# 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 1

## Annexes

## Réponses aux questions 1.3.1, 1.3.2, 1.4, 1.5, 4.2 et 11.1

**Rating Report**

**Report Date:**
April 12, 2012

**Previous Report:**
December 12, 2011

Insight beyond the rating.

# Hydro-Québec


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**The Company**

Hydro-Québec, a Crown corporation of the Province of Québec, generates, transmits and distributes electricity primarily from renewable energy sources. The Company is comprised of four divisions: Hydro-Québec Production (Generation), Hydro-Québec TransÉnergie (Transmission), Hydro-Québec Distribution (Distribution) and Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James (Construction).

**Authorized Commercial Paper Amount Limited**

USD 3.5 billion or equivalent CAD

## Rating

| Debt | Rating | Trend |
|---|---|---|
| Commercial Paper* | R-1 (middle) | Stable |
| Guaranteed Long-Term Debt* | A (high) | Stable |

* Guaranteed by the Province of Québec

## Rating Update

DBRS has updated its report on Hydro-Québec (the Company). The Province of Québec (the Province; see DBRS's report on the Province dated July 7, 2011) unconditionally guarantees (see the methodology DBRS Criteria: Guarantees and Other Forms of Explicit Support for further detail) almost all of the Company's outstanding debt (over 94% of total debt as at December 31, 2011). The ratings assigned to the Company are a flow-through of the rating of the Province.

As outlined in its *Strategic Plan 2009-2013*, Hydro-Québec is undergoing a substantial capital expenditure (capex) program which calls for an increase in debt levels, leading to weakened credit metrics. Operating cash flow increased to approximately $5.0 billion in 2011 from $4.5 billion in 2010. This increase was largely driven by higher electricity sales within Québec, partially offset by the effect of the appreciation of the Canadian dollar on export sales and the decline in electricity prices in the northeastern United States. Capital expenditures have remained high over the past five years, well above historic depreciation levels, as the Company continues to spend on growth projects. Capex is expected to remain above historical levels until at least 2013, at approximately $5.0 billion annually, as the Company executes on growth projects. Dividends declared were approximately 75% of Hydro-Québec's net income in 2011, in accordance with the Hydro-Québec Act. The Company generated negative free cash flow of $667 million in 2011. Free cash flow deficits were funded through debt, a trend expected to continue over the next several years. DBRS anticipates that free cash flow deficits going forward will remain manageable.

## Rating Considerations

**Strengths**

(1) Debt guaranteed by the Province
(2) One of the largest utilities in North America
(3) Low-cost hydroelectricity-based generation
(4) Strong water reservoir capacity
(5) Export access to major markets

**Challenges**

(1) High debt level constrains profitability
(2) Hydrology risk
(3) Export limited by transmission constraints
(4) Regulatory risk

## Financial Information

| | For the year ended December 31 | | | | |
|---|---|---|---|---|---|
| | **2011** | **2010** | **2009** | **2008** | **2007** |
| EBIT interest coverage | 2.06 | 2.02 | 2.19 | 2.11 | 2.09 |
| Debt/capital | 69.1% | 67.6% | 67.3% | 62.3% | 62.4% |
| Cash flow/total debt | 12.0% | 11.6% | 12.7% | 14.4% | 15.5% |
| Cash flow/capital expenditures (times) | 1.32 | 1.06 | 1.19 | 1.40 | 1.54 |
| Net income before non-recurring | 2,611 | 2,515 | 2,871 | 3,012 | 2,882 |
| Cash flow from operations ($million) | 5,033 | 4,486 | 4,823 | 5,258 | 5,350 |
| Electricity sales (GWh) | 196,729 | 192,755 | 188,673 | 191,696 | 192,779 |

Hydro-Québec

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## Rating Considerations Details

**Strengths**

**(1) Debt guaranteed by the Province:** The ratings assigned to the Company are a flow-through of the rating of the Province. Approximately 94% (as at December 31, 2011) of Hydro-Québec's outstanding debt is guaranteed by the Province.

**(2) One of the largest utilities in North America:** This provides significant economies of scale, allowing for high dividend distributions to Québec and making Hydro-Québec one of the Province's most valuable assets.

**(3) Low-cost hydroelectricity-based generation:** Hydro-Québec's cost structure is very competitive, largely as a result of its low cost of hydro power, accounting for approximately 98% of total generating capacity. Furthermore, it will purchase almost all of the power generated from Churchill Falls (Labrador) Corporation Limited (CF(L)Co) until 2041 at lucrative rates equal to 0.25¢ per kilowatt hour (kWh) until 2016, falling to 0.20¢ per kWh thereafter until 2041. The Company has a winter capacity contract with CF(L)Co, which provides it with additional winter capacity at a maximum cost of $1.3 billion from 1998 to 2041. Hydro-Québec sells this electricity primarily to Québec customers within the Company's tariff base, generating income in excess of $600 million per year.

**(4) Strong water reservoir capacity:** Through its 26 large reservoirs, the Company benefits from significant water storage capacity (175 terawatt hours (TWh) or more than one year's total generation). The storage capacity allows Hydro-Québec to buy low-cost power during off-peak periods and sell self-generated power at higher rates during peak-demand periods to maximize export revenues. In addition, the storage capacity greatly simplifies its own peak-shaving needs, since the hydroelectric generation equipment is easily started up and shut down.

**(5) Export access to major markets:** Hydro-Québec has access to Ontario, New Brunswick and the northeastern United States, providing the Company with export opportunities. The Company exported approximately 14% of sales volume (12% of total electricity sales) to these markets in 2011.

**Challenges**

**(1) High debt level constrains profitability:** Leverage of approximately 69% as at December 31, 2011, constrains Hydro-Québec's profitability and balance sheet. Although the Province unconditionally guarantees almost all outstanding debt, high debt levels nevertheless result in a higher interest expense, thus constraining profitability and resulting in weaker interest coverage ratios.

**(2) Hydrology risk:** The Company's earnings and cash flows are sensitive to changes in water levels, given its reliance on hydroelectric-based generating capacity.

**(3) Export limited by transmission constraints:** While Hydro-Québec has access to various jurisdictions, its interconnections are limited relative to the amount of installed capacity, which restricts export capacity over the longer term. However, transmission capacity did increase in May 2010 with the addition of a 1,250 megawatt (MW) transmission interconnection between Ontario and Québec.

**(4) Regulatory risk:** Hydro-Québec's strong asset profile is undermined by: (a) relatively low regulated rates for transmission and distribution activities, and (b) the flow-through of the Province's rating and (c) high dividend payouts.

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## Earnings and Outlook

| ($ millions) | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| | For the year ended December 31 | | | | |
| Total Revenues | 12,392 | 12,484 | 12,333 | 12,717 | 12,330 |
| EBITDA | 7,731 | 7,606 | 7,641 | 7,793 | 7,385 |
| Depreciation and amortization | 2,623 | 2,565 | 2,372 | 2,336 | 1,991 |
| EBIT | 5,108 | 5,041 | 5,269 | 5,457 | 5,394 |
| Gross interest costs | 2,483 | 2,495 | 2,411 | 2,587 | 2,584 |
| Net interest costs | 2,183 | 2,219 | 2,093 | 2,281 | 2,301 |
| Net income (before non-recurring) | 2,611 | 2,515 | 2,871 | 3,012 | 2,882 |
| Net income, as reported | 2,611 | 2,515 | 2,871 | 3,141 | 2,907 |
| Return on average common equity | 14.0% | 13.6% | 14.2% | 14.0% | 14.5% |
| | | | | | |
| Growth in EBIT | 1% | -4% | -3% | 1% | 8% |
| Growth in net income before non-recurring | 4% | -12% | -5% | 5% | 3% |

**Segmented Information**

| ($ millions) | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| | For the year ended December 31 | | | | |
| Net Income | | | | | |
| Distribution | 374 | 453 | 365 | 388 | 395 |
| Transmission | 435 | 447 | 435 | 426 | 396 |
| Generation | 1,690 | 1,605 | 2,214 | 2,230 | 2,077 |
| Other* | 112 | 10 | (143) | (32) | 14 |
| **Total** | **2,611** | **2,515** | **2,871** | **3,012** | **2,882** |

### Summary

- Hydro-Québec's earnings have remained relatively strong throughout the economic cycle, with the Company generating net income (before non-recurring items) in excess of $2.5 billion annually over the past five years.
- In 2011, Hydro-Québec's earnings increased modestly due to the following:
  - Higher consumption within Québec, mainly driven by increased demand from residential customers, as winter temperatures returned to normal from the mild levels experienced in 2010.
  - Increases in net income from the Company's largest segment, Generation, were offset by lower energy prices and the appreciation of the Canadian dollar.
  - Lower operating costs.

### Outlook

- Earnings growth is sensitive to the following factors:
  - The pace of growth in electricity demand, which is influenced largely by economic growth in Québec.
  - Future regulatory decisions with respect to regulated operations.
  - Export sales to Ontario and the northeastern United States.
  - Changes in weather, affecting demand, and hydrological conditions, affecting supply available for export.
- The Company stated in its *Strategic Plan 2009-2013* that it anticipates that net income will reach $2.4 billion each year from 2010 to 2013.
  - These results reflect the outlook for exchange rates as at the strategic plan date and prospects for energy and aluminum prices. However, in 2011 Hydro-Québec reported net income of $2,611 million, $211 million more than was projected in the *Strategic Plan 2009-2013*.
  - In addition, Hydro-Québec has stated that it would do its utmost to make an additional contribution, in accordance with the provision of the government of Québec's budget.
  - The results also take into account the expected impact, as at the strategic plan date, of the changeover to International Financial Reporting Standards (IFRS).

