.7 | 76.9 | 65.0 | -290 | -250 | na | na |
| 2.2 | 3.4 | -0.4 | 2.8 | na | na | na | na | na | na |
| 2.8 | 3.2 | -0.1 | 2.0 | 95.0 | 145.0 | -304 | -242 | na | na |
| 2.7 | 2.4 | -1.6 | -0.9 | na | na | na | na | na | na |
| 2.3 | 2.1 | -0.1 | 0.7 | 10.0 | 20.0 | -326 | -300 | 4.0 | 3.5 |
| 2.9 | 3.1 | 0.0 | 3.1 | na | na | -325 | -281 | na | na |
| 2.8 | 2.7 | 0.1 | 1.8 | 33.1 | 124.3 | -218 | -125 | 2.4 | 1.2 |
| 3.0 | 4.2 | -0.1 | 2.6 | 70.4 | 111.6 | -351 | -269 | 3.4 | 3.8 |
| 2.2 | 2.8 | -0.8 | 2.3 | 90.0 | 140.0 | -314 | -228 | na | na |
| 3.0 | 4.3 | -0.2 | 3.2 | -0.1 | 46.0 | -293 | -220 | na | na |
| 2.2 | 2.7 | -0.6 | 2.0 | 53.8 | 79.1 | -302 | -299 | 4.7 | na |
| 2.4 | 3.1 | -1.0 | 2.1 | 50.0 | 70.0 | -335 | -242 | na | na |
| 2.6 | 2.3 | 0.4 | 2.4 | -5.6 | -6.7 | -378 | -316 | -0.7 | 2.4 |
| 2.6 | 1.0 | -0.3 | 0.8 | 65.0 | 60.0 | -314 | -253 | 3.4 | 2.2 |
| 2.9 | 3.8 | -0.4 | 2.8 | 86.2 | 93.7 | -360 | -270 | na | na |
| 1.9 | 3.1 | -1.0 | 2.6 | 50.5 | 70.0 | -333 | -250 | na | na |
| 2.5 | 1.9 | -0.4 | 0.9 | 25.0 | 15.0 | -345 | -312 | 2.4 | 3.4 |
| 2.0 | 2.0 | -0.9 | 1.2 | na | na | na | na | na | na |
| 2.7 | 3.7 | -0.1 | 3.7 | 38.6 | 68.1 | -367 | -326 | na | na |
| 2.6 | 2.9 | -0.4 | 1.9 | 82.2 | 120.7 | -325 | -243 | na | na |
| 2.9 | 4.0 | -0.2 | 2.7 | 97.1 | 115.4 | -321 | -238 | na | na |
| 2.7 | 1.7 | -0.3 | 0.6 | 44.8 | 35.3 | -315 | -256 | na | na |
| 1.5 | 3.5 | -0.9 | 3.3 | na | na | na | na | na | na |
| 2.5 | 2.5 | -0.3 | 1.5 | na | na | na | na | na | na |
| 1.0 | 2.5 | 0.0 | 2.1 | na | na | -317 | -263 | na | na |
| 2.5 | 3.0 | -0.3 | 2.1 | 53.5 | 76.3 | -322 | -259 | 2.8 | 2.8 |
| 2.4 | 3.2 | -0.3 | 2.4 | 29.6 | 47.8 | -312 | -262 | 2.9 | 2.6 |
| 2.0 | 3.4 | -0.3 | 2.8 | 5.1 | 27.4 | -320 | -257 | 2.8 | 1.9 |
| 3.1 | 4.5 | 0.6 | 3.7 | 97.1 | 145.0 | -218 | -125 | 4.7 | 3.8 |
| 1.0 | 1.0 | -1.6 | -0.9 | -5.6 | -6.7 | -378 | -326 | -0.7 | 1.2 |
| 0.5 | 0.9 | 0.5 | 1.1 | 32.2 | 44.1 | 34 | 44 | 1.7 | 1.0 |
| 2.1 | 4.6 | 0.4 | 3.9 | 13.2 | 54.7 | | | | |
| 3.1 | 4.6 | 0.0 | 3.7 | | | | | | |

### Euro Zone Economic Statistics

The source of all Historical Data (facing page) is **Eurostat**, with the exception of the Current Account and the Money Supply, M3, which are from the **European Central Bank**. The base years and statistics methodologies used by Eurostat may differ from those used by individual Euro zone-member countries included in *Consensus Forecasts*. Eurostat data is often drawn from the national statistical agencies within the Euro zone but is adjusted to achieve standard classifications.


Real Growth and Inflation

## Economy Continues to Contract

Following the ECB's announcement last month of its Outright Monetary Transactions (OMT) programme, economic data appears to have been little affected. September's composite PMI suggests that the Euro area likely dived deeper into recession in Q3. The index stood at 46.1, firmly in contractionary territory on the back of layoffs and slumping orders. Indeed, unemployment reached 11.4% in August, a new high. Manufacturing activity also shrank. Meanwhile, headline inflation edged up from 2.6% (y-o-y) in August to 2.7% in September, pushed up by high energy prices and indirect tax increases stemming from widespread austerity measures. ECB president Mario Draghi expects inflation will fall below the 2% ECB target only in 2013 – as does our panel.

### Euro Zone Interest Rates

Forecasts are provided by a total of more than 80 panellists for **Germany** (page 9), **France** (page 11), **Italy** (page 15), the **Netherlands** (page 20) and **Spain** (page 22). This allows the analysis of forecasts for different yields on individual country 10-year benchmark bonds. Forecasts for 3-month interest rates are all for the EURIBOR rate.

| | **Actual** | **---- Consensus -----** | |
|---|---|---|---|
| | *Oct. 8 '12* | *End Jan. '13* | *End Oct. '13* |
| Euribor, 3-mth, % | 0.2 | 0.3 | 0.4 |
| German 10-yr Govt Bond, % | 1.5 | 1.6 | 1.9 |

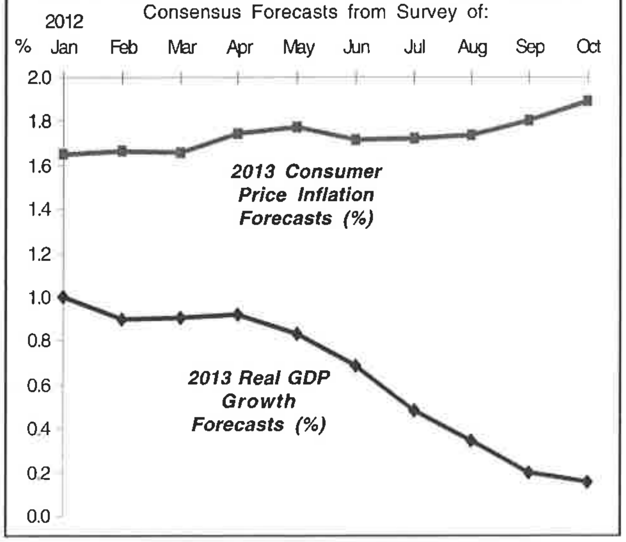
**Euro zone Refinancing Rate – October 8, 2012 = 0.75%**

| **FORECASTS** | **End Dec. 2012** | **End Mar. 2013** | **End June 2013** | **End Sep. 2013** |
|---|---|---|---|---|
| **Consensus Mean Average:** | 0.64% | 0.61% | 0.61% | 0.60% |
| **Mode (most frequent forecast):** | 0.50% | 0.50% | 0.50% | 0.50% |

### Euro Exchange Rates

Consensus forecasts from a survey of approximately 100 panellists are shown on page 27.

### 2013 GDP Growth and Inflation Forecasts



# NETHERLANDS

## OCTOBER 2012

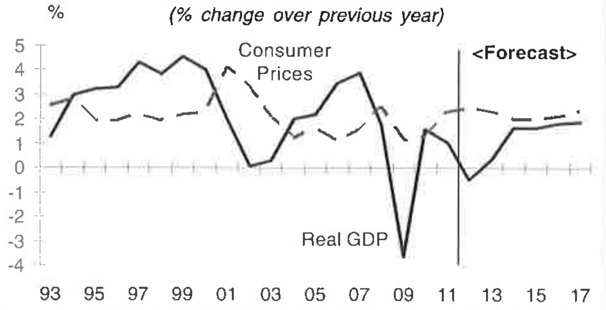
| | Average % Change on Previous Calendar Year | | | | | | | | | | | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Private Con-sumption | | Gross Fixed Investment | | Manufac-turing Produc-tion | | Con-sumer Prices | | Hourly Wages (Manu-facturing) | | Current Account (€ bn) | | General Govt Bud Bal (Maastricht) (€ bn) | | 0.2% 3 month Euro Rate (%) | | 1.7% 10 Year Dutch Govt Bond Yield (%) | |
| **Economic Forecasters** | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| **Feri EuroRatings** | -0.3 | 1.2 | -0.9 | 1.5 | -1.9 | 2.0 | -0.4 | 1.9 | 2.6 | 2.3 | 1.5 | 2.4 | 52.0 | 46.3 | -25.2 | -22.8 | 0.3 | 0.9 | 2.3 | 2.9 |
| **ABN AMRO** | -0.4 | 0.5 | -1.2 | -0.3 | -3.0 | 1.5 | -0.7 | 1.7 | 2.4 | 2.3 | 1.7 | 2.0 | 52.0 | 53.0 | -23.0 | -17.5 | 0.3 | 0.5 | 1.9 | 2.2 |
| **Theodoor Gilissen** | -0.4 | 0.5 | -1.4 | -0.3 | -3.1 | 0.2 | -1.2 | 1.3 | 2.7 | 2.6 | 1.7 | 1.5 | na | na | -25.0 | -22.0 | 0.2 | 0.5 | 1.7 | 2.2 |
| **UBS** | -0.4 | 0.6 | -1.0 | 0.2 | -2.6 | 3.0 | na | na | 2.2 | 2.2 | na | na | 33.5 | 32.0 | -18.8 | -17.0 | 0.8 | 0.8 | 2.6 | 2.9 |
| **Rabobank Nederland** | -0.5 | 0.5 | -1.0 | 0.0 | -3.1 | -0.3 | na | na | 2.5 | 2.0 | na | na | 56.7 | 68.2 | -21.7 | -16.4 | 0.2 | 0.4 | 2.0 | 2.5 |
| **ING** | -0.6 | 0.2 | -1.2 | -0.4 | -2.6 | -0.3 | -2.0 | 0.5 | 2.5 | 2.5 | 1.3 | 1.5 | na | na | -24.0 | -19.0 | 0.3 | 0.6 | 1.8 | 2.1 |
| **NIBC** | -0.7 | -1.0 | -1.2 | -0.5 | -3.1 | -2.6 | -0.9 | -0.6 | 2.5 | 2.4 | 1.8 | 1.8 | 56.0 | 58.0 | -25.0 | -22.0 | 0.3 | 0.5 | 2.0 | 2.4 |
| **Consensus (Mean)** | -0.5 | 0.4 | -1.1 | 0.0 | -2.8 | 0.5 | -1.0 | 1.0 | 2.5 | 2.3 | 1.6 | 1.8 | 50.0 | 51.5 | -23.2 | -19.5 | 0.3 | 0.6 | 2.0 | 2.5 |
| **Last Month's Mean** | -0.5 | 0.5 | -1.1 | -0.2 | -2.6 | 0.9 | -1.2 | 0.7 | 2.5 | 2.3 | 1.6 | 1.6 | 48.4 | 48.6 | -23.8 | -20.0 | | | | |
| **3 Months Ago** | -0.7 | 0.6 | -1.2 | -0.3 | -3.0 | 0.9 | -1.0 | 1.2 | 2.4 | 2.4 | 1.6 | 1.7 | 53.2 | 55.1 | -25.6 | -20.9 | | | | |
| **High** | -0.3 | 1.2 | -0.9 | 1.5 | -1.9 | 3.0 | -0.4 | 1.9 | 2.7 | 2.6 | 1.8 | 2.4 | 56.7 | 68.2 | -18.8 | -16.4 | 0.8 | 0.9 | 2.6 | 2.9 |
| **Low** | -0.7 | -1.0 | -1.4 | -0.5 | -3.1 | -2.6 | -2.0 | -0.6 | 2.2 | 2.0 | 1.3 | 1.5 | 33.5 | 32.0 | -25.2 | -22.8 | 0.2 | 0.4 | 1.7 | 2.1 |
| **Standard Deviation** | 0.1 | 0.7 | 0.2 | 0.7 | 0.4 | 1.8 | 0.6 | 1.0 | 0.2 | 0.2 | 0.2 | 0.4 | 9.5 | 13.5 | 2.3 | 2.7 | 0.2 | 0.2 | 0.3 | 0.3 |
| **Comparison Forecasts** | | | | | | | | | | | | | | | | | | | | |
| **CPB (Oct. '12)** | -0.4 | 0.8 | -1.1 | -0.1 | -2.8 | 1.1 | | | 2.3 | 1.9 | | | 50.7 | 59.1 | -22.5 | -17.0 | 0.7 | 0.5 | 2.0 | 2.4 |
| **Eur Commission (May '12)** | -0.9 | 0.7 | -1.5 | 0.0 | -3.9 | 0.2 | | | | | | | 48.6 | 52.2 | | | | | | |
| **IMF (Oct. '12)** | -0.5 | 0.4 | | | | | | | 2.2 | 1.8 | | | | | -22.4 | -19.7 | | | | |
| **OECD (May '12)** | -0.6 | 0.7 | -0.7 | -0.2 | -1.9 | 2.5 | | | 2.4 | 1.5 | | | | | | | | | | |

◈ Q2 GDP growth was subject to a 0.1% upgrade as the second estimate pointed to a contraction of 0.4% (y-o-y), rather than a previously announced -0.5%. This alteration is primarily due Q2 exports holding up against deteriorating Euro zone demand. Meanwhile, household consumption declined by 1.5% (y-o-y) in July, although September saw an uptick in consumer confidence due to improved sentiment regarding the economic climate.

◈ Further fiscal tightening is widely expected as pro-European Dutch PM Mark Rutte retained power and initiated talks to form a coalition government with the Labour party.

### Real Growth and Inflation

*(% change over previous year)*



### Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **Gross Domestic Product*** | 1.8 | -3.7 | 1.6 | 1.1 |
| **Private Consumption*** | 1.3 | -2.1 | 0.3 | -1.0 |
| **Gross Fixed Investment*** | 4.5 | -12.0 | -7.2 | 5.7 |
| **Manufacturing Production*** | -1.4 | -8.6 | 7.0 | 3.3 |
| **Consumer Prices*** | 2.5 | 1.2 | 1.3 | 2.3 |
| **Hourly Wages (manufacturing)*** | 3.7 | 2.8 | 1.2 | 1.2 |
| **Current Account, transactions basis, Euro bn** | 25.5 | 29.7 | 45.1 | 58.6 |
| **General Govt. Budget Balance (Maastricht definition), Euro bn** | 3.1 | -31.8 | -30.0 | -28.1 |
| **3 mth Euro, % (end yr)** | 2.8 | 0.7 | 1.0 | 1.4 |
| **10 Yr Dutch Govt Bond Yield, % (end yr)** | 3.6 | 3.6 | 3.2 | 2.2 |

**Nominal GDP** - Euro 604.0bn (2011). **Popn** - 16.7mn (mid-year, 2011). **$/Euro Exch. Rate** - 1.390 (average, 2011).

### Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

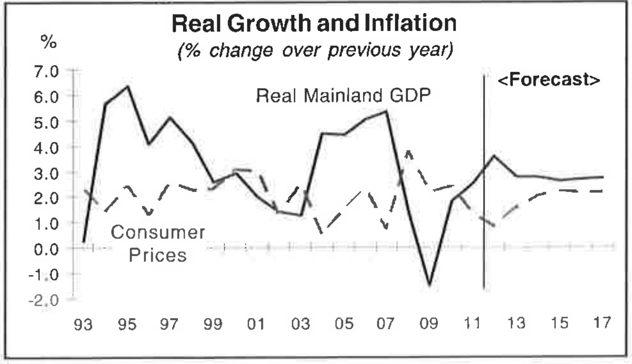
| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | -0.8 | -0.6 | ***-0.5*** | ***0.1*** | ***0.1*** | ***0.3*** | ***0.7*** | ***1.0*** | ***1.1*** | ***1.2*** |
| Consumer Prices | 2.5 | 2.2 | ***2.3*** | ***2.8*** | ***2.7*** | ***2.7*** | ***2.3*** | ***2.2*** | ***2.0*** | ***2.1*** |

*Percentage Change (year-on-year).*

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product (Mainland) | | Private Consumption | | Gross Fixed Investment | | Manufacturing Production | | Consumer Prices | | Wages & Salaries | | Current Account (Nkr bn) | | General Govt Budget Balance (Nkr bn) | | 2.0% 3 month Interbank Rate (%) | | 2.0% 10 Year Govt Bond Yield (%) | |
| Economic Forecasters | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| Feri EuroRatings | 4.1 | 2.8 | 3.4 | 3.3 | 8.2 | 5.0 | 2.6 | 2.7 | 0.8 | 1.8 | 3.7 | 2.5 | 420 | 404 | 376 | 372 | 2.2 | 2.3 | 2.2 | 2.8 |
| Swedbank | 3.7 | 2.9 | 3.6 | 3.1 | 6.5 | 6.0 | 3.1 | 2.7 | 0.8 | 1.8 | 4.0 | 4.2 | 468 | 397 | 365 | 431 | 1.9 | 2.1 | 2.6 | 3.0 |
| DNB | 3.7 | 2.5 | 3.5 | 3.5 | 7.5 | 4.1 | 2.5 | 1.5 | 0.6 | 1.1 | 4.3 | 4.0 | 440 | 400 | 400 | 350 | 1.9 | 2.1 | 2.1 | 2.4 |
| Nordea Markets | 3.7 | 3.0 | 3.7 | 3.5 | 7.2 | 4.9 | na | na | 0.8 | 1.8 | 4.2 | 4.3 | 437 | 497 | 400 | 435 | 2.0 | 2.4 | 2.5 | 2.9 |
| NYKredit | 3.7 | 3.0 | 3.5 | 3.4 | 7.0 | 5.7 | na | na | 0.9 | 1.9 | 4.2 | 4.1 | 423 | 430 | 383 | 412 | na | na | na | na |
| Bank of America - Merrill | 3.6 | 2.5 | 3.5 | na | 3.7 | 4.5 | 2.5 | na | 0.7 | 1.5 | na | na | 384 | na | na | na | na | na | na | na |
| Statistics Norway | 3.6 | 3.1 | 3.6 | 4.7 | 8.0 | 5.8 | na | na | 0.9 | 1.6 | 4.2 | 3.7 | 440 | 349 | na | na | 2.1 | 2.4 | na | na |
| Citigroup | 3.5 | 3.2 | 3.6 | 3.5 | na | na | na | na | 0.8 | 1.7 | na | na | 440 | 398 | na | na | na | na | 2.2 | 2.4 |
| UBS | 3.2 | 2.1 | 3.2 | 2.9 | 6.3 | 5.8 | na | na | 0.9 | 0.9 | na | na | 564 | 604 | 250 | 250 | 1.8 | 1.8 | 2.0 | 2.3 |
| NHO Conf Nor Enterprise | 2.8 | 2.5 | 3.5 | 3.5 | 4.5 | 4.5 | na | na | 1.0 | 1.3 | na | na | na | na | na | na | na | na | na | na |
| Consensus (Mean) | 3.6 | 2.8 | 3.5 | 3.5 | 6.5 | 5.1 | 2.7 | 2.3 | 0.8 | 1.5 | 4.1 | 3.8 | 446 | 435 | 362 | 375 | 2.0 | 2.2 | 2.3 | 2.6 |
| Last Month's Mean | 3.5 | 2.8 | 3.4 | 3.4 | 6.4 | 5.5 | 2.4 | 2.0 | 0.8 | 1.5 | 4.1 | 3.8 | 437 | 428 | 362 | 364 | | | | |
| 3 Months Ago | 2.8 | 2.8 | 3.2 | 3.3 | 5.5 | 5.1 | 1.4 | 1.7 | 1.1 | 1.7 | 3.9 | 4.1 | 413 | 412 | 374 | 381 | | | | |
| High | 4.1 | 3.2 | 3.7 | 4.7 | 8.2 | 6.0 | 3.1 | 2.7 | 1.0 | 1.9 | 4.3 | 4.3 | 564 | 604 | 400 | 435 | 2.2 | 2.4 | 2.6 | 3.0 |
| Low | 2.8 | 2.1 | 3.2 | 2.9 | 3.7 | 4.1 | 2.5 | 1.5 | 0.6 | 0.9 | 3.7 | 2.5 | 384 | 349 | 250 | 250 | 1.8 | 1.8 | 2.0 | 2.3 |
| Standard Deviation | 0.4 | 0.3 | 0.1 | 0.5 | 1.5 | 0.7 | 0.3 | 0.7 | 0.1 | 0.3 | 0.2 | 0.7 | 50 | 80 | 57 | 70 | 0.1 | 0.2 | 0.2 | 0.3 |
| Comparison Forecasts | | | | | | | | | | | | | | | | | | | | |
| Bank of Norway (Aug. '12) | 3.8 | 3.3 | 3.5 | 4.3 | | | | | 1.0 | 1.8 | 4.0 | 4.3 | | | | | | | | |
| OECD (May '12) | 2.7 | 3.6 | 3.0 | 4.3 | 5.7 | 5.2 | | | 1.1 | 2.1 | | | | | | | | | | |

◈ The CPI fell by 0.4% (m-o-m) in August as a strong Norwegian krone, supported by domestic assets attracting outside capital flows, exerted downward inflationary pressure. However, mounting household debt is threatening long-term stability; moreover, the economy continues to grow rapidly. Norges Bank is therefore unlikely to lower interest rates for now.

◈ Exports soared by 7.5% (y-o-y) in August. However, retail sales contracted by 0.2% (m-o-m) in August and household consumption flatlined. The consensus forecast for 2012 GDP growth rose to 3.6% this month.


**Real Growth and Inflation**

*(% change over previous year)*

## Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **GDP (Mainland)*** | 1.4 | -1.5 | 1.8 | 2.5 |
| **Private Consumption*** | 2.0 | -0.2 | 3.6 | 2.4 |
| **Gross Fixed Investment*** | 0.1 | -7.5 | -5.2 | 6.3 |
| **Manufacturing Production*** | 2.9 | -6.4 | 2.8 | 0.9 |
| **Consumer Prices*** | 3.8 | 2.2 | 2.4 | 1.3 |
| **Wages & Salaries per Full-Time Employee (Total)*** | 5.6 | 4.6 | 3.0 | 4.1 |
| **Current Account, Nkr bn** | 408 | 255 | 314 | 394 |
| **General Govt. Bud Bal, Nkr bn** | 481 | 251 | 282 | 374 |
| **3 mth Interbank Rate, % (end year)** | 3.9 | 2.2 | 2.6 | 2.9 |
| **10 Yr Govt Bond Yield, % (end year)** | 3.9 | 4.2 | 3.7 | 2.4 |

**Nominal GDP (total)** - Nkr 2,721bn (2011). **Population** - 4.9mn (mid-yr, 2011). **Nkr/$ Exchange Rate** - 5.605 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product (Mainland) | 4.2 | 3.7 | ***3.4*** | ***3.2*** | ***2.8*** | ***2.5*** | ***2.7*** | ***2.8*** | ***2.9*** | ***2.9*** |
| Consumer Prices | 0.8 | 0.4 | ***0.7*** | ***1.2*** | ***1.1*** | ***1.4*** | ***1.8*** | ***1.6*** | ***1.8*** | ***1.9*** |

*Percentage Change (year-on-year).*

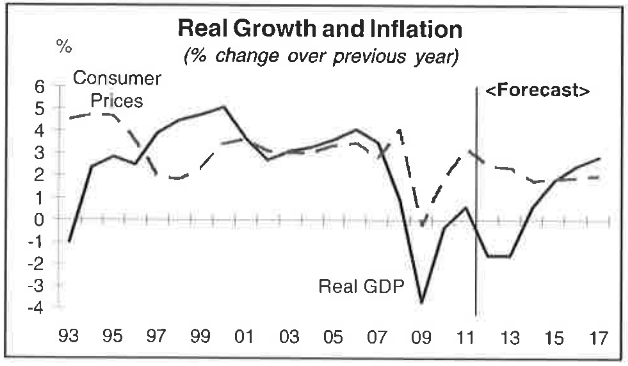
| | Average % Change on Previous Calendar Year | | | | | | | | | | | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | House-hold Con-sumption | | Gross Fixed Invest-ment | | Industrial Produc-tion | | Con-sumer Prices | | Salary Cost per Hour | | Current Account (€ bn) | | General Govt Bud Bal (Maastricht) (€ bn) | | 0.2% | | 5.7% | |
| | | | | | | | | | | | | | | | | | 3 month Euro Rate (%) | | 10 Year Spanish Govt Bond Yield (%) | |
| **Economic Forecasters** | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| BBVA | -1.4 | -1.4 | -2.0 | -2.8 | -9.4 | -5.6 | na | na | 2.1 | 1.5 | na | na | -12.5 | 7.3 | -67.0 | -53.1 | 0.4 | 0.5 | 5.8 | 5.9 |
| Goldman Sachs | -1.4 | -1.4 | -1.6 | -1.1 | -8.5 | -2.2 | -6.8 | -9.2 | 2.3 | 2.3 | na | na | -25.5 | -13.6 | -70.6 | -62.5 | na | na | na | na |
| IFL-Univers Carlos III | -1.4 | -1.6 | -1.5 | -1.2 | -9.2 | -6.8 | -5.0 | -4.2 | 2.4 | 2.3 | na | na | -23.2 | -7.3 | na | na | na | na | na | na |
| Bankia | -1.5 | -1.6 | -2.3 | -2.4 | -9.2 | -3.7 | -5.0 | -1.7 | 2.6 | 2.6 | 0.0 | 0.4 | -22.2 | 6.3 | na | na | 0.1 | 0.1 | 5.3 | 5.0 |
| Grupo Santander | -1.5 | -1.4 | -2.0 | -1.7 | -9.1 | -6.5 | na | na | 2.5 | 2.7 | na | na | -25.5 | -13.8 | na | na | 0.3 | 0.3 | na | na |
| HSBC | -1.5 | -2.0 | -1.8 | -1.8 | -9.4 | -7.5 | -5.6 | -2.6 | 2.4 | 2.5 | na | na | -29.1 | -7.1 | na | na | 0.2 | 0.2 | 5.5 | 5.3 |
| La Caixa | -1.5 | -1.5 | -1.9 | -1.5 | -9.8 | -5.6 | -6.1 | -1.1 | 2.5 | 2.4 | 1.0 | 1.0 | -22.8 | -2.4 | -71.5 | -47.3 | 0.3 | 0.6 | 5.3 | 5.1 |
| CEOE | -1.6 | -1.6 | -2.1 | -2.1 | -9.7 | -4.7 | -5.7 | -3.8 | 2.4 | 1.7 | na | na | -26.5 | -10.5 | -72.7 | -51.5 | 0.3 | 0.5 | 5.8 | 4.8 |
| Inst L R Klein (Gauss) | -1.6 | -1.1 | -1.6 | -1.0 | -9.4 | -4.8 | -5.0 | -2.0 | 2.3 | 1.5 | 1.3 | 1.5 | -12.0 | 11.0 | -66.9 | -47.7 | 0.2 | 0.2 | 5.8 | 5.2 |
| UBS | -1.6 | -1.7 | -2.1 | -2.2 | -10.0 | -8.2 | na | na | 2.4 | 3.1 | na | na | -27.4 | -22.0 | -75.6 | -57.0 | 0.8 | 0.8 | na | na |
| CEPREDE | -1.6 | -1.2 | -2.0 | -1.3 | -9.3 | -4.3 | -5.1 | -3.6 | 2.4 | 2.4 | 1.3 | 1.3 | -17.7 | 8.1 | -74.6 | -35.3 | 0.4 | 0.5 | 4.8 | 4.3 |
| FUNCAS | -1.7 | -1.5 | -1.8 | -2.6 | -9.4 | -6.4 | -7.1 | -2.9 | 2.5 | 2.3 | -0.3 | -0.5 | -20.2 | 11.0 | -65.8 | -32.1 | 0.4 | 0.9 | 5.5 | 5.2 |
| AFI | -1.7 | -2.1 | -2.2 | -2.5 | -9.5 | -4.6 | na | na | 2.4 | 2.3 | na | na | -17.0 | 1.1 | -73.3 | -48.6 | 0.2 | 0.4 | 5.3 | 5.2 |
| Citigroup | -1.8 | -3.2 | -2.3 | -4.1 | -10.0 | -9.8 | na | na | 2.4 | 3.2 | na | na | -14.6 | 18.9 | -69.4 | -57.2 | 0.1 | 0.0 | na | na |
| Econ Intelligence Unit | -2.1 | -1.2 | -2.4 | -1.3 | -4.2 | -1.7 | -10.3 | -5.2 | 2.5 | 2.9 | na | na | na | na | na | na | na | na | na | na |
| **Consensus (Mean)** | -1.6 | -1.6 | -2.0 | -2.0 | -9.1 | -5.5 | -6.2 | -3.6 | 2.4 | 2.4 | 0.7 | 0.7 | -21.2 | -0.9 | -70.7 | -49.2 | 0.3 | 0.4 | 5.4 | 5.1 |
| Last Month's Mean | -1.6 | -1.4 | -1.8 | -1.7 | -8.9 | -4.9 | -5.5 | -3.1 | 2.3 | 2.2 | 0.7 | 0.9 | -22.5 | -1.8 | -67.0 | -45.9 | | | | |
| 3 Months Ago | -1.7 | -0.9 | -1.6 | -1.2 | -8.4 | -4.0 | -5.1 | -1.6 | 1.8 | 1.5 | 0.6 | 0.9 | -21.0 | -4.6 | -64.5 | -42.7 | | | | |
| High | -1.4 | -1.1 | -1.5 | -1.0 | -4.2 | -1.7 | -5.0 | -1.1 | 2.6 | 3.2 | 1.3 | 1.5 | -12.0 | 18.9 | -65.8 | -32.1 | 0.8 | 0.9 | 5.8 | 5.9 |
| Low | -2.1 | -3.2 | -2.4 | -4.1 | -10.0 | -9.8 | -10.3 | -9.2 | 2.1 | 1.5 | -0.3 | -0.5 | -29.1 | -22.0 | -75.6 | -62.5 | 0.1 | 0.0 | 4.8 | 4.3 |
| Standard Deviation | 0.2 | 0.5 | 0.3 | 0.8 | 1.4 | 2.2 | 1.6 | 2.3 | 0.1 | 0.5 | 0.8 | 0.8 | 5.6 | 11.8 | 3.4 | 9.5 | 0.2 | 0.3 | 0.3 | 0.4 |
| **Comparison Forecasts** | | | | | | | | | | | | | | | | | | | | |
| Eur Commission (May '12) | -1.8 | -0.3 | -2.2 | -1.3 | -7.9 | -3.2 | | | | | | | -21.4 | -10.4 | | | | | | |
| IMF (Oct. '12) | -1.5 | -1.3 | -2.2 | -2.4 | -8.9 | -4.1 | | | 2.4 | 2.4 | | | | | -74.0 | -60.0 | | | | |
| OECD (May '12) | -1.6 | -0.8 | -2.9 | -1.8 | -9.3 | -2.4 | | | 1.6 | 2.1 | | | | | | | | | | |

◈ Raising the retirement age, cutting government spending by 8.9% and freezing public sector pay were among the sweeping austerity measures proposed in Spain's 2013 budget. While extensive fiscal tightening was met with widespread public protests, the financial markets have reacted relatively favourably, with 10-year Spanish government bond yields falling by 30bp to 5.7% since the budget was announced.

◈ Preliminary estimates show that inflation accelerated from 2.7% (y-o-y) in August to 3.5% in September, spurred by a 3% sales tax hike on September 1.

### Real Growth and Inflation

*(% change over previous year)*



### Historical Data

| ** % change on previous year* | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **Gross Domestic Product*** | 0.9 | -3.7 | -0.3 | 0.5 |
| **Household Consumption*** | -0.6 | -3.9 | 0.6 | -0.8 |
| **Gross Fixed Investment*** | -4.7 | -18.0 | -6.2 | -5.3 |
| **Industrial Production*** | -7.1 | -16.2 | 0.9 | -1.8 |
| **Consumer Prices*** | 4.1 | -0.3 | 1.8 | 3.2 |
| **Salary Cost per Hour*** | 4.8 | 5.3 | 1.1 | 2.1 |
| **Current Account, Euro bn** | -105 | -50.5 | -47.4 | -37.5 |
| **General Govt. Budget Balance** (Maastricht definition), Euro bn | -48.9 | -117 | -98.2 | -91.3 |
| **3 mth Euro, % (end yr)** | 2.8 | 0.7 | 1.0 | 1.4 |
| **10 Yr Spanish Govt Bond Yield, % (end yr)** | 3.8 | 4.0 | 5.5 | 5.1 |

**Nominal GDP** - Euro1,073bn (2011). **Popn** - 46.5mn (mid-year, 2011). **$/Euro Exch. Rate** - 1.390 (average, 2011).

### Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

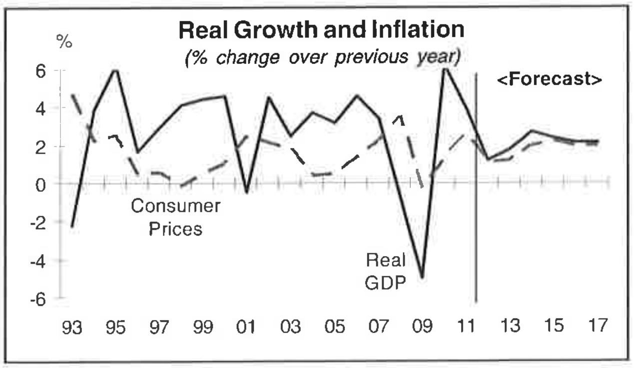
| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Gross Domestic Product | -0.6 | -1.3 | ***-2.1*** | ***-2.7*** | ***-2.8*** | ***-2.3*** | ***-1.4*** | ***-0.2*** | ***0.8*** | ***1.0*** |
| Consumer Prices | 2.0 | 2.0 | ***2.5*** | ***2.9*** | ***2.8*** | ***2.8*** | ***2.3*** | ***1.8*** | ***1.9*** | ***2.0*** |