## Financial Profile

| | For the year ended December 31 | | | | |
|---|---|---|---|---|---|
| ($ millions) | 2011 | 2010 | 2009 | 2008 | 2007 |
| Net income before extraordinary items | 2,611 | 2,515 | 2,871 | 3,012 | 2,882 |
| Depreciation, depletion & amortization | 2,623 | 2,565 | 2,372 | 2,336 | 1,991 |
| Other | (201) | (594) | (420) | (90) | 477 |
| Cash flow (before working cap. changes) | 5,033 | 4,486 | 4,823 | 5,258 | 5,350 |
| Dividends paid | (1,886) | (2,168) | (2,252) | (2,095) | (2,342) |
| Capital expenditures | (3,814) | (4,220) | (4,050) | (3,755) | (3,464) |
| Free Cash Flow (bef. work. cap. changes) | (667) | (1,902) | (1,479) | (592) | (456) |
| Changes in non-cash work. cap. items | 170 | 153 | (36) | (149) | (191) |
| Net Free Cash Flow | (497) | (1,749) | (1,515) | (741) | (647) |
| Acquisitions & Long-term Investments | 0 | 0 | (595) | 0 | 0 |
| Short-term Investments | 376 | 891 | 1,430 | (435) | 155 |
| Proceeds on asset sales | 0 | 10 | 0 | 224 | 80 |
| Net equity change | 0 | 0 | 0 | 0 | 0 |
| Net debt change | 1,448 | 497 | 2,870 | (793) | 1,081 |
| Other | (30) | (41) | (2,103) | 2,075 | (674) |
| Change in cash | 1,297 | (392) | 87 | 330 | (5) |
| | | | | | |
| Total debt | 42,102 | 38,678 | 37,972 | 36,521 | 34,607 |
| Cash and equivalents | 2,281 | 1,310 | 2,589 | 3,930 | 3,127 |
| Net debt in capital structure | 67.9% | 66.8% | 65.8% | 59.6% | 60.1% |
| Total debt in capital structure | 69.1% | 67.6% | 67.3% | 62.3% | 62.4% |
| Net debt/cash flow (times) | 7.91 | 8.33 | 7.34 | 6.20 | 5.88 |
| Total debt/cash flow (times) | 8.37 | 8.62 | 7.87 | 6.95 | 6.47 |
| EBIT interest coverage (times) | 2.06 | 2.02 | 2.19 | 2.11 | 2.09 |
| Cash flow/capital expenditures (times) | 1.32 | 1.06 | 1.19 | 1.40 | 1.54 |
| Cash flow/capital investments (times) | 1.20 | 0.88 | 0.88 | 1.58 | 1.48 |
| Cash flow/debt | 12.0% | 11.6% | 12.7% | 14.4% | 15.5% |
| Cash flow/net debt | 12.6% | 12.0% | 13.6% | 16.1% | 17.0% |

### Summary

- In the context of significant project growth, the Company's credit metrics have weakened over the past three years, largely due to rising debt levels.
- Operating cash flow increased to approximately $5.0 billion in 2011 from $4.5 billion in 2010, primarily driven by higher electricity sales within Québec, and partially offset by the effect of the appreciation of the Canadian dollar on export sales and the decline in electricity prices in markets in northeastern North America.
- Capex over the past five years has been well above historical depreciation levels, as the Company continues to spend on growth projects.
- Dividends were approximately 75% of Hydro-Québec's net income for the previous year, in accordance with the Hydro-Québec Act.
- The Company generated negative free cash flow of $667 million in 2011. Free cash flow deficits were funded through the issuance of debt.

### Outlook

- Credit metrics could weaken further, due to rising debt levels required to support ongoing growth initiatives outlined in the Company's *Strategic Plan 2009-2013*.
- Hydro-Québec's *Strategic Plan 2009-2013* forecasts $25.1 billion in investments over the period and provides a good indication of capex over the short-to-medium term, outlining the following divisional expenditures:
  - Hydro-Québec Production will invest $10.4 billion and increase its hydroelectric generating capacity by close to 1,000 MW, mainly as a result of the Eastmain-1-A/Sarcelle/Rupert project.
  - Hydro-Québec TransÉnergie will invest $7.8 billion in various projects aimed at developing the transmission system and ensuring its long-term operability, including the integration of 3,000 MW of new generating capacity.
  - Hydro-Québec Distribution will make investments of $6.2 billion: $1.6 billion to meet demand growth in Québec, $2.9 billion to maintain and improve facilities and $1.7 billion for the Energy Efficiency Plan.
- Hydro-Québec is expected to continue to issue debt to fund its capital expenditures and dividends, as well as redeem and repay debt, and to manage free cash flow deficits throughout the medium term, while benefitting from historically low interest rates.

**Hydro-Québec**

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## Long-Term Debt Maturities and Bank Lines

**Summary**

- Hydro-Québec has a strong liquidity profile and the majority of debt available through credit facilities is consistent with overall debt levels and guaranteed by the Province. The facilities consist of the following:

– USD $2.0 billion guaranteed committed bank facility (undrawn as at December 31, 2011).

– USD $3.5 billion (or CAD equivalent) guaranteed commercial paper program (USD 3.484 billion unused as at December 31, 2011).

- Hydro-Québec has a $500 million credit line available in Canadian or American dollars, not guaranteed by the Province (as at December 31, 2011, $1 million outstanding).

| (as at December 31, 2011) | 2012 | 2013 | 2014 | 2015 | 2016+ | Total |
|---|---|---|---|---|---|---|
| (CAD $millions) | 1,025 | 753 | 2,086 | 2,365 | 35,821 | 42,050 |
| % of total | 2% | 2% | 5% | 6% | 84% | 100% |

*As at December 31, 2011, the Province of Québec guaranteed $39,643 million of Hydro-Québec's outstanding debt.

- The debt maturity profile is well spread out, with only 4% of total debt maturing prior to year-end 2013.
- The Company has good access to the debt markets, as evidenced by a number of debt issuances throughout 2011, with the most recent being the November 2011 $500 million issuance.

## Regulation

In Québec, generation is not regulated, while both transmission and distribution are regulated by the Régie de l’énergie (Régie).

**Generation**

While generation is not regulated, a “heritage pool” exists whereby Hydro-Québec Production is required to supply Hydro-Québec Distribution with a maximum of 165 billion kWh/year to supply the native load at a set price of 2.79¢/kWh. The wholesale market is open to competition for all needs in excess of the heritage pool.

Hydro-Québec retains sole responsibility for developing hydroelectricity generation sites with a capacity of over 50 MW. The wholesale market has been open to competition since May 1, 1997. However, none of the ten municipal distributors have exercised the option, given the low cost of power offered by Hydro-Québec Production.

**Transmission**

The Régie approved the following for Transmission for the year 2011:

- A deemed capital structure of 70% debt to 30% equity (as per the 2002 decision).
- An approved return of 7.205% on rate base (as per the April 2011 decision).
- Return on equity (ROE) of 7.137% (as per the April 2011 decision).
- Revenue requirement of $3,009 million (as per the May 2011 decision).
- Rate base is set at $17,154 million (as per the May 2011 decision).

The cost of transmission is passed on to Hydro-Québec Distribution and other customers.

**Distribution**

The Régie approved the following for Distribution for the rate year 2011–2012:

- A deemed capital structure of 65% debt to 35% equity (as per the 2005 decision).
- A return on rate base of 7.264% (as per the March 2011 decision).
- ROE of 7.32% (as per the March 2011 decision).
- Revenue requirement of $10,702 million (as per the March 2011 decision).
- Rate base is set at $10,388 million (as per the March 2011 decision).
- In March 2012, the Régie de l'énergie approved a rate adjustment of -0.45% effective April 1, 2012.

## Description of Operations

Hydro-Québec, a Crown corporation of the Province of Québec, is segmented into four main divisions: (1) Hydro-Québec Production; (2) Hydro-Québec TransÉnergie; (3) Hydro-Québec Distribution; (4) Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James.

**Hydro-Québec Production**

- Generates electricity and sells it to wholesale markets both inside and outside Québec.
- Generating fleet includes 59 hydroelectric generating stations, one nuclear plant and three thermal generating stations.
- The Company has 26 large reservoirs with a storage capacity of 175 TWh, along with 579 dams and 97 control structures.
- Total installed capacity of 36.8 gigawatts (GW). This division is obligated to supply a heritage pool of up to 165 TWh per year at a fixed price of 2.79¢/kWh.
- Major projects in the pipeline include the Eastmain-1-A/Sarcelle/Rupert and Romaine complex hydroelectric developments.
- The production division's primary business objective as per the *Strategic Plan 2009-2013* is to increase hydroelectric generating capacity by accelerating project development.
  - Over the strategic plan period, close to 60% of the division's $10.4 billion in investments will be allocated to the development of the generating fleet, including $3.0 billion for the Eastmain-1-A/Sarcelle/Rupert project and $3.0 billion for the Romaine complex.

**Hydro-Québec TransÉnergie**

- Operates the most extensive transmission system in North America.
- The transmission line runs into the northeastern United States and has interconnections available to customers both inside and outside Québec.
- In Québec, it is regulated by the Régie on the basis of cost of service.
- In May 2010, Hydro-Québec TransÉnergie completed the commissioning of the 1,250 MW interconnection with Ontario.
- Hydro-Québec TransÉnergie will continue to develop their transmission system between 2011 and 2013 to meet growing demand for capacity.
- The Company is looking to bring 3,000 MW of new generating capacity onto the grid during the 2009-2013 period.

**Hydro-Québec Distribution**

- Provides a reliable delivery system for electricity to customers in Québec.
- The division operates 113,525 kilometers of lines through its distribution system, a multi-site phone and online customer service centre, five distribution control centres, one hydroelectric generating station and 24 thermal generating stations.
- In Québec, it is regulated by the Régie on the basis of cost of service.
- The division relies on the heritage pool of 165 TWh provided by Hydro-Québec Production. Demand beyond the volume from the heritage pool is purchased from the market.

**Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James**

- Constructs the generation and transmission projects on behalf of Hydro-Québec.

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## Province of Québec

*(Excerpt from DBRS Rating Report dated July 7, 2011. Please see report for more detail)*
DBRS has confirmed the Long-Term and Short-Term Debt ratings of the Province of Québec (the Province) at A (high) and R-1 (middle), respectively. The trends remain Stable, reflective of the fiscal resolve of the Province and the progress achieved in the implementation of its fiscal recovery plan, which calls for a sharp reduction in the deficit next year and a return to balance by 2013-14.