*Percentage Change (year-on-year)*

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | 1.5% | | 1.5% | |
| | Gross Domestic Product | | Household Consumption | | Gross Fixed Investment | | Mining & Manufacturing Production | | Consumer Prices | | Hourly Earnings (Mining & Manuf.) | | Current Account (Skr bn) | | General Govt Budget Balance (Skr bn) | | 3 month Interbank Rate (%) | | 10 Year Govt Bond Yield (%) | |
| **Economic Forecasters** | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| **UBS** | 1.8 | 1.2 | 1.8 | 1.5 | 4.3 | 0.4 | na | na | 1.2 | 1.4 | na | na | 193 | 225 | na | na | 1.2 | 1.2 | 2.0 | 2.4 |
| **Econ Intelligence Unit** | 1.6 | 1.8 | 1.7 | 1.7 | 4.3 | 2.1 | -2.8 | 1.5 | 1.0 | 1.1 | na | na | na | na | na | na | na | na | na | na |
| **Nordea** | 1.5 | 1.8 | 1.7 | 2.0 | 2.5 | 1.0 | na | na | 1.2 | 1.2 | na | na | 259 | 280 | -12.0 | -38.0 | 1.5 | 1.8 | 1.8 | 2.4 |
| **SBAB Bank** | 1.4 | 2.0 | 1.5 | 2.0 | 2.5 | 1.5 | -2.0 | 3.0 | 1.0 | 1.2 | 3.2 | 2.8 | 225 | 225 | -25.0 | -50.0 | 1.4 | 1.6 | 1.7 | 2.5 |
| **Bank of America Merrill** | 1.3 | 1.6 | 1.9 | na | 5.0 | na | na | na | 0.8 | na | na | na | 224 | na | na | na | na | na | na | na |
| **Erik Penser Bank** | 1.3 | 2.0 | 2.2 | 2.2 | 4.8 | 3.5 | na | na | 1.1 | 1.2 | 3.3 | 3.1 | 241 | 235 | -5.0 | -8.0 | 1.6 | 1.6 | 1.7 | 2.0 |
| **Goldman Sachs** | 1.3 | 1.9 | 1.7 | 1.6 | 4.8 | 4.7 | -1.2 | 2.4 | 1.3 | 1.3 | na | na | 238 | 210 | na | na | na | na | na | na |
| **National Institute - NIER** | 1.3 | 1.8 | 2.0 | 2.9 | 3.9 | 3.3 | -2.0 | 3.0 | 1.1 | 0.8 | 4.0 | 2.6 | 246 | 239 | -10.0 | -13.8 | na | na | 1.9 | 2.6 |
| **SE Banken** | 1.3 | 1.5 | 1.5 | 2.0 | 2.5 | 3.0 | na | na | 1.1 | 0.8 | 3.5 | 3.1 | na | na | na | na | 1.6 | 1.5 | 1.6 | 1.8 |
| **NYKredit** | 1.1 | 1.6 | 1.8 | 2.1 | 4.1 | 2.1 | -1.2 | 1.8 | 1.2 | 1.2 | na | na | 239 | 254 | -7.5 | -18.0 | 1.5 | 1.7 | 1.7 | 2.2 |
| **Citigroup** | 1.0 | 1.9 | 1.5 | 1.7 | 4.1 | 1.9 | na | na | 1.1 | 1.5 | na | na | 245 | 256 | na | na | na | na | 1.4 | 1.6 |
| **Svenska Handelsbanken** | 1.0 | 1.7 | 1.7 | 2.0 | 4.2 | 2.5 | -1.1 | 3.1 | 1.0 | 0.7 | 3.1 | 2.8 | 238 | 225 | -15.0 | -25.0 | 1.5 | 1.5 | 1.4 | 1.1 |
| **Confed of Swed Enterprise** | 0.9 | 1.2 | 1.5 | 2.0 | 3.0 | 3.0 | -3.1 | -1.8 | 1.0 | 1.1 | na | na | 230 | 220 | na | na | 1.4 | 1.6 | 1.5 | 2.0 |
| **HSBC** | 0.8 | 2.1 | 1.6 | 1.2 | 4.6 | 3.1 | na | na | na | na | na | na | na | na | na | na | 1.8 | 1.8 | 1.4 | 1.6 |
| **Swedbank** | 0.8 | 1.7 | 1.5 | 2.5 | 3.2 | 2.2 | -3.5 | 1.8 | 1.1 | 1.2 | 3.5 | 3.0 | 225 | 220 | -5.0 | -20.0 | 1.5 | 1.8 | 1.6 | 2.5 |
| **Morgan Stanley** | 0.5 | 1.4 | 1.4 | 1.4 | 5.1 | 1.6 | na | na | 1.2 | 1.6 | na | na | 238 | 256 | -10.1 | 0.6 | 1.8 | 2.1 | 1.9 | 1.8 |
| **Consensus (Mean)** | 1.2 | 1.7 | 1.7 | 1.9 | 3.9 | 2.4 | -2.1 | 1.9 | 1.1 | 1.2 | 3.4 | 2.9 | 234 | 237 | -11.2 | -21.5 | 1.5 | 1.7 | 1.7 | 2.0 |
| **Last Month's Mean** | 1.3 | 1.8 | 1.7 | 2.0 | 3.9 | 2.5 | -1.7 | 2.8 | 1.2 | 1.4 | 3.4 | 2.9 | 242 | 245 | -10.5 | -14.2 | | | | |
| **3 Months Ago** | 0.7 | 2.0 | 1.5 | 2.1 | 2.9 | 3.0 | -2.2 | 3.5 | 1.2 | 1.6 | 3.3 | 3.0 | 246 | 251 | -11.9 | -3.4 | | | | |
| **High** | 1.8 | 2.1 | 2.2 | 2.9 | 5.1 | 4.7 | -1.1 | 3.1 | 1.3 | 1.6 | 4.0 | 3.1 | 259 | 280 | -5.0 | 0.6 | 1.8 | 2.1 | 2.0 | 2.6 |
| **Low** | 0.5 | 1.2 | 1.4 | 1.2 | 2.5 | 0.4 | -3.5 | -1.8 | 0.8 | 0.7 | 3.1 | 2.6 | 193 | 210 | -25.0 | -50.0 | 1.2 | 1.2 | 1.4 | 1.1 |
| **Standard Deviation** | 0.3 | 0.3 | 0.2 | 0.4 | 0.9 | 1.1 | 0.9 | 1.6 | 0.1 | 0.3 | 0.3 | 0.2 | 16 | 20 | 6.5 | 16.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| **Comparison Forecasts** | | | | | | | | | | | | | | | | | | | | |
| **Riksbank (July '12)** | 0.9 | 1.7 | 1.5 | 1.6 | 4.7 | 1.5 | | | 1.1 | 1.7 | | | | | | | | | | |
| **Eur Commission (May '12)** | 0.3 | 2.1 | 1.1 | 1.8 | 1.1 | 3.3 | | | | | | | | | | | | | | |
| **IMF (Oct. '12)** | 1.2 | 2.2 | | | | | | | 1.4 | 2.0 | | | | | -7.9 | -8.9 | | | | |
| **OECD (May '12)** | 0.6 | 2.8 | 0.9 | 3.2 | 2.1 | 4.4 | | | 1.4 | 1.7 | | | | | | | | | | |

◈ Sweden unveiled a budget aimed at stimulating growth through investment in research and infrastructure, alongside a 4.5% reduction in the corporate tax rate. These measures will hopefully help to combat unemployment which unexpectedly edged up from 7% in July to 7.2% in August.

◈ The Riksbank cut its benchmark interest rate by 25bp to 1.25% last month amid concerns over the strength of the Swedish krona and its effect on the export sector. August inflation remained at 0.7% (y-o-y), allowing further room for possible rate cuts before the end of the year.


**Real Growth and Inflation**
*(% change over previous year)*

## Historical Data

| * % change on previous year | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **Gross Domestic Product*** | -0.8 | -5.0 | 6.3 | 3.9 |
| **Household Consumption*** | -0.1 | -0.2 | 3.9 | 2.2 |
| **Gross Fixed Investment*** | 1.1 | -15.5 | 6.7 | 6.9 |
| **Min. & Manufacturing Prodn*** | -3.4 | -19.3 | 8.8 | 6.8 |
| **Consumer Prices*** | 3.5 | -0.3 | 1.3 | 2.6 |
| **Average Hourly Earnings (Mining & Manufacturing)*** | 4.2 | 2.0 | 3.2 | 2.8 |
| **Current Account, Skr bn** | 290 | 208 | 222 | 226 |
| **General Govt. Bud Bal, Skr bn** | 69.5 | -30.4 | -0.7 | 6.4 |
| **3 mth Interbank Rate, % (end yr)** | 2.4 | 0.5 | 2.0 | 2.6 |
| **10 Yr Govt Bond Yield, % (end yr)** | 2.4 | 3.4 | 3.3 | 1.6 |

**Nominal GDP** - Skr 3,492bn (2011). **Population** - 9.4mn (mid-year, 2011). **Skr/$ Exchange Rate** - 6.494 (average, 2011).

## Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| **Gross Domestic Product** | 1.6 | 2.2 | ***1.0*** | ***2.0*** | ***1.7*** | ***1.2*** | ***1.9*** | ***2.2*** | ***2.6*** | ***2.6*** |
| **Consumer Prices** | 1.8 | 1.1 | ***0.9*** | ***0.9*** | ***1.1*** | ***1.3*** | ***1.3*** | ***1.5*** | ***1.8*** | ***1.9*** |

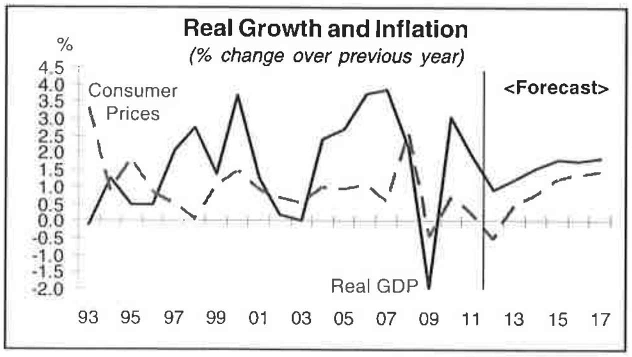
*Percentage Change (year-on-year).*

# SWITZERLAND OCTOBER 2012

| | Average % Change on Previous Calendar Year | | | | | | | | | | | | Annual Total | | | | Rates on Survey Date | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Domestic Product | | Private Consumption | | Gross Fixed Investment | | Industrial Production | | Consumer Prices | | Merchandise Exports (SwFr bn) | | Current Account (SwFr bn) | | General Govt Budget Balance (SwFr bn) | | -0.1% 3 month Euro-Franc Rate (%) | | 0.5% 10 Year Govt Bond Yield (%) | |
| **Economic Forecasters** | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | End Jan'13 | End Oct'13 | End Jan'13 | End Oct'13 |
| **Citigroup** | 1.2 | 1.0 | 2.3 | 0.5 | 2.4 | 4.0 | na | na | -0.8 | -1.3 | na | na | 72.4 | 70.3 | na | na | 0.0 | 0.0 | 0.6 | 0.7 |
| **Goldman Sachs** | 1.2 | 1.1 | 1.6 | 0.3 | -0.6 | 0.1 | na | na | 0.0 | 0.7 | na | na | 83.9 | 84.3 | -1.1 | -0.4 | na | na | na | na |
| **UBS** | 1.1 | 1.4 | 2.3 | 1.7 | 1.0 | 3.4 | na | na | -0.5 | 1.2 | na | na | na | na | na | na | 0.1 | 0.1 | 0.8 | 1.2 |
| **Bank Vontobel** | 1.0 | 1.4 | 2.4 | 1.9 | 0.6 | 1.1 | na | na | -0.7 | 0.5 | na | na | 86.0 | 95.0 | 3.2 | 3.8 | 0.1 | 0.1 | 0.7 | 1.2 |
| **ING Financial Markets** | 1.0 | 1.0 | 2.0 | 1.2 | -0.9 | 1.1 | na | na | na | na | na | na | na | na | na | na | 0.0 | 0.1 | 0.5 | 1.1 |
| **Pictet & Cie** | 1.0 | 1.5 | 2.2 | 1.6 | 0.5 | 1.5 | na | na | -0.6 | 0.4 | na | na | 75.0 | 70.0 | 4.0 | 3.0 | 0.0 | 0.1 | 0.7 | 1.0 |
| **HSBC** | 0.9 | 1.4 | 2.3 | 1.6 | 0.8 | 2.5 | -0.6 | 2.2 | -0.6 | 0.3 | na | na | na | na | na | na | 0.1 | 0.1 | 0.5 | 0.6 |
| **IHS Global Insight** | 0.9 | 1.0 | 2.2 | 1.2 | 0.2 | 0.9 | 2.0 | 1.5 | -0.5 | 0.6 | 204 | 212 | 80.6 | 79.2 | 3.2 | 0.2 | -0.1 | -0.1 | 0.6 | 0.5 |
| **KOF Swiss Econ Inst** | 0.9 | 1.3 | 2.4 | 1.7 | 2.5 | 2.1 | na | na | -0.6 | 0.5 | 199 | 207 | 62.8 | 66.7 | 4.1 | 0.8 | 0.0 | 0.1 | 1.0 | 1.5 |
| **BAK Basel** | 0.9 | 1.2 | 2.2 | 1.4 | 1.7 | 1.2 | 1.3 | 1.5 | -0.6 | 0.1 | 198 | 203 | 73.5 | 76.4 | 4.1 | 2.4 | 0.1 | 0.1 | 0.7 | 0.9 |
| **Econ Intelligence Unit** | 0.8 | 1.2 | 2.3 | 2.0 | 0.9 | 2.6 | 2.9 | 3.9 | -0.9 | 0.0 | na | na | na | na | na | na | na | na | na | na |
| **Swiss Life** | 0.8 | 1.0 | 2.0 | 1.1 | 0.9 | 1.8 | 2.0 | 3.5 | -0.6 | 0.2 | na | na | na | na | na | na | na | na | na | na |
| **Bank Julius Baer** | 0.7 | 1.0 | 2.2 | 0.9 | 1.3 | 2.2 | 1.0 | 0.8 | -0.6 | 0.8 | 197 | 198 | 66.5 | 63.6 | 3.0 | 0.5 | 0.1 | 0.1 | 0.6 | 1.2 |
| **Zürcher Kantonalbank** | 0.6 | 1.5 | 2.3 | 1.5 | 0.2 | 1.3 | 0.0 | 3.1 | -0.5 | 1.0 | 196 | 200 | 81.7 | 87.1 | 4.2 | 2.5 | 0.1 | 0.1 | 0.7 | 1.3 |
| **Credit Suisse** | 0.5 | 1.5 | 1.5 | 1.5 | 0.3 | 2.7 | na | na | -0.3 | 1.0 | na | na | na | na | na | na | 0.1 | 0.1 | 0.8 | 1.2 |
| **Consensus (Mean)** | 0.9 | 1.2 | 2.2 | 1.3 | 0.8 | 1.9 | 1.2 | 2.3 | -0.6 | 0.4 | 199 | 204 | 75.8 | 77.0 | 3.1 | 1.6 | 0.1 | 0.1 | 0.7 | 1.0 |
| **Last Month's Mean** | 1.0 | 1.3 | 2.0 | 1.3 | 0.8 | 1.8 | 0.5 | 2.3 | -0.5 | 0.5 | 200 | 206 | 80.1 | 81.2 | 2.7 | 1.5 | | | | |
| **3 Months Ago** | 1.2 | 1.4 | 1.7 | 1.4 | 1.1 | 2.2 | 1.2 | 2.5 | -0.5 | 0.6 | 202 | 209 | 81.8 | 82.4 | 2.4 | 1.9 | | | | |
| **High** | 1.2 | 1.5 | 2.4 | 2.0 | 2.5 | 4.0 | 2.9 | 3.9 | 0.0 | 1.2 | 204 | 212 | 86.0 | 95.0 | 4.2 | 3.8 | 0.1 | 0.1 | 1.0 | 1.5 |
| **Low** | 0.5 | 1.0 | 1.5 | 0.3 | -0.9 | 0.1 | -0.6 | 0.8 | -0.9 | -1.3 | 196 | 198 | 62.8 | 63.6 | -1.1 | -0.4 | -0.1 | -0.1 | 0.5 | 0.5 |
| **Standard Deviation** | 0.2 | 0.2 | 0.3 | 0.5 | 0.9 | 1.0 | 1.2 | 1.2 | 0.2 | 0.6 | 3 | 6 | 7.9 | 10.4 | 1.8 | 1.5 | 0.1 | 0.1 | 0.1 | 0.3 |
| **Comparison Forecasts** | | | | | | | | | | | | | | | | | | | | |
| **IMF (Oct. '12)** | 0.8 | 1.4 | | | | | | | -0.5 | 0.5 | | | | | 2.9 | 2.9 | | | | |
| **OECD (May '12)** | 0.9 | 1.9 | 1.2 | 1.6 | 2.8 | 3.8 | | | -0.5 | 0.1 | | | | | | | | | | |
| **SECO (June '12)** | 1.4 | 1.5 | 1.7 | 1.3 | | | | | -0.4 | 0.5 | | | | | | | | | | |

◈ Deflationary pressures eased in September as the CPI rose by 0.3% (m-o-m) and the y-o-y rate went from -0.5% in August to -0.4% in September. The competitiveness of exports received a boost last month as the strain on the currency cap softened and the Swiss franc traded at 1.216SwFr/euro, its weakest level in over 8 months.

◈ Meanwhile, the downturn intensified as the PMI for manufacturing pointed to a contraction for the sixth consecutive month, falling sharply from 46.7 in August to 43.6 in September. The consensus forecast for 2012 GDP growth fell to 0.9% (y-o-y) this month from 1% in September.



### Historical Data

| * % change on previous year | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| **Gross Domestic Product*** | 2.2 | -1.9 | 3.0 | 1.9 |
| **Private Consumption*** | 1.2 | 1.8 | 1.6 | 1.2 |
| **Gross Fixed Investment*** | 0.7 | -8.0 | 4.8 | 4.0 |
| **Industrial Production*** | 1.4 | -8.0 | 6.4 | 0.8 |
| **Consumer Prices*** | 2.6 | -0.5 | 0.7 | 0.2 |
| **Merch Exports, SwFr bn** | 206 | 181 | 193 | 198 |
| **Current Account, SwFr bn** | 11.8 | 58.8 | 82.8 | 83.7 |
| **General Govt. Bud. Bal. SwFr bn** | 3.5 | 10.5 | 3.6 | 3.6 *e* |
| **3 mth Euro-Franc Rate, % (end yr)** | 1.1 | 0.3 | 0.5 | 0.2 |
| **10 Yr Govt Bond Yield, % (end yr)** | 2.2 | 2.0 | 1.7 | 0.7 |

*e = consensus estimate based on latest survey*

**Nominal GDP** - SwFr 564.8bn (2011). **Population** - 7.7mn (mid-year, 2011). **SwFr/$ Exchange Rate** - 0.888 (average, 2011).