Hydro Quebec

| **Balance Sheet ($ millions)** | **Dec. 31** | **Dec. 31** | **Dec. 31** | | **Dec. 31** | **Dec. 31** | **Dec. 31** |
|---|---|---|---|---|---|---|---|
| **Assets** | **2011** | **2010** | **2009** | **Liabilities & Equity** | **2011** | **2010** | **2009** |
| Cash & equivalents | 2,281 | 1,310 | 2,589 | S.T. borrowings | 52 | 18 | 29 |
| Accounts receivable | 1,744 | 1,814 | 1,955 | Accounts payable | 2,099 | 1,987 | 2,009 |
| Inventories | 0 | 0 | 0 | Current portion L.T.D. | 1,025 | 1,933 | 586 |
| Prepaid expenses & other | 1,576 | 1,203 | 1,734 | Deferred tax | 0 | 0 | 0 |
| **Total Current Assets** | **5,601** | **4,327** | **6,278** | Other current liab. | 3,081 | 3,103 | 3,316 |
| | | | | **Total Current Liab.** | **6,257** | **7,041** | **5,940** |
| Net fixed assets | 56,901 | 55,537 | 53,824 | Long-term/perp. debt | 41,025 | 36,727 | 37,357 |
| Future income tax assets | 0 | 0 | 0 | Deferred income taxes | 0 | 0 | 0 |
| Goodwill & intangibles | 2,187 | 2,083 | 1,212 | Other L.T. liab. | 3,521 | 3,475 | 3,276 |
| Investments & others | 4,948 | 3,862 | 3,678 | Shareholders equity | 18,834 | 18,566 | 18,419 |
| **Total Assets** | **69,637** | **65,809** | **64,992** | **Total Liab. & SE** | **69,637** | **65,809** | **64,992** |

| **Balance Sheet &** | **For the year ended December 31** | | | | |
|---|---|---|---|---|---|
| **Liquidity & Capital Ratios** | **2011** | **2010** | **2009** | **2008** | **2007** |
| Current ratio | 0.90 | 0.61 | 1.06 | 1.17 | 0.96 |
| Net debt in capital structure | 67.9% | 66.8% | 65.8% | 59.6% | 60.1% |
| Total debt in capital structure | 69.1% | 67.6% | 67.3% | 62.3% | 62.4% |
| Net debt/cash flow (times) | 7.91 | 8.33 | 7.34 | 6.20 | 5.88 |
| Cash flow/total debt | 12.0% | 11.6% | 12.7% | 14.4% | 15.5% |
| Total debt/cash flow (times) | 8.37 | 8.62 | 7.87 | 6.95 | 6.47 |
| (Cash flow - dividends)/capex | 0.83 | 0.55 | 0.63 | 0.84 | 0.87 |
| Dividend payout ratio | 72.2% | 86.2% | 78.4% | 69.6% | 81.3% |
| **Coverage Ratios (times)** | | | | | |
| EBIT interest coverage | 2.06 | 2.02 | 2.19 | 2.11 | 2.09 |
| EBITDA interest coverage | 3.11 | 3.05 | 3.17 | 3.01 | 2.86 |
| Fixed-charge coverage | 2.06 | 2.02 | 2.20 | 2.14 | 2.12 |
| **Profitability Ratios** | | | | | |
| EBITDA margin | 62.4% | 60.9% | 62.0% | 61.3% | 59.9% |
| EBIT margin | 41.2% | 40.4% | 42.7% | 42.9% | 43.7% |
| Profit margin | 21.1% | 20.1% | 23.3% | 23.7% | 23.4% |
| Return on equity | 14.0% | 13.6% | 14.2% | 14.0% | 14.5% |
| Return on capital | 8.1% | 8.3% | 8.6% | 9.3% | 9.5% |
| | | | | | |
| **Earnings Quality/Operating Efficiency** | | | | | |
| Operating margin | 41.2% | 40.4% | 42.7% | 42.9% | 43.7% |
| Profit returned to government | 75.1% | 85.3% | 80.0% | 74.6% | 81.7% |
| Customers/employees | 180 | 170 | 168 | 168 | 166 |
| Growth in customer base | 1.21% | 1.30% | 1.20% | 1.15% | 1.41% |
| GWh sold/employee | 8.7 | 8.1 | 8.0 | 8.2 | 8.2 |

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| | For the year ended December 31 | | | | |
|---|---|---|---|---|---|
| **Electricity Sold (GWh)** | 2011 | 2010 | 2009 | 2008 | 2007 |
| Residential/farm | 62,748 | 59,534 | 62,484 | 60,747 | 60,046 |
| Commercial/institutional | 33,569 | 33,865 | 34,151 | 35,228 | 34,751 |
| Industrial | 67,621 | 68,439 | 63,310 | 69,144 | 73,005 |
| Other | 6,028 | 7,647 | 5,371 | 5,278 | 5,353 |
| **Total domestic** | **169,966** | **169,485** | **165,316** | **170,397** | **173,155** |
| Exports (long-term) | 2,617 | 2,677 | 2,604 | 2,516 | 2,384 |
| Exports (short-term) | 24,146 | 20,593 | 20,753 | 18,783 | 17,240 |
| **Total exports** | **26,763** | **23,270** | **23,357** | **21,299** | **19,624** |
| **Total sold (GWh)** | **196,729** | **192,755** | **188,673** | **191,696** | **192,779** |
| Domestic sales growth | 0.3% | 2.5% | (3.0%) | (1.6%) | 3.5% |
| Total exports growth | 15.0% | (0.4%) | 9.7% | 8.5% | 35.7% |
| Total sales growth | 2.1% | 2.2% | (1.6%) | (0.6%) | 6.0% |
| **Generation Capacity** | | | | | |
| Hydroelectricity | 35,285 | 34,490 | 34,499 | 34,118 | 33,305 |
| Oil + diesel | 1,011 | 1,506 | 1,637 | 1,637 | 1,672 |
| Wind | 0 | 0 | 2 | 2 | 2 |
| Nuclear | 675 | 675 | 675 | 675 | 675 |
| **Installed, in-service capacity (MW)** | **36,971** | **36,671** | **36,813** | **36,432** | **35,654** |
| Available from Churchill Falls (MW) | 5,428 | 5,428 | 5,428 | 5,428 | 5,428 |
| Energy generated (GWh) (1) | | | | | |
| Hydroelectricity | - | 157,568 | 163,112 | 161,125 | 157,797 |
| Nuclear/Oil/Wind (2) | - | 3,562 | 4,089 | 3,939 | 4,693 |
| Gross energy generated | - | 161,130 | 167,201 | 165,064 | 162,490 |
| Plus: Churchill Falls purchases | - | 28,964 | 26,094 | 31,328 | 29,978 |
| Plus: other energy purchases | - | 17,117 | 9,620 | 10,930 | 15,014 |
| Energy generated + purchased | - | 207,211 | 202,915 | 207,322 | 207,482 |
| Less: transmission losses + internal use | - | 14,436 | 14,242 | 15,626 | 14,704 |
| Total sold (GWh) | - | 192,775 | 188,673 | 191,696 | 192,778 |
| Energy lost + used/energy gen. + purch. | n/a | 7.0% | 7.0% | 7.5% | 7.1% |
| Primary peak demand (MW)* | 35,481 | 37,717 | 34,659 | 37,230 | 35,352 |
| Peak demand/installed capacity | 96.0% | 102.9% | 94.1% | 102.2% | 99.2% |
| Peak demand/installed capacity(3) | 83.7% | 89.6% | 82.1% | 88.9% | 86.1% |
| **Export Interconnections** (MW) | | | | | |
| Ontario | 2,705 | 2,705 | 2,705 | 1,295 | 1,295 |
| New Brunswick | 1,029 | 1,080 | 1,080 | 1,200 | 1,200 |
| New England | 2,260 | 2,275 | 2,275 | 2,275 | 2,275 |
| New York | 2,000 | 2,000 | 2,000 | 2,125 | 2,125 |
| **Total** | 7,994 | 8,060 | 8,060 | 6,895 | 6,895 |
| Interconnections as a % of installed capacity. | 21.6% | 22.0% | 21.9% | 18.9% | 19.3% |

*Power requirements at the annual peak of demand in Québec for the winter.
(1) Does not include off-grid systems. (2) St-Ulric wind generation facility sold in 2010.
(3) Includes Churchill Falls capacity.

Hydro-Québec

**Report Date:**
April 12, 2012

## Rating

| Debt | Rating | Trend |
|---|---|---|
| Commercial Paper* | R-1 (middle) | Stable |
| Guaranteed Long-Term Debt* | A (high) | Stable |

* Guaranteed by the Province of Québec

## Rating History

| | Current | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|
| Commercial Paper* | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) |
| Guaranteed Long-Term Debt* | A (high) | A (high) | A (high) | A (high) | A (high) | A (high) |

* Guaranteed by the Province of Québec

## Related Research

DBRS Updates Its Report On Hydro-Québec, December 12, 2011.

DBRS Rates Hydro-Québec's Issue of $500 Million 5.00% Series JN Debentures at A (high), November 4, 2011.

DBRS Rates Hydro-Québec's Issue of $500 Million 5.00% Series JN Debentures at A (high), September 28, 2011.

DBRS Confirms Province of Québec at A (high) and R-1 (middle); Trends Stable, July 7, 2011.

DBRS Rates Hydro-Québec's Issue of U.S. $1,000,000,000 2.000% Global Notes Series JO at A (high), June 28, 2011.

DBRS Rates Hydro-Québec's Issue of $500 Million 5.00% Series JN Debentures at A (high), January 20, 2011.

Note:

All figures are in Canadian dollars unless otherwise noted.

Rating Report

**Report Date:**
April 12, 2013

**Previous Report:**
April 12, 2012

Insight beyond the rating.

# Hydro-Québec


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**The Company**

Hydro-Québec, a Crown corporation of the Province of Québec, generates, transmits and distributes electricity primarily from renewable energy sources. The Company is comprised of four divisions: Hydro-Québec Production (Generation), Hydro-Québec TransÉnergie (Transmission), Hydro-Québec Distribution (Distribution) and Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James (Construction).

**Commercial Paper Limit**

USD 3.5 billion or equivalent CAD

## Rating

| Debt | Rating | Trend |
|---|---|---|
| Commercial Paper* | R-1 (middle) | Stable |
| Guaranteed Long-Term Debt* | A (high) | Stable |

* Guaranteed by the Province of Québec

## Rating Update

DBRS has updated its report on Hydro-Québec (the Company). The Province of Québec (the Province; see DBRS's report on the Province dated May 31, 2012) unconditionally guarantees (see the methodology *DBRS Criteria: Guarantees and Other Forms of Explicit Support* for further detail) most of the Company's outstanding debt (approximately 93% of total debt as at December 31, 2012). The ratings assigned to the Company are a flow-through of the ratings of the Province.

As outlined in its *Strategic Plan 2009-2013*, Hydro-Québec is undergoing a substantial capital expenditure (capex) program which calls for an increase in debt levels, leading to a moderate decline in credit metrics. Operating cash flow remained relatively stable at $4.9 billion in 2012. The lower electricity sales to industrial customers and negative effect of special contracts were offset by higher exports and lower operating expenses. Capex has remained high over the past five years, well above historical depreciation levels, as the Company continues to spend on growth projects. Capex is expected to remain above historical levels in 2013 (approximately $4.9 billion) as the Company continues to execute on growth projects. Dividends declared in 2012 were approximately 75% of Hydro-Québec's net result in 2011, in accordance with the *Hydro-Québec Act*. The Company generated negative free cash flow of approximately $1 billion in 2012. Free cash flow deficits were mainly funded through debt, a trend expected to continue over the next several years. DBRS anticipates that free cash flow deficits going forward will remain manageable.

## Rating Considerations

**Strengths**
(1) Debt guaranteed by the Province
(2) Low-cost hydroelectricity-based generation
(3) Strong water reservoir capacity
(4) Export access to major markets

**Challenges**
(1) High level of planned capex
(2) Hydrology risk
(3) Export limited by transmission constraints
(4) Regulatory risk

## Financial Information

| | CGAAP | CGAAP | CGAAP | CGAAP | CGAAP |
|---|---|---|---|---|---|
| **Hydro-Québec** | **For the year ended December 31** | | | | |
| (CAD$ millions) | **2012** | **2011** | **2010** | **2009** | **2008** |
| EBIT gross interest coverage | 2.04 | 1.96 | 2.02 | 2.19 | 2.11 |
| Total debt in capital structure (1) | 69.4% | 68.9% | 67.8% | 68.2% | 63.7% |
| Cash flow/Total debt | 11.2% | 11.9% | 11.6% | 12.7% | 14.4% |
| Cash flow/Capital expenditure (times) | 1.24 | 1.31 | 1.06 | 1.19 | 1.40 |
| Net results before non-recurring items | 2,822 | 2,686 | 2,515 | 2,871 | 3,012 |
| Cash flow from operations | 4,862 | 4,991 | 4,486 | 4,823 | 5,258 |
| Electricity sales (GWh) | 203,699 | 196,729 | 192,755 | 188,673 | 191,696 |

(1) Adjusted for accumulated other comprehensive income.

## Rating Considerations Details

**Strengths**
(1) **Debt guaranteed by the Province.** The ratings assigned to the Company are a flow-through of the ratings of the Province. Approximately 93% (as at December 31, 2012) of Hydro-Québec's outstanding debt is guaranteed by the Province.

(2) **Low-cost hydroelectricity-based generation.** Hydro-Québec's cost structure is very competitive, largely as a result of its low cost of hydro power, accounting for approximately 98% of total generating capacity. Furthermore, it will purchase almost all of the power generated from Churchill Falls (Labrador) Corporation Limited (CF(L)Co) until 2041 at lucrative rates equal to 0.25¢ per kilowatt hour (kWh) until 2016 and 0.20¢ per kWh thereafter until 2041. The Company has a winter capacity contract with CF(L)Co, which provides it with additional winter capacity at a maximum cost of $1.3 billion from 1998 to 2041. Hydro-Québec sells this electricity primarily to Québec customers within the Company's tariff base.

(3) **Strong water reservoir capacity.** Through its 26 large reservoirs, the Company benefits from significant water storage capacity (175 terawatt hours (TWh) or more than one year's total generation). The storage capacity allows Hydro-Québec to buy low-cost power during off-peak periods and sell self-generated power at higher rates during peak-demand periods to maximize export revenues. In addition, the storage capacity greatly simplifies its own peak-shaving needs, since the hydroelectric generation equipment is easily started up and shut down.

(4) **Export access to major markets.** Hydro-Québec has access to Ontario, New Brunswick and the northeastern United States, providing the Company with export opportunities. The Company exported approximately 17% of total electricity sales volume to these markets in 2012.

**Challenges**
(1) **High level of planned capex.** Hydro-Québec is expected to spend a significant amount of capex in 2013 (approximately $4.9 billion), which will put some pressure on its financial and credit profile. Over the past few years, capex has consistently been above historical depreciation, leading to an increase in leverage (69.4% in 2012 versus 63.7% in 2008). However, the increase in debt is mitigated by the debt guarantee provided by the Province.

(2) **Hydrology risk.** The Company's earnings and cash flows are sensitive to changes in water levels, given its reliance on hydroelectric-based generating capacity.

(3) **Export limited by transmission constraints.** While Hydro-Québec has access to various jurisdictions, its interconnections are limited relative to the amount of installed capacity, which restricts export capacity over the longer term.

(4) **Regulatory risk.** Hydro-Québec's strong asset profile is undermined by: (a) relatively low regulated rates for transmission and distribution activities, (b) the flow-through of the Province's ratings and (c) high dividend payouts.

## Earnings and Outlook

| (CAD$ millions) | CGAAP 2012 | CGAAP 2011 | CGAAP 2010 | CGAAP 2009 | CGAAP 2008 |
|---|---|---|---|---|---|
| | For the year ended December 31 | | | | |
| Net revenues | 12,228 | 12,245 | 12,484 | 12,333 | 12,717 |
| EBITDA | 7,678 | 7,817 | 7,606 | 7,641 | 7,793 |
| EBIT | 5,263 | 5,214 | 5,041 | 5,269 | 5,457 |
| Gross interest expense | 2,576 | 2,662 | 2,495 | 2,411 | 2,587 |
| Net results before non-recurring items | 2,822 | 2,686 | 2,515 | 2,871 | 3,012 |
| Non-recurring items | (1,962) | (75) | 0 | 0 | 129 |
| Reported net results | 860 | 2,611 | 2,515 | 2,871 | 3,141 |
| Return on equity | 14.9% | 14.4% | 13.6% | 14.2% | 14.0% |
| | | | | | |
| Growth in EBIT | 1% | 3% | (4%) | (3%) | 8% |
| Growth in net results before non-recurr. | 5% | 7% | (12%) | (5%) | 3% |
| | | | | | |
| **Segmented Net Results Information (Continuing operations)** | | | | | |
| Distribution | 503 | 374 | 453 | 365 | 388 |
| Transmission | 581 | 429 | 447 | 435 | 426 |
| Generation | 1,541 | 1,765 | 1,605 | 2,214 | 2,230 |
| Other | 111 | 115 | 10 | (143) | (32) |
| **Total** | 2,736 | 2,683 | 2,515 | 2,871 | 3,012 |

**2012 Summary**

- Hydro-Québec's earnings before non-recurring items increased modestly in 2012 despite weaker domestic operating performance. This is mainly due to higher exports volume, lower depreciation, resulting from the shutdown of the Tracy Thermal Generating Station and revision of the useful life of some hydraulic generation assets, and financial expenses, resulting from the low interest rate environment.
- Significant non-recurring items in 2012 are related to the abandonment of the refurbishment project and shutdown of the Gentilly-2 Nuclear Generating Station. This led to a write-off of $990 million in property, plant and equipment under construction, an asset impairment charge of $827 million and a negative operating result of $59 million.

**2013 Outlook**

- DBRS expects earnings before non-recurring items to remain relatively stable in 2013.
- Hydro-Québec is targeting a net result of $2,725 million for the Government of Québec's 2013-2014 fiscal year.
- Earnings growth is sensitive to the following factors:
  - The pace of growth in electricity demand, which is influenced largely by economic growth in Québec.
  - Future regulatory decisions with respect to regulated operations.
  - Export sales to Ontario and the northeastern United States.
  - Changes in weather, affecting demand, and hydrological conditions, affecting supply available for export.

## Financial Profile

| | CGAAP | CGAAP | CGAAP | CGAAP | CGAAP |
|---|---|---|---|---|---|
| | For the year ended December 31 | | | | |
| (CAD$ millions) | **2012** | **2011** | **2010** | **2009** | **2008** |
| Net results before non-recurring items | 2,822 | 2,686 | 2,515 | 2,871 | 3,012 |
| Depreciation & amortization | 2,429 | 2,623 | 2,565 | 2,372 | 2,336 |
| Accrued benefits and other | (389) | (318) | (594) | (420) | (90) |
| Cash flow from operations | 4,862 | 4,991 | 4,486 | 4,823 | 5,258 |
| Dividends paid | (1,958) | (1,886) | (2,168) | (2,252) | (2,095) |
| Capital expenditures | (3,932) | (3,814) | (4,220) | (4,050) | (3,755) |
| Free cash flow (bef. working cap. changes) | (1,028) | (709) | (1,902) | (1,479) | (592) |
| Changes in non-cash work. cap. items | (94) | 170 | 153 | (36) | (149) |
| Net Free Cash Flow | (1,122) | (539) | (1,749) | (1,515) | (741) |
| Acquisitions & long-term investments | 0 | 0 | 0 | (595) | 0 |
| Short-term investments | 506 | 128 | 891 | 1,430 | (435) |
| Proceeds on asset sales | 0 | 0 | 10 | 0 | 224 |
| Net equity change | 0 | 0 | 0 | 0 | 0 |
| Net debt change | 963 | 1,738 | 497 | 2,870 | (793) |
| Other | 459 | (30) | (41) | (2,103) | 2,075 |
| Change in cash | 806 | 1,297 | (392) | 87 | 330 |
| | | | | | |
| Total debt | 43,543 | 42,102 | 38,678 | 37,972 | 36,521 |
| Cash and equivalents | 2,792 | 2,479 | 1,310 | 2,589 | 3,930 |
| Total debt in capital structure (1) | 69.4% | 68.9% | 67.8% | 68.2% | 63.7% |
| Cash flow/Total debt | 11.2% | 11.9% | 11.6% | 12.7% | 14.4% |
| EBIT gross interest coverage (times) | 2.04 | 1.96 | 2.02 | 2.19 | 2.11 |
| Dividend payout ratio | 69.4% | 70.2% | 86.2% | 78.4% | 69.6% |

(1) Adjusted for accumulated other comprehensive income.