### Quarterly Consensus Forecasts

*Historical Data and Forecasts (bold italics) From Survey of* ***September 10, 2012***

| | 2012 | | | | 2013 | | | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| **Gross Domestic Product** | 1.2 | 0.6 | ***0.9*** | ***0.9*** | ***0.7*** | ***1.1*** | ***1.5*** | ***1.7*** | ***1.8*** | ***1.7*** |
| **Consumer Prices** | -0.9 | -1.0 | ***-0.6*** | ***0.0*** | ***0.2*** | ***0.4*** | ***0.6*** | ***0.7*** | ***0.9*** | ***1.0*** |

*Percentage Change (year-on-year)*

Forecasts for the countries in Western Europe, the Middle East and Africa shown on the next two pages were provided by the following leading economic forecasters:

| | | |
|---|---|---|
| *Bank Leumi* | *Bank of America Merrill* | *Citigroup* |
| *Danske Bank* | *Economist Intelligence Unit* | *Euromonitor* |
| *Experian* | *Fitch Ratings* | *NYKredit* |
| *Oxford Economics* | | *UniCredit* |

*e = consensus estimate based on latest survey*

| **AUSTRIA** Population - 8.4mn (2011, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$417.3bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 1.4 | -3.8 | 2.1 | 2.7 | **0.7** | **1.0** |
| Industrial Production (% change on previous year) | 1.4 | -10.1 | 5.7 | 6.0 | **1.3** | **1.5** |
| Consumer Prices (% change on previous year) | 3.2 | 0.5 | 1.9 | 3.3 | **2.2** | **2.0** |
| Current Account (US Dollar bn) | 20.2 | 10.4 | 11.4 | 8.1 | **8.1** | **10.0** |

| **BELGIUM** Population - 10.8mn (2011, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$512.9bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 1.0 | -2.7 | 2.4 | 1.8 | **-0.3** | **0.1** |
| Industrial Production (% change on previous year) | 3.5 | -9.4 | 12.1 | 5.5 | **-5.2** | **-1.9** |
| Consumer Prices (% change on previous year) | 4.5 | -0.1 | 2.2 | 3.5 | **2.7** | **2.0** |
| Current Account (US Dollar bn) | -8.3 | -7.4 | 6.6 | -5.1 | **-0.7** | **1.3** |

| **DENMARK** Population - 5.6mn (2011, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$332.8bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | -0.8 | -5.8 | 1.3 | 0.8 | **0.1** | **1.1** |
| Manufacturing Production (% change on previous year) | -0.3 | -17.2 | 2.4 | 4.7 | **-1.1** | **1.5** |
| Consumer Prices (% change on previous year) | 3.4 | 1.3 | 2.3 | 2.7 | **2.4** | **2.0** |
| Current Account (US Dollar bn) | 9.9 | 10.2 | 17.2 | 21.5 | **17.2** | **15.4** |

| **EGYPT** Population - 84.5mn (2010, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$213.1bn (2010)[1] | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year)[1] | 7.2 | 4.6 | 5.2 | 1.8 | **2.1** | **2.9** |
| Consumer Prices (% change on previous year) | 18.3 | 11.9 | 11.1 | 10.1 | **8.3** | **9.5** |
| Current Account (US Dollar bn) | -1.4 | -3.3 | -4.5 | -6.4 *e* | **-8.2** | **-8.3** |

[1] *year(s) ending June 30*

| **FINLAND** Population - 5.4mn (2011, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$266.3bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 0.3 | -8.5 | 3.3 | 2.7 | **0.5** | **1.1** |
| Industrial Production (% change on previous year) | 0.7 | -18.2 | 4.7 | 1.5 | **-1.9** | **2.1** |
| Consumer Prices (% change on previous year) | 4.1 | 0.0 | 1.2 | 3.5 | **2.9** | **2.4** |
| Current Account (US Dollar bn) | 7.1 | 4.2 | 3.6 | -4.2 | **-1.5** | **-0.2** |

| **GREECE** Population - 11.4mn (2011, mid-year) | **Historical Data** | | | | **Consensus Forecasts** | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$299.0bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | -0.2 | -3.3 | -3.5 | -6.9 | **-6.7** | **-3.6** |
| Industrial Production (% change on previous year) | -4.0 | -9.4 | -5.9 | -7.8 | **-7.3** | **-2.2** |
| Consumer Prices (% change on previous year) | 4.2 | 1.2 | 4.7 | 3.3 | **1.3** | **2.3** |
| Current Account (US Dollar bn) | -51.0 | -35.9 | -30.4 | -29.3 | **-17.3** | **-13.4** |

## ADDITIONAL COUNTRIES

**OCTOBER 2012**

| **IRELAND** Population - 4.5mn (2011, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$217.5bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | -2.1 | -5.5 | -0.8 | 1.4 | **-0.1** | **1.1** |
| Industrial Production (% change on previous year) | -2.4 | -4.3 | 7.7 | 0.0 | **0.1** | **0.8** |
| Consumer Prices (% change on previous year) | 4.1 | -4.5 | -1.0 | 2.6 | **1.7** | **1.5** |
| Current Account (US Dollar bn) | -14.9 | -5.2 | 2.4 | 2.5 | **2.6** | **3.7** |

| **ISRAEL** Population - 7.6mn (2011, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$239.1bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 4.0 | 0.8 | 4.8 | 4.8 | **3.1** | **3.2** |
| Industrial Production (% change on previous year) | 6.6 | -6.0 | 8.1 | 2.5 | **2.9** | **3.2** |
| Consumer Prices (% change on previous year) | 4.6 | 3.3 | 2.7 | 3.4 | **1.9** | **2.3** |
| Current Account (US Dollar bn) | 2.2 | 7.3 | 8.2 | 1.9 | **-3.5** | **-3.3** |

| **NIGERIA** Popn - 158.3mn (2010, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$231.7bn (2010) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 6.0 | 7.0 | 8.0 | 7.2 | **7.0** | **5.1** |
| Consumer Prices (% change on previous year) | 11.6 | 11.5 | 13.7 | 10.8 | **10.0** | **9.1** |
| Current Account (US Dollar bn) | 29.1 | 13.8 | 13.3 | 8.7 | **12.6** | **10.8** |

| **PORTUGAL** Population - 10.7mn (2011, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$237.7bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 0.0 | -2.9 | 1.4 | -1.7 | **-3.3** | **-2.3** |
| Industrial Production (% change on previous year) | -4.1 | -8.1 | 1.5 | -1.9 | **-5.6** | **-3.4** |
| Consumer Prices (% change on previous year) | 2.6 | -0.8 | 1.3 | 3.7 | **3.0** | **1.8** |
| Current Account (US Dollar bn) | -31.8 | -25.6 | -22.8 | -15.4 | **-7.2** | **-4.9** |

| **SAUDI ARABIA** Popn - 28.1mn (2011, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$576.8bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 4.2 | 0.1 | 5.1 | 7.1 | **5.9** | **4.6** |
| Consumer Prices (% change on previous year) | 9.9 | 5.0 | 5.4 | 5.0 | **5.2** | **5.2** |
| Current Account (US Dollar bn) | 132.3 | 21.0 | 66.8 | 158.5 | **157.5** | **118.1** |

| **SOUTH AFRICA** Popn - 50.5mn (2011, mid-year) | Historical Data | | | | Consensus Forecasts | |
|---|---|---|---|---|---|---|
| Nominal GDP - US$408.2bn (2011) | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Gross Domestic Product (% change on previous year) | 3.6 | -1.5 | 2.9 | 3.1 | **2.6** | **3.2** |
| Manufacturing Production (% change on previous year) | 0.6 | -13.0 | 5.0 | 2.6 | **1.4** | **2.1** |
| Consumer Prices (% change on previous year) | 11.5 | 7.1 | 4.3 | 5.0 | **5.5** | **5.4** |
| Current Account (US Dollar bn) | -19.6 | -11.5 | -10.2 | -13.6 | **-20.8** | **-20.6** |

*e = consensus estimate based on latest survey*

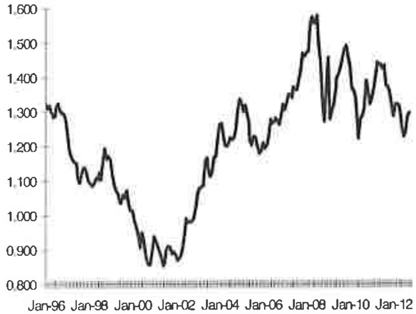
## OCTOBER 2012 FOREIGN EXCHANGE FORECASTS

### Foreign Exchange Rates

| *¹All US$ rates are amounts of currency per dollar, except the UK pound and the euro which are reciprocals. A positive (+) sign for the % change implies an appreciation of the currency against the US Dollar and vice versa.* | Historical Data | | | | Latest Spot Rate (Oct. 8) | Consensus Forecasts | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rates at end of: | | | | | Forecast End Jan. 2013 | Percent Change | Forecast End Oct. 2013 | Percent Change | Forecast End Oct. 2014 | Percent Change |
| | 2008 | 2009 | 2010 | 2011 | | | | | | | |
| **Rates per US Dollar¹** | | | | | | | | | | | |
| **Canadian Dollar** | 1.225 | 1.047 | 1.001 | 1.021 | 0.976 | 0.982 | -0.6 | 0.987 | -1.1 | 1.015 | -3.8 |
| **Egyptian Pound** | 5.504 | 5.475 | 5.793 | 6.017 | 6.093 | 6.233 | -2.2 | 6.398 | -4.8 | 6.596 | -7.6 |
| **European Euro** | 1.392 | 1.441 | 1.336 | 1.294 | 1.297 | 1.268 | -2.2 | 1.239 | -4.5 | 1.250 | -3.6 |
| **Israeli Shekel** | 3.802 | 3.775 | 3.549 | 3.821 | 3.871 | 4.011 | -3.5 | 3.990 | -3.0 | 4.090 | -5.4 |
| **Japanese Yen** | 90.75 | 92.06 | 81.45 | 77.72 | 78.16 | 79.26 | -1.4 | 81.61 | -4.2 | 83.90 | -6.8 |
| **Nigerian Naira** | 132.6 | 149.6 | 150.7 | 158.3 | 157.0 | 165.4 | -5.1 | 170.4 | -7.9 | 176.5 | -11.0 |
| **Saudi Arabian Riyal** | 3.750 | 3.750 | 3.750 | 3.750 | 3.750 | 3.750 | 0.0 | 3.750 | 0.0 | 3.750 | 0.0 |
| **South African Rand** | 9.305 | 7.380 | 6.632 | 8.143 | 8.883 | 8.287 | +7.2 | 8.204 | +8.3 | 8.290 | +7.1 |
| **United Kingdom Pound** | 1.458 | 1.620 | 1.566 | 1.546 | 1.603 | 1.590 | -0.8 | 1.566 | -2.3 | 1.582 | -1.3 |
| **Rates per Euro** | | | | | | | | | | | |
| **Danish Krone** | 7.451 | 7.442 | 7.454 | 7.435 | 7.457 | 7.446 | +0.2 | 7.441 | +0.2 | 7.454 | 0.0 |
| **Norwegian Krone** | 9.860 | 8.310 | 7.781 | 7.750 | 7.398 | 7.349 | +0.7 | 7.275 | +1.7 | 7.431 | -0.4 |
| **Swedish Krona** | 10.87 | 10.25 | 8.966 | 8.913 | 8.607 | 8.472 | +1.6 | 8.371 | +2.8 | 8.488 | +1.4 |
| **Swiss Franc** | 1.480 | 1.485 | 1.255 | 1.218 | 1.211 | 1.208 | +0.3 | 1.214 | -0.3 | 1.240 | -2.3 |

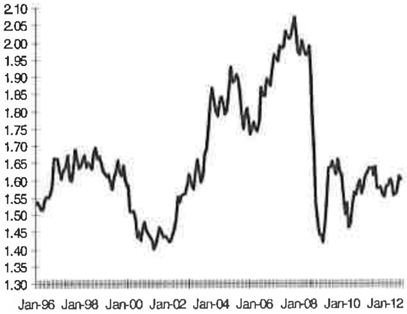
**Yen per US$**

**US$ per Euro¹**



*¹ historical rates up to January 1, 1999, are calculated as "synthetic" euro exchange rates based on a weighted average of the eleven original component currencies.*

**US$ per UK Pound**



## OCTOBER 2012 OIL PRICES

| West Texas Intermediate, US$ per barrel | | |
|---|---|---|
| **Range 1985-2012** | 10.4 - 145.3 | |
| **Spot Rate (Oct. 8)** | 89.43 | |
| **October Survey** | Forecast for End Jan. 2013 | Forecast for End Oct. 2013 |
| **Mean Forecast** | 97.0 | 98.7 |
| **High** | 117.0 | 121.4 |
| **Low** | 85.0 | 80.0 |
| **Standard Deviation** | 7.3 | 8.8 |
| **No. of Forecasts** | 65 | 66 |

### Volatility Follows Oil Price Declines

Brent and West Texas Intermediate (WTI) eased noticeably in the latter part of September and early October. Brent fell from US$117.26 per barrel on September 17 to US$109.72 on October 4 while WTI spot crude went from US$98.94 per barrel on September 14 to US$88.19 on October 3 – roughly a US$10 drop for both measures. The global downturn has put a dampener on oil prices, especially with the Euro area recession and slowing US and Asian indicators. Prices are expected to remain volatile, though, in light of tighter supply issues and the ongoing threat of disruption in the Middle East. Some traders worry that Saudi Arabia may not be able to shield consumers against an oil price shock triggered by tensions over Iran's nuclear programme and Syria's civil war.

*continued from page 3*

## France

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -0.2 | -3.1 | 1.6 | 1.7 | 0.1 | 0.3 | 1.2 | 1.5 | 1.7 | 1.7 | 1.8 |
| **Household Consumption*** | 0.2 | 0.2 | 1.4 | 0.2 | 0.0 | 0.1 | 0.9 | 1.2 | 1.4 | 1.5 | 1.7 |
| **Business Investment*** | 2.3 | -13.5 | 5.9 | 5.1 | 0.1 | 0.2 | 2.1 | 2.7 | 2.7 | 2.6 | 2.6 |
| **Manufacturing Production*** | -3.5 | -13.9 | 4.5 | 3.2 | -2.7 | -0.9 | 1.5 | 1.5 | 2.2 | 2.1 | 2.2 |
| **Consumer Prices*** | 2.8 | 0.1 | 1.5 | 2.1 | 2.1 | 1.7 | 1.8 | 1.8 | 1.9 | 2.0 | 2.0 |
| **Current Account Balance (Euro bn)** | -33.7 | -25.1 | -30.2 | -38.9 | -42.8 | -40.2 | -32.0 | -25.8 | -22.0 | -30.0 | -21.0 |
| **10 Year Treasury Bond Yield, %[2]** | 3.5 | 3.6 | 3.4 | 3.2 | 2.3 [3] | 2.6 [4] | 3.1 | 3.4 | 3.5 | 3.5 | 3.9 |

## United Kingdom

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -1.0 | -4.0 | 1.8 | 0.9 | -0.2 | 1.2 | 1.9 | 2.2 | 2.2 | 2.1 | 2.0 |
| **Household Consumption*** | -1.6 | -3.0 | 1.3 | -1.1 | 0.2 | 1.1 | 2.1 | 2.2 | 2.1 | 1.8 | 1.9 |
| **Gross Fixed Investment*** | -4.6 | -13.7 | 3.5 | -2.4 | 1.2 | 2.7 | 5.5 | 6.0 | 5.4 | 4.1 | 3.5 |
| **Manufacturing Production*** | -2.5 | -9.7 | 3.9 | 2.0 | -1.1 | 1.1 | 2.5 | 2.5 | 2.0 | 1.5 | 1.3 |
| **Retail Prices (underlying rate)*** | 4.3 | 2.0 | 4.8 | 5.3 | 3.1 | 2.7 | 3.1 | 3.6 | 4.0 | 4.6 | 4.0 |
| **Consumer Prices*** | 3.6 | 2.2 | 3.3 | 4.5 | 2.7 | 2.2 | 2.3 | 2.5 | 2.8 | 3.3 | 2.9 |
| **Current Account Balance (£ bn)** | -14.4 | -17.7 | -37.3 | -29.0 | -46.4 | -33.0 | -30.3 | -25.2 | -21.2 | -27.2 | -25.1 |
| **10 Year Treasury Bond Yield, %[2]** | 3.0 | 4.0 | 3.6 | 2.1 | 1.7 [3] | 1.9 [4] | 2.6 | 2.7 | 3.8 | 4.2 | 4.6 |

## Italy

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -1.2 | -5.5 | 1.8 | 0.5 | -2.4 | -0.7 | 0.7 | 1.1 | 0.9 | 1.0 | 1.0 |
| **Household Consumption*** | -0.8 | -1.6 | 1.2 | 0.2 | -3.3 | -1.3 | 0.6 | 0.9 | 1.0 | 0.7 | 0.7 |
| **Gross Fixed Investment*** | -3.8 | -11.7 | 1.7 | -1.2 | -8.4 | -2.5 | 1.8 | 2.5 | 2.3 | 2.3 | 2.2 |
| **Industrial Production*** | -3.4 | -18.8 | 6.8 | 0.1 | -6.5 | -1.7 | 0.9 | 1.7 | 0.9 | 1.5 | 2.1 |
| **Consumer Prices*** | 3.3 | 0.8 | 1.5 | 2.8 | 3.2 | 2.3 | 1.7 | 1.7 | 1.8 | 2.4 | 2.1 |
| **Current Account Balance (Euro bn)** | -44.9 | -30.2 | -54.7 | -51.5 | -23.9 | -11.8 | -16.0 | -12.8 | 1.1 | 15.0 | 5.0 |
| **10 Year Treasury Bond Yield, %[2]** | 4.3 | 4.2 | 4.9 | 7.0 | 5.2 [3] | 4.9 [4] | 4.7 | 4.5 | 4.8 | 4.7 | 4.5 |

## Canada

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 1.1 | -2.8 | 3.2 | 2.6 | 2.0 | 2.0 | 2.3 | 2.5 | 2.3 | 2.1 | 2.0 |
| **Personal Expenditure*** | 2.9 | 0.1 | 3.5 | 2.4 | 1.7 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 |
| **Machinery & Eqpt Investment*** | 0.1 | -20.4 | 13.7 | 10.7 | 3.4 | 6.3 | 6.2 | 4.8 | 4.2 | 3.8 | 3.2 |
| **Industrial Production*** | -3.1 | -9.5 | 4.9 | 3.5 | 1.6 | 2.5 | 2.8 | 2.8 | 2.8 | 2.6 | 2.3 |
| **Consumer Prices*** | 2.4 | 0.3 | 1.8 | 2.9 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| **Current Account Balance (C$ bn)** | 1.9 | -46.4 | -60.2 | -52.3 | -59.2 | -52.0 | -45.1 | -37.6 | -32.3 | -30.8 | -36.5 |
| **10 Year Treasury Bond Yield, %[2]** | 2.9 | 3.6 | 3.2 | 1.9 | 1.8 [3] | 2.2 [4] | 2.7 | 3.6 | 4.2 | 4.5 | 4.5 |

## Euro zone

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 0.3 | -4.4 | 2.0 | 1.5 | -0.5 | 0.2 | 1.2 | 1.6 | 1.7 | 1.5 | 1.3 |
| **Private Consumption*** | 0.4 | -1.0 | 1.0 | 0.1 | -0.8 | -0.1 | 0.5 | 1.0 | 1.0 | 1.3 | 1.3 |
| **Gross Fixed Investment*** | -1.4 | -12.7 | -0.3 | 1.6 | -3.0 | -0.7 | 2.2 | 3.4 | 3.1 | 3.1 | 3.0 |
| **Industrial Production*** | -1.8 | -14.9 | 7.3 | 3.5 | -2.1 | 0.7 | 1.8 | 2.4 | 1.9 | 1.8 | 1.7 |
| **Consumer Prices*** | 3.3 | 0.3 | 1.6 | 2.7 | 2.4 | 1.9 | 1.7 | 1.8 | 2.0 | 2.1 | 2.0 |
| **Current Account Balance (Euro bn)** | -144 | -21.9 | -6.8 | -2.3 | 53.5 | 76.3 | 65.1 | 105.2 | 140.7 | 150.0 | 100.0 |

*[1] Signifies average for period [2] End period [3] End January 2013 [4] End October 2013*

## The Netherlands

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 1.8 | -3.7 | 1.6 | 1.1 | -0.5 | 0.4 | 1.5 | 1.6 | 1.8 | 1.9 | 2.1 |
| **Private Consumption*** | 1.3 | -2.1 | 0.3 | -1.0 | -1.1 | 0.0 | 0.9 | 1.4 | 1.3 | 1.7 | 2.5 |
| **Gross Fixed Investment*** | 4.5 | -12.0 | -7.2 | 5.7 | -2.8 | 0.5 | 2.2 | 3.3 | 3.2 | 3.0 | 3.5 |
| **Manufacturing Production*** | -1.4 | -8.6 | 7.0 | 3.3 | -1.0 | 1.0 | 1.6 | 1.6 | 1.9 | 2.2 | 2.3 |
| **Consumer Prices*** | 2.5 | 1.2 | 1.3 | 2.3 | 2.5 | 2.3 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 |
| **Current Account Balance (Euro bn)** | 25.5 | 29.7 | 45.1 | 58.6 | 50.0 | 51.5 | 49.3 | 44.7 | 42.9 | 42.0 | 42.0 |
| **10 Year Treasury Bond Yield, %[2]** | 3.6 | 3.6 | 3.2 | 2.2 | 2.0[3] | 2.5[4] | 3.0 | 3.3 | 4.1 | 4.5 | 4.5 |

## Norway

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Dom Prod (Mainland)*** | 1.4 | -1.5 | 1.8 | 2.5 | 3.6 | 2.8 | 2.8 | 2.6 | 2.7 | 2.7 | 2.6 |
| **Private Consumption*** | 2.0 | -0.2 | 3.6 | 2.4 | 3.5 | 3.5 | 3.5 | 3.5 | 3.0 | 3.0 | 3.0 |
| **Gross Fixed Investment*** | 0.1 | -7.5 | -5.2 | 6.3 | 6.5 | 5.1 | 4.0 | 2.3 | 3.4 | 3.3 | 3.2 |
| **Manufacturing Production*** | 2.9 | -6.4 | 2.8 | 0.9 | 2.7 | 2.3 | 1.6 | 1.7 | 1.8 | 1.8 | 1.7 |
| **Consumer Prices*** | 3.8 | 2.2 | 2.4 | 1.3 | 0.8 | 1.5 | 2.0 | 2.2 | 2.2 | 2.2 | 2.1 |
| **Current Account Balance (Nkr bn)** | 408 | 255 | 314 | 394 | 446 | 435 | 368 | 374 | 399 | 394 | 378 |
| **10 Year Treasury Bond Yield, %[2]** | 3.9 | 4.2 | 3.7 | 2.4 | 2.3[3] | 2.6[4] | 3.5 | 3.8 | 4.5 | 4.5 | 4.5 |

## Spain

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 0.9 | -3.7 | -0.3 | 0.5 | -1.6 | -1.6 | 0.6 | 1.7 | 2.4 | 2.8 | 2.6 |
| **Household Consumption*** | -0.6 | -3.9 | 0.6 | -0.8 | -2.0 | -2.0 | 0.3 | 1.4 | 2.1 | 2.5 | 2.1 |
| **Gross Fixed Investment*** | -4.7 | -18.0 | -6.2 | -5.3 | -9.1 | -5.5 | 0.9 | 2.9 | 4.0 | 4.1 | 3.6 |
| **Industrial Production*** | -7.1 | -16.2 | 0.9 | -1.8 | -6.2 | -3.6 | 2.1 | 3.3 | 3.7 | 3.9 | 3.2 |
| **Consumer Prices*** | 4.1 | -0.3 | 1.8 | 3.2 | 2.4 | 2.4 | 1.8 | 1.9 | 1.9 | 1.9 | 2.1 |
| **Current Account Balance (Euro bn)** | -105 | -50.5 | -47.4 | -37.5 | -21.2 | -0.9 | 8.5 | 20.6 | 23.6 | 29.5 | 27.4 |
| **10 Year Treasury Bond Yield, %[2]** | 3.8 | 4.0 | 5.5 | 5.1 | 5.4[3] | 5.1[4] | 5.2 | 5.2 | 5.1 | 4.6 | 4.8 |

## Sweden

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | -0.8 | -5.0 | 6.3 | 3.9 | 1.2 | 1.7 | 2.6 | 2.3 | 2.1 | 2.2 | 2.5 |
| **Household Consumption*** | -0.1 | -0.2 | 3.9 | 2.2 | 1.7 | 1.9 | 2.4 | 2.2 | 2.1 | 2.4 | 2.8 |
| **Gross Fixed Investment*** | 1.1 | -15.5 | 6.7 | 6.9 | 3.9 | 2.4 | 4.3 | 3.5 | 3.5 | 2.8 | 2.3 |
| **Mining & Manufacturing Production*** | -3.4 | -19.3 | 8.8 | 6.8 | -2.1 | 1.9 | 4.0 | 4.2 | 3.6 | 2.0 | 2.0 |
| **Consumer Prices*** | 3.5 | -0.3 | 1.3 | 2.6 | 1.1 | 1.2 | 2.0 | 2.2 | 2.0 | 1.9 | 1.7 |
| **Current Account (Skr bn)** | 290 | 208 | 222 | 226 | 234 | 237 | 245 | 260 | 265 | 238 | 245 |
| **10 Year Treasury Bond Yield, %[2]** | 2.4 | 3.4 | 3.3 | 1.6 | 1.7[3] | 2.0[4] | 2.9 | 4.0 | 4.0 | 4.0 | 4.0 |

## Switzerland

| * *% change over previous year* | Historical | | | | Consensus Forecasts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018-2022[1] |
| **Gross Domestic Product*** | 2.2 | -1.9 | 3.0 | 1.9 | 0.9 | 1.2 | 1.5 | 1.8 | 1.8 | 1.8 | 1.7 |
| **Private Consumption*** | 1.2 | 1.8 | 1.6 | 1.2 | 2.2 | 1.3 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 |
| **Gross Fixed Investment*** | 0.7 | -8.0 | 4.8 | 4.0 | 0.8 | 1.9 | 2.3 | 2.6 | 2.0 | 1.9 | 2.9 |
| **Industrial Production*** | 1.4 | -8.0 | 6.4 | 0.8 | 1.2 | 2.3 | 2.9 | 3.0 | 2.6 | 2.0 | 1.6 |
| **Consumer Prices*** | 2.6 | -0.5 | 0.7 | 0.2 | -0.6 | 0.4 | 0.8 | 1.2 | 1.4 | 1.5 | 1.5 |
| **Current Account Balance (SwFr bn)** | 11.8 | 58.8 | 82.8 | 83.7 | 75.8 | 77.0 | 70.2 | 73.0 | 74.4 | 76.2 | 79.1 |
| **10 Year Treasury Bond Yield, %[2]** | 2.2 | 2.0 | 1.7 | 0.7 | 0.7[3] | 1.0[4] | 1.4 | 2.3 | 2.6 | 2.7 | 3.2 |

[1] *Signifies average for period* [2] *End period* [3] *End January 2013* [4] *End October 2013*

# NOTES AND ABBREVIATIONS OCTOBER 2012

- GDP - Gross Domestic Product IMF - International Monetary Fund
  na - not available Emu - European economic and monetary union
  OECD - Organisation for Economic Co-operation and Development ECB - European Central Bank
  BoE - Bank of England PMI - Purchasing Managers Index
  y-o-y - year-on-year q-o-q - quarter-on-quarter m-o-m - month-on-month

- Measures of GDP, Consumption, Business Investment and Industrial Production are expressed in real (i.e. inflation-adjusted) terms. These variables, and certain others as indicated, are expressed as percentage changes over the previous year.

- All individual country forecasters on pages 4-24 are listed in descending order of their 2012 real GDP estimates. Consensus forecasts are mean arithmetic averages of the listed individual estimates.

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# CONSENSUS FORECASTS: WORLD ECONOMIC ACTIVITY

| October Survey | Real GDP % increase | | | Consumer Prices % increase | | | Current Account Balance, US$bn | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2011 | 2012 | 2013 | 2011 | 2012 | 2013 |
| Belgium | 1.8 | -0.3 | 0.1 | 3.5 | 2.7 | 2.0 | -5.1 | -0.7 | 1.3 |
| Canada | 2.6 | 2.0 | 2.0 | 2.9 | 1.8 | 1.9 | -52.9 | -59.4 | -52.8 |
| France | 1.7 | 0.1 | 0.3 | 2.1 | 2.1 | 1.7 | -54.1 | -54.9 | -50.4 |
| Germany | 3.0 | 0.8 | 0.9 | 2.3 | 2.0 | 1.9 | 204 | 200 | 190 |
| Italy | 0.5 | -2.4 | -0.7 | 2.8 | 3.2 | 2.3 | -71.6 | -30.7 | -14.8 |
| Japan | -0.7 | 2.3 | 1.3 | -0.3 | 0.0 | -0.1 | 120 | 77.7 | 99 |
| Netherlands | 1.1 | -0.5 | 0.4 | 2.3 | 2.5 | 2.3 | 81.5 | 64.2 | 64.5 |
| Norway | 2.5 | 3.6 | 2.8 | 1.3 | 0.8 | 1.5 | 70.3 | 76.5 | 74.5 |
| Spain | 0.5 | -1.6 | -1.6 | 3.2 | 2.4 | 2.4 | -52.1 | -27.1 | -1.2 |
| Sweden | 3.9 | 1.2 | 1.7 | 2.6 | 1.1 | 1.2 | 34.8 | 34.6 | 35.3 |
| Switzerland | 1.9 | 0.9 | 1.2 | 0.2 | -0.6 | 0.4 | 94.3 | 80.7 | 79.6 |
| United Kingdom | 0.9 | -0.2 | 1.2 | 4.5 | 2.7 | 2.2 | -46.5 | -73.5 | -52.1 |
| United States | 1.8 | 2.1 | 2.0 | 3.1 | 2.1 | 2.0 | -466 | -493 | -493 |
| North America[1] | 1.9 | 2.1 | 2.0 | 3.1 | 2.0 | 2.0 | -518.9 | -552.4 | -545.5 |
| Western Europe[2] | 1.5 | -0.3 | 0.4 | 2.7 | 2.2 | 2.0 | 237.9 | 270.9 | 337.2 |
| European Union[2] | 1.6 | -0.3 | 0.4 | 2.9 | 2.4 | 2.1 | 35.9 | 82.2 | 148.5 |
| Euro zone[2] | 1.5 | -0.5 | 0.2 | 2.7 | 2.4 | 1.9 | -3.2 | 68.6 | 95.5 |
| Asia Pacific[3] | 4.6 | 4.8 | 4.8 | 3.7 | 2.6 | 2.7 | 379.6 | 282.6 | 288.0 |
| Eastern Europe[4] | 4.8 | 2.8 | 3.3 | 6.3 | 6.4 | 5.4 | -2.2 | 3.8 | -32.3 |
| Latin America[5] | 4.2 | 2.9 | 3.8 | 7.1 | 5.9 | 6.4 | -69.8 | -85.2 | -100.5 |
| Other Countries[6] | 5.2 | 4.4 | 3.9 | 6.2 | 6.0 | 6.0 | 147.3 | 137.6 | 96.8 |
| Total[7] | 3.1 | 2.5 | 2.8 | 3.8 | 3.0 | 2.9 | | | |

*Regional totals, as well as the grand total for GDP growth and inflation, are weighted averages calculated using* ***2011 GDP weights, converted at average 2011 exchange rates.*** *Current account forecasts given in national currencies on pages 7-24 have been converted using consensus exchange rate forecasts for the purposes of comparison.* [1] *USA and Canada.* [2] *The Euro zone aggregate is taken from our panel's latest forecasts (pages 18-19). The Euro zone current account data and forecasts are based on extra-euro zone data, i.e., they are compiled from an aggregate of the Euro zone member states' transactions only with nonresidents of the Euro zone. The European Union data includes the Euro zone countries listed on page 18 plus Denmark, Sweden and the United Kingdom, as well as May 2004 entrants the Czech Republic, Estonia, Hungary, Latvia, Lithuania and Poland, plus Romania and Bulgaria who entered in January 2007 (data taken from Eastern Europe Consensus Forecasts). Western Europe comprises the Euro zone plus Denmark, Sweden and the United Kingdom, along with Norway and Switzerland.* [3] *Survey results for Japan plus fifteen other countries taken from* ***Asia Pacific Consensus Forecasts.*** [4] *Twenty-seven countries, including eleven European Union countries taken from the latest issue of* ***Eastern Europe Consensus Forecasts.*** [5]*Eighteen countries taken from the latest issue of* ***Latin American Consensus Forecasts*** *(Inflation figures are on a December/December basis).* [6] *Egypt, Israel, Nigeria, Saudi Arabia and South Africa.* [7] *The* ***Eastern Europe*** *and* ***Latin American*** *components of the* ***World Total*** *are taken from the prior month's surveys.*

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## On the Assessment of Risk

Marshall E. Blume

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# ON THE ASSESSMENT OF RISK

MARSHALL E. BLUME*

## INTRODUCTION

THE CONCEPT OF RISK has so permeated the financial community that no one needs to be convinced of the necessity of including risk in investment analysis. Still of controversy is what constitutes risk and how it should be measured. This paper examines the statistical properties of one measure of risk which has had wide acceptance in the academic community: namely the coefficient of non-diversifiable risk or more simply the beta coefficient in the market model.

The next section defines this beta coefficient and presents a brief non-rigorous justification of its use as a measure of risk. After discussing the sample and its basic properties in Section III, Section IV examines the stationarity of this beta coefficient over time and proposes a method of obtaining improved assessments of this measure of risk.

## II. THE RATIONALE OF BETA AS A MEASURE OF RISK

The interpretation of the beta coefficient as a measure of risk rests upon the empirical validity of the market model. This model asserts that the return from time (t-1) to t on asset i, $\tilde{R}_{it}$,[1] is a linear function of a market factor common to all assets $\tilde{M}_t$, and independent factors unique to asset i, $\tilde{\varepsilon}_{it}$.

Symbolically, this relationship takes the form

$$\tilde{R}_{it} = \alpha_i + \beta_i \tilde{M}_t + \tilde{\varepsilon}_{it}, \qquad (1)$$

where the tilde indicates a random variable, $\alpha_i$ is a parameter whose value is such that the expected value of $\tilde{\varepsilon}_{it}$ is zero, and $\beta_i$ is a parameter appropriate to asset i.[2] That the random variables $\tilde{\varepsilon}_{it}$ are assumed to be independent and

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* University of Pennsylvania.

[1] In this paper, return will be measured as the ratio of the value of the investment at time t with dividends reinvested to the value of the investment at time (t-1). Dividends are assumed reinvested at time t.

[2] The parameter $\beta_i$ is defined as Cov $(\tilde{R}_i, \tilde{M})$/Var $(\tilde{M})$.

unique to asset i implies that Cov $(\tilde{\varepsilon}_{it}, \tilde{M}_t)$ is zero and that Cov $(\tilde{\varepsilon}_{it}, \tilde{\varepsilon}_{jt})$, $i \neq j$, are zero. This last conclusion is tantamount to assuming the absence of industry effects.