**2012 Summary**

- In the context of significant project growth, the Company's credit metrics have moderately declined over the past five years, largely due to rising debt levels.
- Operating cash flow decreased in 2012, as lower electricity sales to industrial customers and the negative impact of special contracts more than offset higher exports and lower expenses.
- Capex over the past five years has been well above historical depreciation levels, as the Company continues to spend on growth projects.
- Dividends were approximately 75% of Hydro-Québec's 2011 net results, in accordance with the *Hydro-Québec Act*.
- The Company generated negative free cash flow of approximately $1 billion in 2012. Free cash flow deficits were mainly funded through debt issuance.

**2013 Outlook**

- Credit metrics could weaken moderately, due to rising debt levels required to support the high capex.
- The Company plans to invest approximately $4.9 billion in 2013, a large portion of which, $2.2 billion, will be devoted to the operations of Hydro-Québec TransÉnergie and $1.5 billion to the operations of Hydro-Québec Production. More than half of Hydro-Québec's investments will be allocated for development and growth activities. The remainder will go toward facility maintenance and improvements.
- Hydro-Québec is expected to continue to issue debt to fund its capex, dividends and debt redemption in the medium term, while benefitting from historically low interest rates.

## Long-Term Debt Maturities and Bank Lines

### Summary

- Hydro-Québec has a strong liquidity profile, and the majority of debt available through credit facilities is consistent with overall debt levels and is guaranteed by the Province. The facilities consist of the following:
  - USD 2.0 billion guaranteed committed bank facility maturing in 2018 (undrawn as at April 8, 2013).
  - USD 3.5 billion (or CAD equivalent) guaranteed commercial paper program (CAD 19 million outstanding as at December 31, 2012).
- Hydro-Québec has a $500 million credit line available in Canadian or American dollars, not guaranteed by the Province (CAD 1 million outstanding as at December 31, 2012).

| (As at December 31, 2012) | 2013 | 2014 | 2015 | 2016 | 2017+ | Total (1) |
|---|---|---|---|---|---|---|
| (CAD $millions) | 678 | 2,084 | 2,376 | 1,495 | 33,955 | 40,588 |
| % of total | 2% | 5% | 6% | 4% | 84% | 100% |

*As at December 31, 2012, the Province of Québec guaranteed $40,541 million of Hydro-Québec's outstanding debt.

(1) Long term debt maturities are presented at par value. In Hydro-Québec's consolidated financial statements, the long-term debt is shown at the amortized cost and totalled $43,543 million. It includes adjustment for fair-value hedged risk, private investments of debt, perpetual debt and the obligations maturing in 2060.

- The debt maturity profile is well spread out, with only 7% of total debt maturing prior to year-end 2014.
- The Company has good access to the debt markets and raised approximately $2.3 billion on the Canadian and global markets in 2012.

## Regulation

In Québec, generation is not regulated, while both transmission and distribution are regulated by the Régie de l'énergie (Régie).

### Generation

- A "heritage pool" exists whereby Hydro-Québec Production is required to supply Hydro-Québec Distribution with a maximum of 165 TWh/year to supply the native load at a set price of 2.79¢/kWh.
- The wholesale market is open to competition for all needs in excess of the heritage pool.
- Hydro-Québec retains sole responsibility for developing hydroelectricity generation sites with a capacity of over 50 MW.
- Given the low cost of power offered by Hydro-Québec Production, none of the ten municipal distributors have utilized the wholesale market for electricity needs.

### Transmission

- The cost of transmission is passed on to Hydro-Québec Distribution and other customers.
- The Régie approved the following, effective on January 1, 2012, for Transmission as per the June 6, 2012 decision:
  - A deemed capital structure of 70% debt to 30% equity.
  - An approved return of 6.84% on rate base (7.21% in 2011).
  - Return on equity (ROE) of 6.391%, which decreased by 0.746% from 7.137% in 2011.
  - Revenue requirement of $2,992 million.
  - Rate base is set at $17,288 million.

### Distribution

- The Régie approved the following for Distribution for the rate year 2013-2014, effective April 1, 2013, as per the March 13, 2013, and March 22, 2013, decisions:
  - A deemed capital structure of 65% debt to 35% equity.
  - A return on rate base of 6.380%.
  - ROE of 6.189%, which decreased by 0.180% from 6.369% in 2012.
  - Revenue requirement of $11,000 million.
  - Rate base is set at $10,280 million.
  - An average rate increase of 2.41%.

## Description of Operations

Hydro-Québec, a Crown corporation of the Province of Québec, is segmented into four main divisions: (1) Hydro-Québec Production; (2) Hydro-Québec TransÉnergie; (3) Hydro-Québec Distribution; (4) Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James.

### Hydro-Québec Production

- Generates electricity and sells it to wholesale markets both inside and outside Québec.
- Generating fleet includes 59 hydroelectric generating stations and two thermal generating stations.
- The Company has 26 large reservoirs with a storage capacity of 175 TWh, along with 664 dams and 97 control structures.
- Total installed capacity of 35.8 gigawatts (GW). This division is obligated to supply a heritage pool of up to 165 TWh per year at a fixed price of 2.79¢/kWh.
- In 2012, the Québec government, on Hydro-Québec's recommendation, decided to abandon the refurbishment of the Gentilly-2 Nuclear Generating Station due to an increase in project costs combined with a drop in energy prices on external markets.
- Major projects include the Eastmain-1-A/Sarcelle/Rupert project and Romaine complex hydroelectric developments.
- The production division's primary business objective is to increase hydroelectric generating capacity by accelerating project development.
  - In 2013, more than 30% of the Company's investments will be allocated to the development of the generation fleet, including the Romaine complex.

### Hydro-Québec TransÉnergie

- Operates the most extensive transmission system in North America.
- The transmission lines run into the northeastern United States and have interconnections available to customers both inside and outside Québec.
- In Québec, transmission is regulated by the Régie on the basis of cost of service.
- Hydro-Québec TransÉnergie will continue to develop their transmission system in 2013 to meet growing demand for capacity.

### Hydro-Québec Distribution

- Provides a reliable delivery system for electricity to customers in Québec.
- The division operates 114,649 kilometres of lines through its distribution system, a multi-site phone and online customer service centre, five distribution control centres, one hydroelectric generating station, 24 thermal generating stations and 272 kilometres of transmission lines supplying customers on off-grid systems.
- In Québec, distribution is regulated by the Régie on the basis of cost of service.
- The division relies on the heritage pool of 165 TWh provided by Hydro-Québec Production. Demand beyond the volume from the heritage pool is purchased from the market.

### Hydro-Québec Équipement et services partagés and Société d'énergie de la Baie James

- Constructs the generation and transmission projects on behalf of Hydro-Québec.

## Province of Québec

*(Excerpt from DBRS Rating Report dated May 31, 2012. Please see report for more detail.)*
DBRS has confirmed the Long-Term and Short-Term Debt ratings of the Province of Québec (the Province) at A (high) and R-1 (middle), respectively. Despite a revenue outlook weakened by volatile global economic conditions, the Province remains on course with its fiscal recovery plan, which calls for a return to balance next year with a mix of spending restraint and revenue measures. This should help slow debt growth to a more manageable pace below GDP growth.

Hydro-Québec

| Balance Sheet | CGAAP | CGAAP | CGAAP | | CGAAP | CGAAP | CGAAP |
|---|---|---|---|---|---|---|---|
| (CAD$ millions) | Dec. 31 | Dec. 31 | Dec. 31 | | Dec. 31 | Dec. 31 | Dec. 31 |
| **Assets** | 2012 | 2011 | 2010 | **Liabilities & Equity** | 2012 | 2011 | 2010 |
| Cash & equivalents | 2,792 | 2,479 | 1,310 | S.T. borrowings | 19 | 52 | 18 |
| Accounts receivable | 1,838 | 1,744 | 1,814 | Accounts payable | 2,078 | 2,099 | 1,987 |
| Prepaid expenses & other | 1,252 | 1,576 | 1,203 | Current portion L.T.D. | 694 | 1,025 | 1,933 |
| | | | | Other current liab. | 2,321 | 3,093 | 3,103 |
| **Total Current Assets** | **5,882** | **5,799** | **4,327** | **Total Current Liab.** | **5,112** | **6,269** | **7,041** |
| Net fixed assets | 57,174 | 56,901 | 55,537 | Long-term debt | 42,830 | 41,025 | 36,727 |
| Goodwill & intangibles | 2,241 | 2,187 | 2,083 | Other L.T. liab. | 3,593 | 3,509 | 3,475 |
| Investments & others | 5,220 | 4,750 | 3,862 | Shareholders' equity | 18,982 | 18,834 | 18,566 |
| **Total Assets** | **70,517** | **69,637** | **65,809** | **Total Liab. & SE** | **70,517** | **69,637** | **65,809** |

| | CGAAP | CGAAP | CGAAP | CGAAP | CGAAP |
|---|---|---|---|---|---|
| **Balance Sheet &** | **For the year ended December 31** | | | | |
| **Liquidity & Capital Ratios** | **2012** | **2011** | **2010** | **2009** | **2008** |
| Current ratio | 1.15 | 0.93 | 0.61 | 1.06 | 1.17 |
| Total debt in capital structure (1) | 69.4% | 68.9% | 67.8% | 68.2% | 63.7% |
| Cash flow/Total debt | 11.2% | 11.9% | 11.6% | 12.7% | 14.4% |
| (Cash flow-dividends)/Capex | 0.74 | 0.81 | 0.55 | 0.63 | 0.84 |
| Dividend payout ratio | 69.4% | 70.2% | 86.2% | 78.4% | 69.6% |
| **Coverage Ratios (times)** | | | | | |
| EBIT gross interest coverage | 2.04 | 1.96 | 2.02 | 2.19 | 2.11 |
| EBITDA gross interest coverage | 2.98 | 2.94 | 3.05 | 3.17 | 3.01 |
| Fixed-charges coverage | 1.98 | 1.90 | 1.90 | 2.06 | 2.05 |
| **Profitability Ratios** | | | | | |
| EBITDA margin | 70.2% | 70.5% | 68.6% | 68.7% | 68.9% |
| EBIT margin | 48.1% | 47.0% | 45.4% | 47.4% | 48.2% |
| Profit margin | 25.8% | 24.2% | 22.7% | 25.8% | 26.6% |
| Return on equity | 14.9% | 14.4% | 13.6% | 14.2% | 14.0% |
| Return on capital | 8.2% | 8.5% | 8.4% | 8.8% | 9.5% |
| **Earnings Quality/Operating Efficiency** | | | | | |
| Operating margin | 48.1% | 47.0% | 45.4% | 47.4% | 48.2% |
| Profit returned to government | 69.4% | 70.2% | 86.2% | 78.4% | 69.6% |
| Customers/employees | 190 | 180 | 170 | 168 | 168 |
| Growth in customer base | 2.38% | 2.52% | 2.51% | 2.36% | 2.58% |
| GWh sold/employee | 9.4 | 8.7 | 8.1 | 8.0 | 8.2 |

(1) Adjusted for accumulated other comprehensive income.