The empirical validity of the market model as it applies to common stocks listed on the NYSE has been examined extensively in the literature.[3] The principal conclusions are: (1) The linearity assumption of the model is adequate.[4] (2) The variables $\tilde{\varepsilon}_{it}$ cannot be assumed independent between securities because of the existence of industry effects. However, these industry effects, as documented by King,[5] probably account for only about ten percent of the variation in returns, so that as a first approximation they can be ignored. (3) The unique factors $\tilde{\varepsilon}_{it}$ correspond more closely to non-normal stable variates than to normal ones. This conclusion means that variances and covariances of the unique factors do not exist. Nonetheless, this paper will make the more common assumption of the existence of these statistics in justifying the beta coefficient as a measure of risk since Fama[6] and Jensen[7] have shown that this coefficient can still be interpreted as a measure of risk under the assumption that the $\tilde{\varepsilon}_{it}$'s are non-normal stable variates.

That the beta coefficient, $\beta_i$, in the market model can be interpreted as a measure of risk will be justified in two different ways: the portfolio approach and the equilibrium approach.

## A. *The Portfolio Approach*

The important assumption underlying the portfolio approach is that individuals evaluate the risk of a portfolio as a whole rather than the risk of each asset individually. An example will illustrate the meaning of this statement. Consider two assets, each of which by itself is extremely risky. If, however, it is always the case that when one of the assets has a high return, the other has a low return, the return on a combination of these two assets in a portfolio may be constant. Thus, the return on the portfolio may be risk free whereas each of the assets has a highly uncertain return. The discussion of such an

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[3] See Marshall E. Blume, "Portfolio Theory: A Step Towards Its Practical Application," forthcoming *Journal of Business;* Eugene F. Fama, "The Behavior of Stock Market Prices," *Journal of Business* (1965), 34-105; Eugene F. Fama, Lawrence Fisher, Michael Jensen, and Richard Roll, "The Adjustment of Stock Prices to New Information," *International Economic Review* (1969), 1-21; Michael Jensen, "Risk, the Pricing of Capital Assets, and the Evaluation of Investment Portfolios," *Journal of Business* (1969), 167-247; Benjamin F. King, "Market and Industry Factors in Stock Price Behavior," *Journal of Business* (1966), 139-90; and William F. Sharpe, "Mutual Fund Performance," *Journal of Business* (1966), 119-38.

[4] The linearity assumption of the model should not be confused with the equilibrium requirement of William F. Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk," *Journal of Finance* (1964), 425-42, which states that $\alpha_i = (1 - \beta_i)\ R_F$, where $R_F$ is the risk free rate. It is quite possible that this equality does not hold and at the same time that the market model is linear.

[5] King, *op. cit.*

[6] Eugene F. Fama, "Risk, Return, and Equilibrium" (Report No. 6831, University of Chicago, Center for Mathematical Studies in Business and Economics, June, 1968).

[7] Jensen, *op. cit.*

obvious point may seem unwarranted, but there is very little empirical work which indicates that people do in fact behave according to it.

Now if an individual is willing to judge the risk inherent in a portfolio solely in terms of the variance of the future aggregate returns, the risk of a portfolio of n securities with an equal amount invested in each, according to the market model, will be given by

$$\mathrm{Var}\,(\tilde{W}_t) = \Big(\sum_{i=1}^{n} \frac{1}{n}\beta_i\Big)^2 \mathrm{Var}\,(\tilde{M}_t) + \sum_{i=1}^{n} \Big(\frac{1}{n}\Big)^2 \mathrm{Var}\,(\tilde{\varepsilon}_{it}) \qquad (2)$$

where $\tilde{W}_t$ is the return on the portfolio. Equation (2) can be rewritten as

$$\mathrm{Var}\,(\tilde{W}_t) = \bar{\beta}^2\,\mathrm{Var}\,(\tilde{M}_t) + \frac{\overline{\mathrm{Var}\,(\tilde{\varepsilon})}}{n} \qquad (3)$$

where the bar indicates an average. As one diversifies by increasing the number of securities n, the last term in equation (3) will decrease. Evans and Archer[8] have shown empirically that this process of diversification proceeds quite rapidly, and with ten or more securities most of the effect of diversification has taken place. For a well diversified portfolio, Var $(\tilde{W}_t)$ will approximate $\bar{\beta}^2$ Var $(\tilde{M}_t)$. Since Var $(\tilde{M}_t)$ is the same for all securities, $\bar{\beta}$ becomes a measure of risk for a portfolio and thus $\beta_i$, as it contributes to the value of $\bar{\beta}$, is a measure of risk for a security. The larger the value of $\beta_i$, the more risk the security will contribute to a portfolio.[9]

## B. *The Equilibrium Approach*

Using the market model, Sharpe[10] and Lintner,[11] as clarified by Fama,[12] have developed a theory of equilibrium in the capital markets. This theory relates the risk premium for an individual security, $E(\tilde{R}_{it}) - R_F$, where $R_F$ is the risk free rate, to the risk premium of the market, $E(\tilde{M}_t) - R_F$, by the formula

$$E(\tilde{R}_{it}) - R_F = \beta_i[E(\tilde{M}_t) - R_F]. \qquad (4)$$

The risk premium for an individual security is proportional to the risk premium for the market. The constant of proportionality $\beta_i$ can therefore be interpreted as a measure of risk for individual securities.

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[8] John L. Evans and Stephan H. Archer, "Diversification and the Reduction of Dispersion: An Empirical Analysis," *Journal of Finance* (1968), 761-68.

[9] This argument has been extended to a non-Gaussian, symmetric stable world by E. F. Fama, "Portfolio Analysis in a Stable Paretian Market," *Management Science* (1965), 404-19; and P. A. Samuelson, "Efficient Portfolio Selection for Pareto-Levy Investments," *Journal of Financial and Quantitative Analysis* (1967), 107-22.

[10] Sharpe, "Capital Asset Prices," *op. cit.*

[11] John Lintner, "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets," *Review of Economics and Statistics* (1965), 13-37.

[12] Eugene F. Fama, "Risk, Return, and Equilibrium: Some Clarifying Comments," *Journal of Finance* (1968), 29-40.

This theory of equilibrium, although theoretically sound, is based upon numerous assumptions which obviously do not hold in the real world. A theoretical model, however, should not be judged by the accuracy of its assumptions but rather by the accuracy of its predictions. The empirical work of Friend and Blume[13] suggests that the predictions of this model are seriously biased and that this bias is primarily attributable to the inaccuracy of one key assumption, namely that the borrowing and lending rates are equal and the same for all investors. Therefore, although Sharpe's and Lintner's theory of equilibrium can be used as a justification for $\beta_i$ as measure of risk, it is a weaker and considerably less robust justification than that provided by the portfolio approach.

## III. THE SAMPLE AND ITS PROPERTIES

The sample was taken from the updated Price Relative File of the Center for Research in Security Prices at the Graduate School of Business, University of Chicago. This file contains the monthly investment relatives, adjusted for dividends and capital changes of all common stocks listed on the New York Stock Exchange during any part of the period from January 1926 through June 1968, for the months in which they were listed. Six equal time periods beginning in July 1926 and ending in June 1968 were examined. Table 1 lists these six periods and the number of companies in each for which there was a complete history of monthly return data. This number ranged from 415 to 890.

The investment relatives for a particular security and a particular period were regressed[14] upon the corresponding combination market link relatives, which were originally prepared by Fisher[15] as a measure of the market factor. This process was repeated for each security and each period, yielding, for instance, in the July 1926 through June 1933 period, 415 separate regressions. The average coefficient of determination of these 415 regressions was 0.51. The corresponding average coefficients of determination for the next five periods were, respectively, 0.49, 0.36, 0.32, 0.25, and 0.28. These figures are consistent with King's findings[16] in that the proportion of the variance of returns explained by the market declined steadily until 1960 when his sample terminated. Since 1960, the importance of the market factor has increased slightly according to these figures.

Table 1, besides giving the number of companies analyzed, summarizes the distributions of the estimated beta coefficients in terms of the means, standard deviations, and various fractiles of these distributions. In addition, the number of estimated betas which were less than zero is given. In three of the periods,

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[13] Irwin Friend and Marshall Blume, "Measurement of Portfolio Performance Under Uncertainty," *American Economic Review* (1970), 561-75.

[14] John Wise, "Linear Estimators for Linear Regression Systems Having Infinite Variances," (Berkeley-Stanford Mathematics-Economics Seminar, October, 1963) has given some justification for the use of least squares in estimating coefficients of regressions in which the disturbances are non-normal symmetric stable variates.

[15] Lawrence Fisher, "Some New Stock-Market Indexes," *Journal of Business* (1966), 191-225.

[16] King, *op. cit.*

TABLE 1

DESCRIPTIVE SUMMARY OF ESTIMATED BETA COEFFICIENTS

| Period | Number of Companies | Mean | Standard Deviation | Number of BETAS less than Zero | Fractiles | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | .10 | .25 | .50 | .75 | .90 |
| 7/26-6/33 | 415 | 1.051 | 0.462 | 1 | 0.498 | 0.711 | 1.023 | 1.352 | 1.616 |
| 7/33-6/40 | 604 | 1.036 | 0.474 | 0 | 0.436 | 0.701 | 1.015 | 1.349 | 1.581 |
| 7/40-6/47 | 731 | 0.990 | 0.504 | 0 | 0.500 | 0.643 | 0.872 | 1.186 | 1.606 |
| 7/47-6/54 | 870 | 1.010 | 0.409 | 2 | 0.473 | 0.727 | 0.996 | 1.263 | 1.565 |
| 7/54-6/61 | 890 | 0.998 | 0.423 | 0 | 0.458 | 0.678 | 0.984 | 1.250 | 1.558 |
| 7/61-6/68 | 847 | 0.962 | 0.390 | 4 | 0.475 | 0.681 | 0.934 | 1.199 | 1.491 |

none of the estimated betas was negative. Of the 4357 betas estimated in all six periods, only seven or 0.16 per cent were negative. This means that although the inclusion of a stock which moves counter to the market can reduce the risk of a portfolio substantially, there are virtually no opportunities to do this. Nearly every stock appears to move with the market.[17]

## IV. THE STATIONARITY OF BETA OVER TIME

No economic variable including the beta coefficient is constant over time. Yet for some purposes, an individual might be willing to act *as if* the values of beta for individual securities were constant or stationary over time. For example, a person who wishes to assess the future risk of a well diversified portfolio is really interested in the behavior of averages of the $\beta_i$'s over time and not directly in the values for individual securities. For the purposes of evaluating a portfolio, it may be sufficient that the historical values of $\beta_i$ be unbiased estimates of the future values for an individual to act *as if* the values of the $\beta_i$'s for individual securities are stationary over time. This is because the errors in the assessment of an average will tend to be less than those of the components of the average providing that the errors in the assessments of the components are independent of each other.[18] Yet, a statistician or a person who wishes to assess the risk of an individual security may have completely different standards in determining whether he would act as if the $\beta_i$'s are constant over time. The remainder of the paper examines the stationarity of the $\beta_i$'s from the point of view of a person who wishes to analyze a portfolio.

### A. *Correlations*

To examine the empirical behavior of the risk measures for portfolios over time, arbitrary portfolios of n securities were selected as follows: The estimates of $\beta_i$ were derived using data from the first period, July 1926 through June 1933, and were then ranked in ascending order.[19] The first portfolio of n securities consisted of those securities with the n smallest estimates of $\beta_i$. The second portfolio consisted of those securities with the next n smallest estimates of $\beta_i$, and so on until the number of securities remaining was less than n. The number of securities n was allowed to vary over 1, 2, 4, 7, 10, 20, 35, 50, 75, and 100. This process was repeated for each of the next four periods.

Table 2 presents the product moment and rank order correlation coefficients between the risk measures for portfolios of n securities assuming an equal investment in each security estimated in one period and the corresponding risk

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[17] The use of considerably less than seven years of monthly data such as two or three years to estimate the beta coefficient results in a larger proportion of negative estimates. This larger proportion is probably due to sampling errors which, as documented in Richard Roll, "The Efficient Market Model Applied to U. S. Treasury Bill Rates," (Unpublished Ph.D. thesis, Graduate School of Business, University of Chicago, 1968) may be quite large for models with non-normal symmetric stable disturbances.

[18] This property of averages does not hold for all distributions (*cf.* Eugene F. Fama, "Portfolio Analysis in a Stable Paretian Market"), but for the distributions associated with stock market returns it almost certainly holds.

[19] Only securities which also had complete data in the next seven year period were included in this ranking.

measure for the same portfolio estimated in the next period.[20] The risk measure calculated using the earlier data might be regarded as an individual's assessment of the future risk, and the measure calculated using the later data can be regarded as the realized risk. Thus, these correlation coefficients can be interpreted as a measure of the accuracy of one's assessments, which in this case are simple extrapolations of historical data.

TABLE 2

PRODUCT MOMENT AND RANK ORDER CORRELATION COEFFICIENTS OF BETAS FOR PORTFOLIOS OF N SECURITIES

| Number of Securities per Portfolio | 7/26-6/33 and 7/33-6/40 | | 7/33-6/40 and 7/40-6/47 | | 7/40-6/47 and 7/47-6/54 | | 7/47-6/54 and 7/54-6/61 | | 7/54-6/61 and 7/61-6/68 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | P.M. | Rank | P.M. | Rank | P.M. | Rank | P.M. | Rank | P.M. | Rank |
| 1 | 0.63 | 0.69 | 0.62 | 0.73 | 0.59 | 0.65 | 0.65 | 0.67 | 0.60 | 0.62 |
| 2 | 0.71 | 0.75 | 0.76 | 0.83 | 0.72 | 0.79 | 0.76 | 0.76 | 0.73 | 0.74 |
| 4 | 0.80 | 0.84 | 0.85 | 0.90 | 0.81 | 0.89 | 0.84 | 0.84 | 0.84 | 0.85 |
| 7 | 0.86 | 0.90 | 0.91 | 0.93 | 0.88 | 0.93 | 0.87 | 0.88 | 0.88 | 0.89 |
| 10 | 0.89 | 0.93 | 0.94 | 0.95 | 0.90 | 0.95 | 0.92 | 0.93 | 0.92 | 0.93 |
| 20 | 0.93 | 0.99 | 0.97 | 0.98 | 0.95 | 0.98 | 0.95 | 0.96 | 0.97 | 0.98 |
| 35 | 0.96 | 1.00 | 0.98 | 0.99 | 0.95 | 0.99 | 0.97 | 0.98 | 0.97 | 0.97 |
| 50 | 0.98 | 1.00 | 0.99 | 0.98 | 0.98 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 |

The values of these correlation coefficients are striking. For the assessments based upon the data from July 1926 through June 1933 and evaluated using data from July 1933 through June 1940, the product moment correlations varied from 0.63 for single securities to 0.98 for portfolios of 50 securities. The high value of the latter coefficient indicates that substantially all of the variation in the risk among portfolios of 50 securities can be explained by assessments based upon previous data. The former correlation suggests that assessments for individual securities derived from historical data can explain roughly 36 per cent of the variation in the future estimated values, leaving about 64 per cent unexplained.[21]

These results, which are typical of the other periods, suggest that at least as measured by the correlation coefficients, naively extrapolated assessments of future risk for larger portfolios are remarkably accurate, whereas extrapolated assessments of future risk for individual securities and smaller portfolios are of some, but limited value in forecasting the future.

### B. *A Closer Examination*

Table 3 presents the actual estimates of the risk parameters for portfolios of 100 securities for successive periods. For all five different sets of portfolios, the rank order correlations between the successive estimates are one, but there is obviously some tendency for the estimated values of the risk parameter to

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[20] Because of the small number of portfolios of 100 securities, correlations are not presented in Table 2 for these portfolios.

[21] This large magnitude of unexplained variation may make the beta coefficient an inadequate measure of risk for analyzing the cost of equity for an individual firm although it may be adequate for cross-section analyses of cost of equity.

TABLE 3

Estimated BETA Coefficients for Portfolios of 100 Securities in Two Successive Periods

| Portfolio | 7/26-6/33 | 7/33-6/40 | 7/33-6/40 | 7/40-6/47 | 7/40-6/47 | 7/47-6/54 | 7/47-6/54 | 7/54-6/61 | 7/54-6/61 | 7/61-6/68 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.528 | 0.610 | 0.394 | 0.573 | 0.442 | 0.593 | 0.385 | 0.553 | 0.393 | 0.620 |
| 2 | 0.898 | 1.004 | 0.708 | 0.784 | 0.615 | 0.776 | 0.654 | 0.748 | 0.612 | 0.707 |
| 3 | 1.225 | 1.296 | 0.925 | 0.902 | 0.746 | 0.887 | 0.832 | 0.971 | 0.810 | 0.861 |
| 4 | | | 1.177 | 1.145 | 0.876 | 1.008 | 0.967 | 1.010 | 0.987 | 0.914 |
| 5 | | | 1.403 | 1.354 | 1.037 | 1.124 | 1.093 | 1.095 | 1.138 | 0.995 |
| 6 | | | | | 1.282 | 1.251 | 1.245 | 1.243 | 1.337 | 1.169 |

change gradually over time. This tendency is most pronounced in the lowest risk portfolios, for which the estimated risk in the second period is invariably higher than that estimated in the first period. There is some tendency for the high risk portfolios to have lower estimated risk coefficients in the second period than in those estimated in the first. Therefore, the estimated values of the risk coefficients in one period are biased assessments of the future values, and furthermore the values of the risk coefficients as measured by the estimates of $\beta_i$ tend to regress towards the means with this tendency stronger for the lower risk portfolios than the higher risk portfolios.

### C. *A Method of Correction*

In so far as the rate of regression towards the mean is stationary over time, one can in principle correct for this tendency in forming one's assessments. An obvious method is to regress the estimated values of $\beta_i$ in one period on the values estimated in a previous period and to use this estimated relationship to modify one's assessments of the future.

Table 4 presents these regressions for five successive periods of time for individual securities.[22] The slope coefficients are all less than one in agreement with the regression tendency, observed above. The coefficients themselves do change over time, so that the use of the historical rate of regression to correct

TABLE 4

Measurement of Regression Tendency of Estimated BETA Coefficients for Individual Securities

| Regression Tendency Implied Between Periods | $\beta_2 = a + b\beta_1$ |
|---|---|
| 7/33-6/40 and 7/26-6/33 | $\beta_2 = 0.320 + 0.714\beta_1$ |
| 7/40-6/47 and 7/33-6/40 | $\beta_2 = 0.265 + 0.750\beta_1$ |
| 7/47-6/54 and 7/40-6/47 | $\beta_2 = 0.526 + 0.489\beta_1$ |
| 7/54-6/61 and 7/47-6/54 | $\beta_2 = 0.343 + 0.677\beta_1$ |
| 7/61-6/68 and 7/54-6/61 | $\beta_2 = 0.399 + 0.546\beta_1$ |

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[22] The reader should not think of these regressions as a test of the stationarity of the risk of securities over time but rather merely as a test of the accuracy of the assessments of future risk which happen to be derived as historical estimates. In this test of accuracy, the independent variable in these regressions is measured without error, so that the estimated coefficients are unbiased. In the test of the stationarity of the risk measures over time, the independent variable would be measured with error, so that the coefficients in Table 4 would be biased.

for the future rate will not perfectly adjust the assessments and may even overcorrect by introducing larger errors into the assessments than were present in the unadjusted data.

To examine the efficacy of using historical rates of regression to correct one's assessments, the estimated risk coefficients for the individual securities for the period from July 1933 through June 1940 were modified using the first equation in Table 4 to obtain adjusted risk coefficients under the assumption that the future rate of regression will be the same as the past. This process was repeated for each of the next three periods using respectively the next three equations in Table 4 to estimate the rate of regression.

Table 5 compares these adjusted assessments with the unadjusted assessments which were used in Tables 2 and 3. For the portfolios selected previously using the data from July 1933 through June 1940, both the unadjusted and adjusted assessments of future risk were obtained. The accuracy of these two alternative methods of assessment were compared through the mean squared errors of the assessments versus the estimated risk coefficients in the next period, July 1940 through June 1947.[23] This process was repeated for each of the next three periods.

TABLE 5

MEAN SQUARE ERRORS BETWEEN ASSESSMENTS AND FUTURE ESTIMATED VALUES

| | Assessments Based Upon | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Number of Sec./ Port. | 7/33-6/40 | | 7/40-6/47 | | 7/47-6/54 | | 7/54-6/61 | |
| | unadjusted | adjusted | unadjusted | adjusted | unadjusted | adjusted | unadjusted | adjusted |
| 1 | 0.1929 | 0.1808 | 0.1747 | 0.1261 | 0.1203 | 0.1087 | 0.1305 | 0.1013 |
| 2 | 0.0915 | 0.0813 | 0.1218 | 0.0736 | 0.0729 | 0.0614 | 0.0827 | 0.0535 |
| 4 | 0.0538 | 0.0453 | 0.0958 | 0.0483 | 0.0495 | 0.0381 | 0.0587 | 0.0296 |
| 7 | 0.0323 | 0.0247 | 0.0631 | 0.0276 | 0.0387 | 0.0281 | 0.0523 | 0.0231 |
| 10 | 0.0243 | 0.0174 | 0.0535 | 0.0220 | 0.0305 | 0.0189 | 0.0430 | 0.0169 |
| 20 | 0.0160 | 0.0090 | 0.0328 | 0.0106 | 0.0258 | 0.0139 | 0.0291 | 0.0089 |
| 35 | 0.0120 | 0.0055 | 0.0266 | 0.0080 | 0.0197 | 0.0101 | 0.0302 | 0.0089 |
| 50 | 0.0096 | 0.0046 | 0.0192 | 0.0046 | 0.0122 | 0.0097 | 0.0237 | 0.0064 |
| 75 | 0.0081 | 0.0035 | 0.0269 | 0.0067 | 0.0112 | 0.0078 | 0.0193 | 0.0056 |
| 100 | 0.0084 | 0.0020 | 0.0157 | 0.0035 | 0.0114 | 0.0084 | 0.0195 | 0.0056 |

For individual securities as well as portfolios of two or more securities, the assessments adjusted for the historical rate of regression are more accurate than the unadjusted or naive assessments. Thus, an improvement in the accuracy of one's assessments of risk can be obtained by adjusting for the historical rate of regression even though the rate of regression over time is not strictly stationary.

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[23] The mean square error was calculated by $\frac{\Sigma(\beta_1 - \beta_2)^2}{n}$ where $\beta_1$ is the assessed value of the future risk, $\beta_2$ is the estimated value of the risk, and n is the number of portfolios. In using an estimate of beta rather than the actual value, the mean square error will be biased upwards, but the effect of this bias will be the same for both the adjusted and unadjusted assessments.

## V. CONCLUSION

This paper examined the empirical behavior of one measure of risk over time. There was some tendency for the estimated values of these risk measures to regress towards the mean over time. Correcting for this regression tendency resulted in considerably more accurate assessments of the future values of risk.

# Betas and Their Regression Tendencies

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# BETAS AND THEIR REGRESSION TENDENCIES

Marshall E. Blume*

## I. Introduction

A previous study [3] showed that estimated beta coefficients, at least in the context of a portfolio of a large number of securities, were relatively stationary over time. Nonetheless, there was a consistent tendency for a portfolio with either an extremely low or high estimated beta in one period to have a less extreme beta as estimated in the next period. In other words, estimated betas exhibited in that article a tendency to regress towards the grand mean of all betas, namely one. This study will examine in further detail this regression tendency.[1]

The next section presents evidence showing the existence of this regression tendency and reviews the conventional reasons given in explanation [1], [4], [5]. The following section develops a formal model of this regression tendency and finds that the conventional analysis of this tendency is, if not incorrect, certainly misleading. Accompanying this theoretical analysis are some new empirical results which show that a major reason for the observed regression is real non-stationarities in the underlying values of beta and that the so-called "order bias" is not of dominant importance.

## II. The Conventional Wisdom

If an investor were to use estimated betas to group securities into portfolios spanning a wide range of risk, he would more than likely find that the betas estimated for the very same portfolios in a subsequent period would be less extreme or closer to the market beta of one than his prior estimates. To illustrate, assume that the investor on July 1, 1933, had at his disposal an estimate of beta for each common stock which had been listed on the NYSE (New York Stock Exchange) for the prior seven years, July 1926-June 1933. Assume further that each estimate was derived by regressing the eighty-four monthly relatives covering this seven-year period upon the corresponding values for the market portfolio.[2]

If this investor, say, desired equally weighted portfolios of 100 securities, he might group those 100 securities with the smallest estimates of beta together to form a portfolio. Such a portfolio would of all equally

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[1] Quite apart from this regression tendency, it is reasonable to suppose that betas do change over time in systematic ways in response to certain changes in the structure of companies.

[2] Such regressions were calculated only for securities with complete data. The relative for the market portfolio was measured by Fisher's Combination Link Relative [6].

weighted portfolios have the smallest possible estimated portfolio beta since an estimate of such a portfolio beta can be shown to be an average of the estimates for the individual securities [2, p. 169]. To cover a wide range of portfolio betas, this investor might then form a second portfolio consisting of the 100 securities with the next smallest estimates of beta, and so on.

Using the securities available as of June 1933, this investor could thus obtain four portfolios of 100 securities apiece with no security in common. Estimated over the same seven-year period, July 1926-June 1933, the betas for these portfolios[3] would have ranged from 0.50 to 1.53. Similar portfolios can be constructed for each of the next seven-year periods through 1954 and their portfolio betas calculated. Table 1 contains these estimates under the heading "Grouping Period."

The betas for these same portfolios, but reestimated using the monthly portfolio relatives adjusted for delistings from the seven years following the grouping period, illustrate the magnitude of the regression tendency.[4] Whereas the portfolio betas as estimated, for instance, in the grouping period 1926-33 ranged from 0.50 to 1.53, the betas as estimated for these same portfolios in the subsequent seven-year period 1933-40 ranged only from 0.61 to 1.42. The results for the other periods display a similar regression tendency.

An obvious explanation of this regression tendency is that for some unstated economic or behavioral reasons, the underlying betas do tend to regress towards the mean over time.[5] Yet, even if the true betas were constant over time, it has been argued that the portfolio betas as estimated in the grouping period would as a statistical artifact tend to be more extreme than those estimated in a subsequent period. This bias has sometimes been termed an order or selection bias.

The frequently given intuitive explanation of this order bias [1], [4], [5], parallels the following: Consider the portfolio formed of the 100 securities with the lowest estimates of beta. The estimated portfolio beta might be expected to understate the true beta or equivalently be expected to be measured with negative error. The reason the measurement error might

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[3] These portfolio betas were derived by averaging the 100 estimates for the individual securities. Alternatively, as [2] shows, the same number would be obtained by regressing the monthly portfolio relatives upon the market index where the portfolio relatives are calculated assuming an equal amount invested in each security at the beginning of each month.

[4] These portfolio betas were calculated by regressing portfolio relatives upon the market relatives. The portfolio relatives were taken to be the average of the monthly relatives of the individual securities for which relatives were available. These relatives represent those which would have been realized from an equally-weighted, monthly rebalancing strategy in which a delisted security is sold at the last available price and the proceeds reinvested equally in the remaining securities. This rather complicated procedure takes into account delisted securities and therefore avoids any survivorship bias. In [3], the securities analyzed were required to be listed on the NYSE throughout both the grouping period and the subsequent period, so that there was a potential survivorship bias. Nonetheless, the results reported there are in substantive agreement with the results in Table 1.

[5] If the betas are continually changing over time, an estimate of beta as provided by a simple regression must be interpreted with considerable caution. For example, if the true beta followed a linear time trend, it is easily shown that the estimated beta can be interpreted as an unbiased estimate of the beta in the middle of the sample period. A similar interpretation would not in general hold if, for instance, the true beta followed a quadratic time trend.

TABLE 1
Beta Coefficients for Portfolios of 100 Securities

| Portfolio | Grouping Period | First Subsequent Period |
|---|---|---|
| | 7/26-6/33 | 7/33-6/40 |
| 1 | 0.50 | 0.61 |
| 2 | 0.85 | 0.96 |
| 3 | 1.15 | 1.24 |
| 4 | 1.53 | 1.42 |
| | 7/33-6/40 | 7/40-6/47 |
| 1 | 0.38 | 0.56 |
| 2 | 0.69 | 0.77 |
| 3 | 0.90 | 0.91 |
| 4 | 1.13 | 1.12 |
| 5 | 1.35 | 1.31 |
| 6 | 1.68 | 1.69 |
| | 7/40-6/47 | 7/47-6/54 |
| 1 | 0.43 | 0.60 |
| 2 | 0.61 | 0.76 |
| 3 | 0.73 | 0.88 |
| 4 | 0.86 | 0.99 |
| 5 | 1.00 | 1.10 |
| 6 | 1.21 | 1.21 |
| 7 | 1.61 | 1.36 |
| | 7/47-6/54 | 7/54-6/61 |
| 1 | 0.36 | 0.57 |
| 2 | 0.61 | 0.71 |
| 3 | 0.78 | 0.88 |
| 4 | 0.91 | 0.96 |
| 5 | 1.01 | 1.03 |
| 6 | 1.13 | 1.13 |
| 7 | 1.26 | 1.24 |
| 8 | 1.47 | 1.32 |
| | 7/54-6/61 | 7/61-6/68 |
| 1 | 0.37 | 0.62 |
| 2 | 0.56 | 0.68 |
| 3 | 0.72 | 0.85 |
| 4 | 0.86 | 0.85 |
| 5 | 0.99 | 0.95 |
| 6 | 1.11 | 0.98 |
| 7 | 1.23 | 1.07 |
| 8 | 1.43 | 1.25 |

be expected to be negative may best be explored by analyzing how a security might happen to have one of the 100 lowest estimates of beta. First, if the true beta were in the lowest hundred, the estimated beta would fall in the lowest 100 estimates only if the error in measuring the beta were not too large which roughly translates into more negative than positive errors. Second, if the true beta were not in the lowest 100, the estimated beta might still be in the lowest 100 estimates if it were measured with a sufficiently large negative error.[6]

Thus, the negative errors in the 100 smallest estimates of beta might be expected to outweigh the positive errors. The same argument except in reverse would apply to the 100 largest estimates. Indeed, it would seem that any portfolio of securities stratified by estimates of beta for which the average of these estimates is not the grand mean of all betas, namely 1.0, would be subject to some order bias. It would also seem that the absolute magnitude of this order bias should be greater, the further the average estimate is from the grand mean. The next section formalizes this intuitive argument and suggests that, if it is not incorrect, it is certainly misleading as to the source of the bias.

## III. A FORMAL MODEL

The intuitive explanation of the order bias just given would seem to suggest that the way in which the portfolios are formed caused the bias. This section will argue that the bias is present in the estimated betas for the individual securities and is not induced by the way in which the portfolios are selected. Following this argument will be an analysis of the extent to which this order bias accounts for the observed regression tendency in portfolio betas over time.

A numerical example will serve to illustrate the logic of the subsequent argument and to introduce some required notation.[7] Assume for the moment that the possible values of beta for an individual security i in period t, $\beta_{it}$, are 0.8, 1.0 and 1.2 and that each of these values is equally likely. Assume further that in estimating a beta for an individual security, there is a 0.6 probability that the estimate $\hat{\beta}_{it}$ contains no measurement error, a 0.2 probability that it understates the true $\beta_{it}$ by 0.2, and a 0.2 probability that it overstates the true value by 0.2. Now in a sample of ten securities whose true betas were all say 0.8, one would expect two estimates of beta to be 0.6, six to be 0.8, and two to be 1.0. These numbers have been transcribed to the first row of Table 2. The second and third rows are similarly constructed by first assuming that the ten securities all had a true value of 1.0 and then of 1.2.

The rows of Table 2 thus correspond to the distribution of the estimated beta, $\hat{\beta}_{it}$, conditional on the true value, $\beta_{it}$. It might be noted that the expectation of $\hat{\beta}_{it}$ conditional on $\beta_{it}$, $E(\hat{\beta}_{it} \mid \beta_{it})$, is $\beta_{it}$. However, in a sampling situation, an investigator would be faced with an estimate of beta and would want to assess the distribution of the true $\beta_{it}$ conditional on the estimated $\hat{\beta}_{it}$. Such conditional distributions correspond to the columns of Table 2. It is easily verified that the expectation of $\beta_{it}$ conditional on $\hat{\beta}_{it}$, $E(\beta_{it} \mid \hat{\beta}_{it})$ is generally not $\hat{\beta}_{it}$. For example, if $\hat{\beta}_{it}$ were

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[6] It is theoretically possible that the estimated beta for a security whose true beta does not fall into the lowest 100 to be in the lowest 100 estimates with a positive measurement error if the betas for some of the improperly classified securities are measured with sufficiently large positive errors.

[7] The author is indebted to Harry Markowitz for suggesting this numerical example as a way of clarifying the subsequent formal development.

TABLE 2

NUMBER OF SECURITIES CROSS CLASSIFIED BY $\beta_{it}$ AND $\hat{\beta}_{it}$

| | | | | $\hat{\beta}_{it}$ | | |
|---|---|---|---|---|---|---|
| | | .6 | .8 | 1.0 | 1.2 | 1.4 |
| | .8 | 2 | 6 | 2 | | |
| $\beta_{it}$ | 1.0 | | 2 | 6 | 2 | |
| | 1.2 | | | 2 | 6 | 2 |

0.8, $E(\beta_{it} \mid \hat{\beta}_{it} = 0.8)$ would be 0.85 since with this estimate the true beta would be 0.8 with probability 0.75 or 1.0 with probability 0.25.[8]

The estimate $\hat{\beta}_{it}$, therefore, would typically be biased, and it is biased whether or not portfolios are formed. The effect of forming large portfolios is to reduce the random component in the estimate, so that the difference between the estimated portfolio beta and the true portfolio beta can be ascribed almost completely to the magnitude of the bias.

In the spirit of this example, the paper will now develop explicit formulae for the order bias and real non-stationarities over time. Let it be assumed that the betas for individual securities in period t, $\beta_{it}$, can be thought of as drawings from a normal distribution with a mean of 1.0 and variance $\sigma^2(\beta_{it})$. The corresponding assumption for the numerical example just discussed would be a trinomial distribution with equal probabilities for each possible value of $\beta_{it}$.

Let it additionally be assumed that the estimate, $\hat{\beta}_{it}$, measures $\beta_{it}$ with error $\eta_{it}$, a mean-zero independent normal variate, so that $\hat{\beta}_{it}$ is given by the sum of $\beta_{it}$ and $\eta_{it}$. It immediately follows that $\beta_{it}$ and $\hat{\beta}_{it}$ are distributed by a bivariate normal distribution. It might be noted that, as formulated, $\sigma^2(\eta_{it})$ need not equal $\sigma^2(\eta_{jt})$, $i \neq j$. Since the empirical work will assume equality, the subsequent theoretical work will also make this assumption even though for the most part it is not necessary. The final assumption is that $\beta_{it}$ and $\beta_{it+1}$ are distributed as bivariate normal variates. Because $\eta_{it}$ is independently distributed, $\hat{\beta}_{it}$ and $\beta_{it+1}$ will be distributed by a bivariate normal distribution.