**Hydro-Québec**

**Report Date:**
April 12, 2013

| | For the year ended December 31 | | | | |
|---|---|---|---|---|---|
| **Electricity Sold (GWh)** | **2012** | **2011** | **2010** | **2009** | **2008** |
| Residential/farm | 62,329 | 62,748 | 59,534 | 62,484 | 60,747 |
| Commercial/institutional | 33,983 | 33,569 | 33,865 | 34,151 | 35,228 |
| Industrial | 65,916 | 67,621 | 68,439 | 63,310 | 69,144 |
| Other | 6,173 | 6,028 | 7,647 | 5,371 | 5,278 |
| **Total domestic** | **168,401** | **169,966** | **169,485** | **165,316** | **170,397** |
| Exports (long-term) | 2,683 | 2,617 | 2,677 | 2,604 | 2,516 |
| Exports (short-term) | 32,615 | 24,146 | 20,593 | 20,753 | 18,783 |
| **Total exports** | **35,298** | **26,763** | **23,270** | **23,357** | **21,299** |
| **Total sold (GWh)** | **203,699** | **196,729** | **192,755** | **188,673** | **191,696** |
| Domestic sales growth | (0.9%) | 0.3% | 2.5% | (3.0%) | (1.6%) |
| Total exports growth | 31.9% | 15.0% | (0.4%) | 9.7% | 8.5% |
| Total sales growth | 3.5% | 2.1% | 2.2% | (1.6%) | (0.6%) |
| **Generation Capacity** | | | | | |
| Hydroelectricity | 35,125 | 35,285 | 34,490 | 34,499 | 34,118 |
| Oil + diesel | 704 | 1,011 | 1,506 | 1,637 | 1,637 |
| Wind | 0 | 0 | 0 | 2 | 2 |
| Nuclear | 0 | 675 | 675 | 675 | 675 |
| **Installed, in-service capacity (MW)** | **35,829** | **36,971** | **36,671** | **36,813** | **36,432** |
| Available from Churchill Falls (MW) | 5,428 | 5,428 | 5,428 | 5,428 | 5,428 |
| **Energy generated (GWh) (1)** | | | | | |
| Hydroelectricity | 167,530 | 165,842 | 157,568 | 163,112 | 161,125 |
| Nuclear/Oil/Wind (2) | 4,217 | 3,532 | 3,562 | 4,089 | 3,939 |
| Gross energy generated | 171,747 | 169,374 | 161,130 | 167,201 | 165,064 |
| Plus: Churchill Falls purchases | 30,805 | 28,594 | 28,964 | 26,094 | 31,328 |
| Plus: other energy purchases | 17,211 | 13,457 | 17,117 | 9,620 | 10,930 |
| Energy generated + purchased | 219,763 | 211,424 | 207,211 | 202,915 | 207,322 |
| Less: transmission losses + internal use | 16,064 | 14,728 | 14,436 | 14,242 | 15,626 |
| **Total sold (GWh)** | 203,699 | 196,696 | 192,775 | 188,673 | 191,696 |
| Energy lost + used/energy gen. + purch. | 7.3% | 7.0% | 7.0% | 7.0% | 7.5% |
| Primary peak demand (MW)* | 38,797 | 35,481 | 37,717 | 34,659 | 37,230 |
| Peak demand/installed capacity | 108.3% | 96.0% | 102.9% | 94.1% | 102.2% |
| Peak demand/installed capacity(3) | 94.0% | 83.7% | 89.6% | 82.1% | 88.9% |
| **Export Interconnections** (MW) | | | | | |
| Ontario | 2,735 | 2,705 | 2,705 | 2,705 | 1,295 |
| New Brunswick | 1,029 | 1,029 | 1,080 | 1,080 | 1,200 |
| New England | 2,275 | 2,260 | 2,275 | 2,275 | 2,275 |
| New York | 1,999 | 2,000 | 2,000 | 2,000 | 2,125 |
| **Total** | 8,038 | 7,994 | 8,060 | 8,060 | 6,895 |
| Interconnections as a % of installed capacity. | 22.4% | 21.6% | 22.0% | 21.9% | 18.9% |

*Power requirements at the annual peak of demand in Québec for the winter.

(1) Does not include off-grid systems. (2) St-Ulric wind generation facility sold in 2010.

(3) Includes Churchill Falls capacity.

**Hydro-Québec**

**Report Date:**
April 12, 2013

## Rating

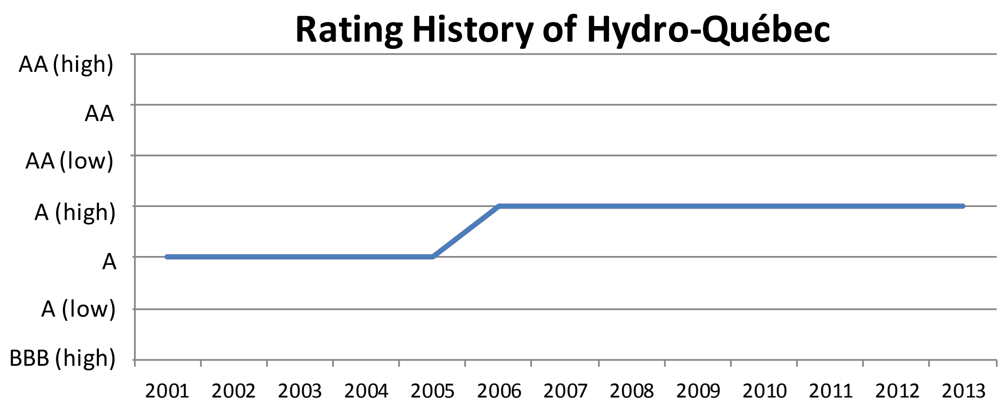
| Debt | Rating | Trend |
|---|---|---|
| Commercial Paper* | R-1 (middle) | Stable |
| Guaranteed Long-Term Debt* | A (high) | Stable |

* Guaranteed by the Province of Québec

## Rating History

| | Current | 2012 | 2011 | 2010 | 2009 | 2008 |
|---|---|---|---|---|---|---|
| Commercial Paper* | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) | R-1 (middle) |
| Guaranteed Long-Term Debt* | A (high) | A (high) | A (high) | A (high) | A (high) | A (high) |

* Guaranteed by the Province of Québec




Note:
All figures are in Canadian dollars unless otherwise noted.

Public Power
Full Rating Report

# Hydro-Quebec

Quebec, Canada

## Ratings

**Recent Issuance**
CAD1.0 Billion, Series JN, Sr. Unsec. Debentures due Feb. 15, 2050 ..... AA–

**Outstanding Debt**
CAD35.5 Billion Parity Debentures and Medium-Term Notes .................. AA–
$2.25 Billion Commercial Paper ..... F1+[a]

[a]As of Dec. 31, 2009, CAD21 million of commercial paper (CP) was outstanding. HQ's CP program is supported by $2 billion in dedicated stand-by lines of credit with various banks.

## Rating Outlook

Stable

## Analysts

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## Key Utility Statistics

(Fiscal Year Ended Dec. 31, 2009)

| **Consolidated Basis** | |
|---|---|
| System Type | Integrated |
| No. of Customers (Mil.) | 3.96 |
| Annual Revenues ($ Bil.) | 12.3 |
| Primary Fuel Source | Hydro |
| Peak Demand (MW) | 34,659 |
| Five-Year Energy Growth (%) | 0.4 |
| FFO/Interest Coverage (x) | 1.78 |
| Days Operating Cash | 201.7 |
| Equity/Capitalization (%) | 36.9 |

## Related Research

**Applicable Criteria**
- *Revenue-Supported Rating Criteria, Dec. 29, 2009*
- *Public Power Rating Guidelines, June 11, 2009*

**Other Research**
- *U.S. Public Power Peer Study, June 16, 2010*

## Rating Rationale

- Hydro-Quebec's (HQ) credit ratings are supported and driven by an unconditional and irrevocable guarantee by the government of Quebec, whose rating was recently affirmed at 'AA–' with a Stable Outlook by Fitch.
- On a stand-alone basis, HQ is an integrated utility with very low-cost hydroelectric power resources. HQ's power resource base benefits from substantial reservoirs, which help mitigate exposure to variable hydrological conditions.
- HQ has a history of stable financial performance and has historically maintained solid financial metrics with days cash on hand of 201.7 days and equity capitalization of more than 36% for the past three fiscal years.
- HQ is currently in the midst of a substantial capital-expenditure program, with associated construction risks related to the buildout of several large hydroelectric and transmission projects through 2020. On a consolidated basis, the capital-expenditure program is estimated at $20 billion from 2010–2013, of which approximately 50% will be debt financed.
- Additionally, as the new generating facilities become operational, HQ intends to sell more of its "green" hydropower outside of Quebec in neighboring regions that are lacking adequate carbon-free energy resources. While this strategy is economically viable, it potentially increases cash flow volatility for the generation division as its revenues become more dependent upon surplus off-system sales, which can be subject to fluctuating wholesale electricity market prices.
- On a stand-alone basis, HQ's financial metrics, as projected through 2013, will tighten from historical levels but should remain adequate in comparison to other 'AA–' rated municipal utilities.
- HQ remains subject to changes in Quebec's public policy, as occurred in 2008, when the divided to the province, HQ's sole shareholder, was increased to its maximum of 75% of net income from 50%.
- The proposed acquisition of the neighboring province's utility system, NB Power, for CAD3.2 billion, was officially canceled on March 24, 2010. There were changes proposed to the agreement-in-principle that had been signed in January that were unacceptable to both parties. From a credit perspective for HQ, the canceled acquisition is largely a credit neutral factor, though it will positively lower the utility's debt burden for fiscal-year 2010.