That $\hat{\beta}_{it}$ and $\beta_{it+1}$ are bivariate normal random variables, each with a mean of 1.0, implies the following regression

$$E(\beta_{it+1} \mid \hat{\beta}_{it}) - 1 = \frac{\text{Cov}\,(\beta_{it+1}, \hat{\beta}_{it})}{\sigma^2(\hat{\beta}_{it})}\,(\hat{\beta}_{it} - 1). \tag{1}$$

This regression is similar to the procedure proposed in Blume [3] to adjust the estimated betas for the regression tendency. That procedure was to regress estimates of beta for individual securities from a later period on estimates from an earlier period and to use the coefficients from this regression to adjust future estimates.[9] The empirical evidence

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[8] For further and more detailed discussion of the distinction between $E(\beta_{it} \mid \hat{\beta}_{it})$ and $E(\hat{\beta}_{it} \mid \beta_{it})$, the reader is referred to Vasicek [7].

[9] That the regression of estimated betas from a later period on estimates from an earlier period is similar to (1) follows from noting that $E(\hat{\beta}_{it+1} \mid \hat{\beta}_{it})$ equals $E(\beta_{it+1} \mid \hat{\beta}_{it})$ and that $\text{Cov}(\hat{\beta}_{it+1}, \hat{\beta}_{it})$ equals $\text{Cov}(\beta_{it+1}, \hat{\beta}_{it})$. In [3], the grand mean of all betas was estimated in each period and was not assumed equal to 1.0.

presented there indicated that this procedure did improve the accuracy of estimates of future betas, though no claim was made that there might not be better ways to adjust for the regression tendency.

The coefficient of $(\hat{\beta}_{it} - 1)$ in (1) can be broken down into two components: one of which would correspond to the so-called order bias and the other to a true regression tendency. To achieve this result, note that the covariance of $\beta_{it+1}$ and $\hat{\beta}_{it}$ is given by $\mathrm{Cov}(\beta_{it+1}, \beta_{it} + \eta_{it})$, which because of the assumed independence of the errors, reduces to the covariance of $\beta_{it+1}$ and $\beta_{it}$. Making this substitution and replacing $\mathrm{Cov}(\beta_{it+1}, \beta_{it})$ by $\rho(\beta_{it+1}, \beta_{it})\sigma(\beta_{it+1})\sigma(\beta_{it})$, (1) becomes

$$E(\beta_{it+1} \mid \hat{\beta}_{it}) - 1 = \frac{\rho(\beta_{it+1}, \beta_{it})\sigma(\beta_{it+1})\sigma(\beta_{it})}{\sigma^2(\hat{\beta}_{it})} (\hat{\beta}_{it} - 1). \qquad (2)$$

The ratio of $\sigma(\beta_{it})\sigma(\beta_{it+1})$ to $\sigma^2(\hat{\beta}_{it})$ might be identified with the order bias and the correlation of $\beta_{it}$ and $\beta_{it+1}$ with a true regression.

If the underlying values of beta are stationary over time, the correlation of successive values will be 1.0 and the standard deviations of $\beta_{it}$ and $\beta_{it+1}$ will be the same. Assuming such stationarity and noting then that $\beta_{it+1}$ equals $\beta_{it}$, equation (2) can be rewritten as[10]

$$\begin{aligned} E(\beta_{it+1} \mid \hat{\beta}_{it}) - 1 &= E(\beta_{it} \mid \hat{\beta}_{it}) - 1 \\ &= \frac{\sigma^2(\beta_{it})}{\sigma^2(\hat{\beta}_{it})} (\hat{\beta}_{it} - 1). \qquad (3) \end{aligned}$$

Since $\sigma^2(\beta_{it})$ would be less than $\sigma^2(\hat{\beta}_{it})$ if beta is measured with any error, the coefficient of $(\hat{\beta}_{it} - 1)$ would be less than 1.0. This means that the true beta for a security would be expected to be closer to one than the estimated value. In other words, an estimate of beta for an individual security except for an estimate of 1.0 is biased.[11]

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[10] Equation (3) can be derived alternatively from the assumption that $\beta_{it}$ and $\hat{\beta}_{it}$ are bivariate normal variables and under the assumption of stationarity $\beta_{it}$ will equal $\beta_{it+1}$. Vasicek [7] has developed using Bayes' Theorem, an expression for $E(\beta_{it}|\hat{\beta}_{it})$ which can be shown to be mathematically identical to the right hand side of (3): He observed that the procedure used by Merrill Lynch, Pierce, Fenner and Smith, Inc. in their Security Risk Evaluation Service is similar to his expression if $\sigma^2(\eta_{it})$ is assumed to be the same for all securities. Merrill Lynch's procedure, as he presented it, is to use the coefficient of the cross-sectional regression of $(\hat{\beta}_{it+1} - 1)$ on $(\hat{\beta}_{it} - 1)$ to adjust future estimates. This adjustment mechanism is in fact the same as (1) or (2) which shows that such a cross sectional regression takes into account real changes in the underlying betas. Only if betas were stationary over time would his formula be similar to Merrill Lynch's.

[11] The formula for order bias given by (3) is similar to that which measures the bias in the estimated slope coefficient in a regression on one independent variable measured with error. Explicitly, consider the regression, $y = bx + \epsilon$, where $\epsilon$ is an independent mean-zero normal disturbance and both y and x are measured in deviate form. Now if x is measured with independent mean-zero error $\eta$ and y is regressed on $x + \eta$, it is well known that the estimated coefficient, $\hat{b}$, will be biased toward zero and the probability limit of $\hat{b}$ is $\dfrac{b}{1 + \dfrac{\sigma^2(\eta)}{\sigma^2(x)}}$. This expression can be rewritten as $\dfrac{\sigma^2(x)}{\sigma^2(x + \eta)}$ b. Interpreting x as the true beta less 1.0, the correspondence to (3) is obvious. In this type of regression, one could either adjust the independent variables themselves for bias and thus obtain an unbiased estimate of the regression coefficient or run the regression on the unadjusted variables and then adjust the regression coefficient. The final coefficient will be the same in either case.

In light of this discussion, the paper now reexamines the empirical results of the previous section. The initial task will be to adjust the portfolio betas in the grouping periods for the order bias. After making this adjustment, it will be apparent that much of the regression tendency observed in Table 1 remains. Thus, if (2) is valid, the value of the correlation coefficient is probably not 1.0. The statistical properties of estimates of the portfolio betas in both the grouping and subsequent periods will be examined. The section ends with an additional test that gives further confirmation that much of the regression tendency stems from true non-stationarities in the underlying betas.

To adjust the estimates of beta in the grouping periods for the order bias using (3) would require estimates of the ratio of $\sigma^2(\beta_{it})$ to $\sigma^2(\hat{\beta}_{it})$. The sample variance calculated from the estimated betas for all securities in a particular cross-section provides an estimate of $\sigma^2(\hat{\beta}_{it})$. An estimate of $\sigma^2(\beta_{it})$ can be derived as the difference between estimates of $\sigma^2(\hat{\beta}_{it})$ and $\sigma^2(\eta_{it})$. If the variance of the error in measuring an individual beta is the same for every security, $\sigma^2(\eta_{it})$ can be estimated as the average over all securities of the squares of the standard error associated with each estimated beta.

In conformity with these procedures, estimates of the ratio of $\sigma^2(\beta_{it})$ to $\sigma^2(\hat{\beta}_{it})$ for the five seven-year periods from 1926 through 1961 were respectively 0.92, 0.92, 0.89, 0.82, and 0.75. In other words, an unbiased estimate of the underlying beta for an individual security should be some eight to twenty-five per cent closer to 1.0 than the original estimate. For instance, if $\sigma^2(\beta_{it})/\sigma^2(\hat{\beta}_{it})$ were 0.9 and if $\hat{\beta}_{it}$ were 1.3, an unbiased estimate would be 1.27.

To determine whether the order bias accounted for all of the regression, the estimated betas for the individual securities were adjusted for the order bias using (3) and the appropriate value of the ratio. For the same portfolios of 100 securities examined in the previous section, portfolio betas for the grouping period were recalculated as the average of these adjusted betas. It might be noted that these adjusted portfolio betas could alternatively be obtained by adjusting the unadjusted portfolio betas directly. These adjusted portfolio betas are given in Table 3. For the reader's convenience, the unadjusted portfolio betas and those estimated in the subsequent seven years are reproduced from Table 1.

Before comparing these estimates, let us for the moment consider the statistical properties of the portfolio betas, first in the grouping period and then in the subsequent period. Though unadjusted estimates of the portfolio betas in the grouping period may be biased, they would be expected to be highly "reliable" as that term is used in psychometrics. Thus, regardless of what these estimates measure, they measure it accurately or more precisely their values approximate those which would be expected conditional on the underlying population and how they are calculated. For equally-weighted portfolios, the larger the number of securities, the more reliable would be the estimate.

Specifically, for an equally-weighted portfolio of 100 securities, the standard deviation of the error in the portfolio beta would be one-tenth

TABLE 3

BETA COEFFICIENTS FOR PORTFOLIOS OF 100 SECURITIES

| | Grouping Period | | | |
|---|---|---|---|---|
| Portfolio | Unadjusted for Order Bias | Adjusted for Order Bias | First Subsequent Period | Second Subsequent Period |
| | 7/26-6/33 | | 7/33-6/40 | 7/40-6/47 |
| 1 | 0.50 | .54 | 0.61 | 0.73 |
| 2 | 0.85 | .86 | 0.96 | 0.92 |
| 3 | 1.15 | 1.14 | 1.24 | 1.21 |
| 4 | 1.53 | 1.49 | 1.42 | 1.47 |
| | 7/33-6/40 | | 7/40-6/47 | 7/47-6/54 |
| 1 | 0.38 | .43 | 0.56 | 0.53 |
| 2 | 0.69 | .72 | 0.77 | 0.86 |
| 3 | 0.90 | .91 | 0.91 | 0.96 |
| 4 | 1.13 | 1.12 | 1.12 | 1.11 |
| 5 | 1.35 | 1.32 | 1.31 | 1.29 |
| 6 | 1.68 | 1.63 | 1.69 | 1.40 |
| | 7/40-6/47 | | 7/47-6/54 | 7/54-6/61 |
| 1 | 0.43 | .50 | 0.60 | 0.73 |
| 2 | 0.61 | .65 | 0.76 | 0.88 |
| 3 | 0.73 | .76 | 0.88 | 0.93 |
| 4 | 0.86 | .88 | 0.99 | 1.04 |
| 5 | 1.00 | 1.00 | 1.10 | 1.12 |
| 6 | 1.21 | 1.19 | 1.21 | 1.14 |
| 7 | 1.61 | 1.54 | 1.36 | 1.20 |
| | 7/47-6/54 | | 7/54-6/61 | 7/61-6/68 |
| 1 | 0.36 | .48 | 0.57 | 0.72 |
| 2 | 0.61 | .68 | 0.71 | 0.79 |
| 3 | 0.78 | .82 | 0.88 | 0.88 |
| 4 | 0.91 | .93 | 0.96 | 0.92 |
| 5 | 1.01 | 1.01 | 1.03 | 1.04 |
| 6 | 1.13 | 1.10 | 1.13 | 1.02 |
| 7 | 1.26 | 1.21 | 1.24 | 1.08 |
| 8 | 1.47 | 1.39 | 1.32 | 1.15 |
| | 7/54-6/61 | | 7/61-6/68 | |
| 1 | 0.37 | .53 | 0.62 | |
| 2 | 0.56 | .67 | 0.68 | |
| 3 | 0.72 | .79 | 0.85 | |
| 4 | 0.86 | .89 | 0.85 | |
| 5 | 0.99 | .99 | 0.95 | |
| 6 | 1.11 | 1.08 | 0.98 | |
| 7 | 1.23 | 1.17 | 1.07 | |
| 8 | 1.43 | 1.32 | 1.25 | |

the standard error of the estimated betas for individual securities providing the errors in measuring these individual betas were independent of each other. During the 1926-33 period, the average standard error of betas for individual securities was 0.12 so that the standard error of the portfolio beta would be roughly 0.012. The average standard error for individual securities increased gradually to 0.20 in the period July 1954-June 1961. For the next seven-year period ending June 1968, the average declined to 0.17.

As pointed out, standard errors for portfolio betas calculated from those for individual securities assume independence of the errors in estimates. The standard error for a portfolio beta can however be calculated directly without making this assumption of independence by regressing the portfolio returns on the market index. The standard error for the portfolio of the 100 securities with the lowest estimates of beta in the July 1926-June 1933 period was for instance, 0.018, which compares to 0.012 calculated assuming independence. The average standard error of the estimated betas for the four portfolios in this period was also 0.018. The average standard errors of the betas for the portfolios of 100 securities in the four subsequent seven-year periods ending June 1961 were respectively 0.025, 0.027, 0.024, and 0.027. Although these standard errors, not assuming independence, are about 50 per cent larger than before, they are still extremely small compared to the range of possible values for portfolio betas.

For the moment, let us therefore assume that the portfolio betas as estimated in the grouping period before adjustment for order bias are extremely reliable numbers in that whatever they measure, they measure it accurately. In this case, adjusting these portfolio betas for the order bias will give extremely reliable and unbiased estimates of the underlying portfolio beta and therefore these adjusted betas can be taken as very good approximations to the underlying, but unknown, values. The greater the number of securities in the portfolio, the better the approximation will be.

The numerical example in Table 2 gives an intuitive feel for what is happening. Consider a portfolio of a large number of securities whose estimated betas were all 0.8 in a particular sample. It will be recalled that such an estimate requires that the true beta be either 0.8 or 1.0. As the number of securities with estimates of 0.8 increases, one can be more and more confident that 75 per cent of the securities have true betas of 0.8 and 25 per cent have true betas of 1.0 or equivalently that an equally-weighted portfolio of these securities has a beta of 0.85.

The heuristic argument in the prior section might lead some to believe that, contrary to the estimates in the grouping period, there are no order biases associated with the portfolio betas estimated in the subsequent seven years. This belief, however, is not correct. Formally, the portfolios formed in the grouping period are being treated as if they were securities in the subsequent period. To estimate these portfolio betas, portfolio returns were calculated and regressed upon some measure of the market. In this paper so far, these portfolio returns were calculated under an equally-weighted monthly revision strategy in which delisted securities were sold at the last available price and the proceeds reinvested equally in the remaining. Other strategies are, of course, possible.

Since these portfolios are being treated as securities, formula (3) applies, so that there is still some "order bias" present. However, in determining the rate of regression, the appropriate measure of the variance of the errors in the estimates is the variance for the portfolio betas and not for the betas of individual stocks. This fact has the important effect of making the ratio of $\sigma^2(\beta_{it})$ to $\sigma^2(\hat{\beta}_{it})$ much closer to one than for individual securities. Estimating $\sigma^2(\hat{\beta}_{it})$ and $\sigma^2(\eta_{it})$ for the portfolios formed on the immediately prior period, the value of this ratio for each of the four seven-year periods from 1933 to 1961 was in excess of 0.99 and for the last seven-year period in excess of 0.98. Thus, for most purposes, little error is introduced by assuming that these estimated portfolio betas contain no "order bias" or equivalently that these estimates measure accurately the true portfolio beta.

A comparison of the portfolio betas in the grouping period, even after adjusting for the order bias, to the corresponding betas in the immediately subsequent period discloses a definite regression tendency. This regression tendency is statistically significant at the five per cent level for each of the last three grouping periods, 1940-47, 1947-54, 1954-61.[12] Thus, this evidence strongly suggests that there is a substantial tendency for the underlying values of beta to regress towards the mean over time. Yet, it could be argued that this test is suspect because the formula used in adjusting for the order bias was developed under the assumption that the distributions of beta were normal. This assumption is certainly not strictly correct and it is not clear how sensitive the adjustment is to violations of this assumption.

A more robust way to demonstrate the existence of a true regression tendency is based upon the observation that the portfolio betas estimated in the period immediately subsequent to the grouping period are measured with negligible error and bias. These estimated portfolio betas can be compared to betas for the same portfolios estimated in the second seven years subsequent to the grouping period. These betas, which have been estimated in the second subsequent period and are given in Table 3, disclose again an obvious regression tendency. This tendency is significant at the five per cent level for the last three of the four possible comparisons.[13]

## IV. SUMMARY

Beginning with a review of the conventional wisdom, the paper showed that estimated beta coefficients tend to regress towards the grand mean of all betas over time. The next section presented two kinds of empirical analyses which showed that part of this observed regression tendency represented real nonstationarities in the betas of individual securities and that the so-called order bias was not of overwhelming importance.

In other words, companies of extreme risk—either high or low—tend to have less extreme risk characteristics over time. There are two logical

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[12] This test of significance was based upon the regression $(\hat{\beta}_{it+1} - 1) = b(\hat{\beta}_{it} - 1) + \epsilon_{it}$ where $\hat{\beta}_{it}$ has been adjusted for order bias. The estimated coefficients with the t-value measured from 1.0 in parentheses were for the five seven-years chronologically 0.86 (−1.14), 0.94 (−0.88), 0.71 (−3.84), 0.86 (−3.23), and 0.81 (−2.57). Note that even if $\beta_{it}$ were measured with substantial independent error contrary to fact, the estimated b would not be biased towards zero because, as footnote 10 shows, the adjustment for the order bias has already corrected for this bias.

[13] Using the same regression as in the previous footnote, the estimated coefficient b with the t-value measured from 1.0 in parentheses were for the four possible comparisons in chronological order 0.92 (−0.69), 0.74 (−2.67), 0.62 (−6.86), and 0.58 (−5.51).

explanations. First, the risk of existing projects may tend to become less extreme over time. This explanation may be plausible for high risk firms, but it would not seem applicable to low risk firms. Second, new projects taken on by firms may tend to have less extreme risk characteristics than existing projects. If this second explanation is correct, it is interesting to speculate on the reasons. For instance, is it a management decision or do limitations on the availability of profitable projects of extreme risk tend to cause the riskiness of firms to regress towards the grand mean over time? Though one could continue to speculate on the forces underlying this tendency of risk—as measured by beta coefficients—to regress towards the grand mean over time, it remains for future research to determine the explicit reasons.

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