## Key Rating Drivers

- The key rating driver for HQ is Fitch's credit rating for the province of Quebec, given the explicit provincial guarantee. Fitch also assesses HQ's underlying, or stand-alone, credit quality to better gauge the level of support HQ receives from the province and vice versa.

## Security

The bonds are secured by a pledge of the net revenues of the consolidated HQ system. HQ debt is further secured by an unconditional payment guarantee by the province of Quebec.

## Credit Summary

HQ is a vertically integrated electric system in Canada, providing electric service to virtually all of Quebec, or 3.96 million customers. Quebec is a winter-peaking service area, with a 2010 winter peak of 34,659 MW. HQ is one of the largest electric systems in North America, with 36,810 MW of installed generating capacity and more than 33,000 kilometers of transmission lines in place.

HQ is composed of four principal operating segments: HQ Production (power generation); HQ TransEnergie (transmission division); HQ Distribution; and HQ Equipement (designs, builds, and refurbishes generation and transmission facilities). Transmission and distribution services are provided under regulated tariffs (see the Management and Governance section below for more detail). Generation services are not subject to local/provincial regulation.

HQ's distribution division's customer base is primarily the province of Quebec, or more than 3.96 million consumers. The distribution utility's load is well diversified, with residential, commercial, and industrial users representing 54%, 19%, and 27% of system revenues, respectively, for fiscal year 2010. The recent economic recession has negatively affected HQ's industrial sales, as the utility serves many energy-intensive users, such as aluminum producers. Electricity sales to industrial customers have decreased approximately 10,000 GWh during 2008 and 2009, and given the current demand and economic climate, will likely take some time before they return to the pre-2008 usage levels.

Conversely, residential sales are still rising despite the economic downturn as customers continue to switch from oil-fired home heating to more economical electric-heating systems. HQ's residential sales have increased by an average annual 1.75% since 2005 and rose by 2.85% from fiscal-year 2008 to fiscal-year 2009.

On a consolidated basis, which incorporates kWh sales outside of Quebec, HQ's total sales have been increasing by 0.44% per annum over the past five years. Going forward, management is projecting relatively higher sales growth of 3% for fiscal-year 2010, given that the utility experienced an abnormally warm winter in 2009. Sales are projected to grow at a moderate pace thereafter, more in-line with historical levels through 2013.

For fiscal-year 2009, on a consolidated basis, 87.5% of HQ's revenues are derived from customers inside Quebec, which is 3% higher than in the prior fiscal year. The remaining 12.5% of revenues is attributable to off-system sales, including sales outside of Quebec, which represented 3% less in fiscal-year 2009 than in fiscal-year 2008.

## Recent Issuance Details

In March 2010, HQ issued another tranche of $500 million series JN debentures (unsecured) due Feb. 15, 2050. This brought the total issuance of the series JN debentures to $2.5 billion, as anticipated. Bond proceeds will be used to finance a portion of HQ's capital-expenditure program, refund a portion of outstanding debt, and for other general corporate purposes. All of the series JN debentures offer a 5% coupon and have been underwritten by a syndicate of Canadian banks. With this issuance, less than 10% of HQ's total debt is in U.S.-denominated securities. The JN debentures are on parity, as to payment, with HQ's $38.3 billion outstanding senior unsecured, medium-term note and perpetual debt (not rated by Fitch) obligations.

Unlike most U.S. municipal power companies, HQ's financing strategy is based on the use of mainly bullet maturities, rather than levelized annual debt amortization. Part of HQ's financing plan is to redeem debt prior to maturity, if economic, and to stagger debt maturities to maintain a somewhat more level amount of principal coming due each year.

## Management and Governance

HQ was created in 1944 by the Hydro-Quebec Act passed by the Quebec Parliament. All capital stock of HQ is held by the Minister of Finance on behalf of the government of Quebec. Pursuant to the Hydro-Quebec Act, HQ declares annual dividends to its sole owner, the province, of no more than 75% of its consolidated net income, provided the utility maintains equity capitalization of at least 25%.

HQ is governed by a 16-member board, 14 of which are appointed by the Quebec government with the remaining two being the president and CEO of HQ and the Deputy Minister of Natural Resources and Wildlife. The management team has a history of fiscal conservatism and, in recent years, has eliminated international business investments and activities to focus on native load growth and power needs. Over the past decade, HQ has changed its utilization of its reservoir system to favorably maximize profitability.

### Strategic Plan

HQ's most recent strategic plan (2009–2013) is focused on several objectives including: energy-efficiency goals at the distribution division (with a target of 11 terrawatt hour [tWh] savings by 2015), investment in renewable energy resources (primarily wind), the addition of 1,000 MW of new/retrofitted hydroelectric facilities by 2013, major transmission projects, and meeting distribution system growth and upgrades. HQ plans to invest $25.1 billion on capital expenditures between 2009 and 2013, of which approximately 41% (or $10.4 billion) will be used to increase hydroelectric-generating capacity. This initial wave of hydroelectric construction is needed primarily for native load growth purposes (as domestic demand picks up) and for increasing export sales.

Additionally, in May 2006, the Quebec government unveiled its long-term energy strategy (for the 2006–2015 period). As part of the government's energy plan, HQ is in the process of adding 1,550 MW of new hydroelectric capacity by 2020 (the Romaine Complex). HQ has also moved forward on government targets to integrate more wind power into its portfolio mix and implement programs to help attain the energy-efficiency goal of 11 twh by 2015. Ever further out on the time horizon, the Quebec government announced its energy strategy, referred to as the Northern Plan, which calls for the addition of 3,500 MW of renewable energy (more hydropower facilities plus wind/other renewables) by 2035.

**Hydro-Quebec Business Segments**

(C$ Mil., As of Dec. 31, 2009)

| | Generation | Transmission | Distribution | Construction | Corporate/ Other[a] | HQ Total |
|---|---|---|---|---|---|---|
| Revenues | 6,407 | 2,929 | 10,717 | 2,678 | 1,265 | 12,334 |
| Net Income | 2,214 | 435 | 365 | - | 9 | 3,035 |
| Total Assets | 33,103 | 17,677 | 12,443 | 424 | 5,584 | 68,978 |
| Capital Expenditures | 2,066 | 1,196 | 709 | 1 | 111 | 4,083 |

[a]Includes energy-efficiency program spending.
Source: Company financial reports.

A key tenet behind HQ and the government's energy plan is to maximize profits from the utility's largely renewable mix of power resources. Particularly beyond 2015, an increasing portion of HQ's new power resources will be available for resale outside of Quebec, namely to neighboring provinces and the U.S. Given increasing renewable and carbon-reduction targets, both in Canada and the U.S., HQ's generation division should be favorably positioned to sell surplus renewable or green power into nearby regions. This type of strategy can be more speculative in nature, as sales into wholesale electricity market are subject to price volatility (assuming kWh sales are not long-term, bilateral sales contracts).

HQ is projecting off-system sales will rise from 8% of total generation division sales to 12% by 2013. With respect to net margins, these exports will account for a significant 38% of HQ's consolidated net income by 2013, from 32% at fiscal year-end 2008 and 22% at fiscal year-end 2009. HQ's projections are based on fairly conservative assumptions regarding natural gas prices ($4.50–$7.10/million British thermal units [MMBtu]), wholesale electricity prices, aluminum prices, and the continued strength of the Canadian dollar versus the U.S. dollar. Nonetheless, Fitch will be monitoring HQ's ability to effectively manage its increasing off-system sales going forward.

### New Brunswick Power Transaction Update

In March 2010, HQ announced it would not move forward with its planned transaction with New Brunswick Power. Citing new developments that came up during the due-diligence phase of the transaction, HQ felt there were additional costs and risks that the utility became aware of during this phase that made the investment unattractive. HQ and New Brunswick Power continue to maintain solid business relations.

## Rate Competitiveness

The most recent distribution system rate increase of 0.35% was approved by the Regie de L'Energie (provincial utility regulatory authority) and became effective on April 1, 2010. It is expected to increase revenue by $33.1 million and add 37 cents per month for the utility's average residential customer bill. HQ's average system retail revenue per kWh was 6.4 cents in 2009, which was slightly up from 6.1 cents per kWh in the prior year but still very competitive among the Canadian provinces and compared with HQ's U.S. utility counterparts. The average retail price for residential customers, as of April 1, 2009 (in Canadian dollars) for the cities of Montreal (Quebec), Toronto (Ontario), and New York City (USA) is 6.87, 11.46, and 25.32 cents per kWh, respectively, exhibiting HQ's rate competitiveness.

Prospectively, HQ is projecting distribution system rate increases on the order of 0.2%–2.5% per year through 2013, albeit subject to approval by the Regie. Given the relatively modest rate projection, HQ's retail rates should remain competitive within North America.

## Assets

HQ's three largest business divisions (distribution, transmission, and generation) accounted for 99% of the utility's total net income for fiscal year-end 2009. The following is a brief summary of each of the largest divisions.

### HQ Production

HQ's generation division consists of 59 hydroelectric power stations, four thermal facilities, one nuclear facility, and one wind farm. Total installed capacity was 36,810 MW as of Dec. 31, 2009. HQ's power resources are heavily green (97% of generation), including hydroelectricity (93.7% of installed capacity) and wind power

**Installed Capacity**

(MW, As of Dec. 31, 2009)

| | |
|---|---|
| **Owned Generating Capacity** | |
| Hydroelectric | 34,499 |
| Nuclear | 675 |
| Thermal | 1,634 |
| Wind | 2 |
| **Total Installed Capacity** | **36,810** |
| **Purchases (Long Term)** | |
| Churchill Falls (Hydro) | 5,428 |
| Wind Farms | 657 |
| Other | 1,297 |
| **Total Capacity** | **44,192** |
| Peak Demand | 34,659 |

Source: HQ 2009 annual report.

purchases, each favorably noncarbon-emitting resources.

HQ's generation division is focused on three key goals over the next five years: increasing hydroelectric-generating capacity by 1,000 MW; augmenting off-system sales (referred to as net exports by HQ); and maintaining reliable delivery of electricity to HQ Distribution customers and other long-term contractual power purchasers. Current hydropower projects under construction include the Eastmain 1A/Sarcelle/Rupert project (which will add 8.7 twh of energy by 2012) and the Romaine complex (which will add 8.0 twh by 2020). HQ has developed a certain level of expertise in the construction of hydroelectric powerhouses, which has resulted in new projects typically being built on time and under budget. The average cost of generation in 2009 was a very competitive 2.0 cents per kWh. By 2013, the average cost of generation is projected to rise to 2.39 cents/kWh, which is still low in cost, given the addition of new generation, inflationary cost increases, and rising water royalties (fees) as hydroelectric generation grows.

HQ Production is continuing work on the draft design of a 1,200-MW hydroelectric project, the Petit-Mecatina Complex. This project would complete the portfolio of new generating capacity (4,500 MW in aggregate) necessary to fulfill the energy strategy originally announced by the provincial government in 2006. The energy plan was updated in the fall of 2008 and extended to cover generating capacity needs through 2035 (as part of the Northern Plan). According to this very long-term view, HQ Production would need to add another 3,500 MW of new generating capacity by 2035 (mostly hydropower, plus wind and other renewable resources).

## Transmission and Distribution Divisions

Pursuant to the Energy Board Act enacted in 1996, HQ's distribution and transmission businesses are regulated by the Regie de L'Energie (the Regie). The Regie consists of a seven-member board appointed by the government. The Regie, among other functions, has the authority to set rates and conditions under which electricity is distributed or transmitted by HQ. The Energy Board Act provides for the setting of rates sufficient to recover cost of service plus a reasonable rate of return on the rate base. The Regie, while comparatively young in terms of regulatory existence, has a history of approving reasonable distribution and transmission rate orders in regard to HQ. The other HQ divisions are not regulated, with the exception of HQ Production's obligation to meet the heritage pool sales requirement of 165 twh, deliverable to HQ's distribution division.

HQ's TransEnergie division maintains a vast transmission system within Quebec with connections to three provinces (Ontario, New Brunswick, and Newfoundland and Labrador) and the northeastern U.S. HQ operates 33,244 kilometers (or more than 20,656 miles) of transmission lines. With the recent new interconnection with the province of Ontario (1,250 MW), TransEnergie's maximum export capacity totals 8,060 MW.

TransEnergie continues to invest in its transmission system for four main purposes: 1) to maintain system reliability; 2) to meet load growth; 3) to connect new HQ generation facilities to the transmission grid; and 4) to increase export/import capacity (new transmission lines) outside of Quebec. The capital expenditures are forecast to significantly rise over the next five years to a cumulative $7.8 billion through 2013, as compared with an aggregate of $4.2 billion over the last five years. Favorably, a majority (roughly 74%) of the future investment is to meet native load growth and upgrade HQ's existing transmission grid.

### HQ Distribution

HQ Distribution consists of more than 111,000 kilometers of medium- and low-voltage lines, in addition to one hydroelectric-generating station and 23 thermal generating facilities. HQ Distribution's power supply is primarily (98.6 % of total requirements) met via its heritage pool electricity (165 tWh), which the HQ Production division is obligated to provide at a fixed rate of 2.79 cents per kWh. To meet power supply needs in excess of the heritage pool, the distribution system issues tenders, or requests for proposals, for the supplemental power. The distribution division can purchase such supplemental power from HQ's Production division, but those sales are at market prices not the heritage pool price of 2.79 cents/kWh.

HQ Distribution expects to add more wind, via contractual purchases, to its power supply mix, with a goal of up to 3,500 MW of wind purchases by 2015. While this type of resource is more costly than others available in the region, it is a strategic goal of the provincial government to expand Quebec's renewable portfolio mix. Positively, the distribution system's power supply mix is flexible in relation to changes in customer demand. For example, in 2008, with the economic recession and associated drop in industrial customer demand, HQ Distribution received approval from the Regie to defer a portion of its power purchases from HQ Production until the 2012–2020 period, alleviating some of the power supply cost pressure during the economic downturn.

**Hydro-Quebec Regulated Businesses**

| | Rate Structure | Rate Adjustments[a] 2009[b] | Rate Adjustments[a] 2010[b] | Capital Structure | Allowed ROE (%) |
|---|---|---|---|---|---|
| HQ Distribution | Cost Based | 1.22% | 0.35% | 35% Equity | 7.849 |
| HQ TransEnergie (Transmission) | Cost Based | $72.00[c] | $75.26 | 30% Equity | 7.587 |

[a]As authorized by Regie de L'Energie. [b]Cents per kWh. Note: HQ Distribution does not have an automatic fuel adjustment factor; it needs approval by Regie.
Source: HQ 2009–2010 financial profile.

HQ Distribution's main goals include improving system reliability, increasing energy-efficiency efforts, and implementing cost-cutting initiatives. Prospectively, the distribution division is projecting capital expenditures totaling $6.2 billion through 2013, which is approximately double the distribution system's capital investments over the last five years. This stepped-up capital plan reflects the need to meet customer growth, albeit at a slower pace, make progress on an energy efficiency target of 11 twh savings by 2015, and improve the distribution system's reliability to an average system interruption duration of less than 110 minutes for all of Quebec.

## Financial Position

HQ has a history of stable financial performance and has historically maintained solid financial metrics with days cash on hand of 201 days and equity at an average of 37% for the past three fiscal years. Leverage, as measured by debt to funds available for debt service, has been approximately 5.0x but will likely increase, given HQ's capital plans.

HQ's 2009–2013 strategic plan incorporates a $25.1 billion capital program, modest distribution and transmission rate increases, conservative electricity/natural gas price forecasts, limited native load growth of 0.6%, $9 billion in aggregate dividends to the province, and $3.1 billion in water royalties. The utility closed fiscal-year 2009 with a net income of $3.035 billion, slightly higher than midyear projections of $2.7 billion for the same period. Net income is projected at $2.4 billion through 2013, which is in line with historical levels. However, this net income projection was recently augmented, as requested by the Quebec government in its 2010 budget, to include an additional $25 million in net income for fiscal-year 2010, rising to $250 million by 2013.

## Liquidity

HQ continues to maintain very strong levels of liquidity in the form of unrestricted cash and various credit and liquidity facilities. With 201 days cash on hand and 296 days liquidity on hand at fiscal year-end 2009, HQ's liquidity needs are adequately met by a diverse group of financial institutions, which provides flexibility when contracts come up for renewal. HQ does not project changing its existing level of liquidity. Meanwhile, HQ's authorized commercial paper program of $2.25 billion (of which only $21 million was outstanding as of Dec. 31, 2009) is supported by $2 billion in dedicated stand-by lines of credit with various banks.

### Capital Expenditures by Business Segment

(C$ Mil.)

| | Actual | | Projected | | | | Total |
|---|---|---|---|---|---|---|---|
| | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2010–2013** |
| **HQ Business Segments** | | | | | | | |
| Production | 1,894 | 2,066 | 2,244 | 1,950 | 2,068 | 1,653 | 7,915 |
| Transmission | 1,097 | 1,196 | 1,231 | 1,752 | 1,662 | 1,946 | 6,591 |
| Distribution | 900 | 709 | 1,138 | 1,179 | 1,383 | 1,482 | 5,182 |
| Other | 101 | 112 | 137 | 116 | 144 | 116 | 513 |
| **Total Capital Plan** | **3,992** | **4,340** | **4,750** | **4,997** | **5,257** | **5,197** | **20,201** |

Source: HQ 2009–2013 strategic plan.

## Financial Summary — Hydro-Quebec

(C$ Mil., Fiscal Year Ending Dec. 31)

| | 2009 | 2008 | 2007 | 2006 | 2005 |
|---|---|---|---|---|---|
| **Key Ratios** | | | | | |
| Debt Service Coverage (x)[a] | 1.94 | 1.41 | 1.94 | 1.35 | 1.31 |
| Coverage of Full Obligations (x)[b] | 1.76 | 1.34 | 1.77 | 1.31 | 1.28 |
| Funds from Operations/Interest (x)[c] | 1.78 | 1.80 | 1.87 | 1.56 | 1.68 |
| Debt/FADS (x) | 5.0 | 4.6 | 4.6 | 4.9 | 5.2 |
| Days Cash on Hand | 201.7 | 290.2 | 230.8 | 284.3 | 28.5 |
| Days Liquidity on Hand | 396.4 | 475.5 | 415.3 | 504.5 | 239.4 |
| All Transfers to Provincial/Local Govt. % Revenue | 25.8 | 25.1 | 25.6 | 14.8 | 17.9 |
| Operating Margin (%) | 44.1 | 42.9 | 43.7 | 44.9 | 41.7 |
| Net Margin (%) | 24.6 | 24.7 | 23.6 | 33.5 | 20.7 |
| Debt Service/Operating Expenses (%) | 57.0 | 77.1 | 55.6 | 85.7 | 79.1 |
| Internal Cash/Cap. Expenditures (%) | 62.9 | 81.7 | 86.8 | 88.6 | 84.5 |
| Variable-Rate Debt/Total Debt (%) | 11.0 | 11.0 | 7.8 | 8.2 | 20.0 |
| Equity/Total Capital (%) | 36.9 | 37.7 | 37.6 | 35.4 | 33.5 |
| Return on Equity (%) | 14.1 | 14.6 | 14.6 | 20.7 | 13.4 |
| **Profitability** | | | | | |
| Revenues | 12,334 | 12,717 | 12,330 | 11,161 | 10,888 |
| Operating Expenses | 6,900 | 7,260 | 6,936 | 6,152 | 6,350 |
| Operating Income | 5,434 | 5,457 | 5,394 | 5,009 | 4,538 |
| Adjustment to Operating Income for Debt Service Coverage | 2,214 | 2,423 | 2,078 | 2,086 | 2,046 |
| Funds Available for Debt Service | 7,648 | 7,880 | 7,472 | 7,095 | 6,584 |
| Net Income | 3,035 | 3,141 | 2,907 | 3,741 | 2,252 |
| Taxes to Local/Provincial Govt. | 928 | 1,093 | 816 | 529 | 594 |
| **Cash Flow** | | | | | |
| Cash Flow from Operations | 4,781 | 5,015 | 5,159 | 4,005 | 4,401 |
| Change in Working Capital | (38) | (149) | (191) | (87) | 279 |
| Funds from Operations | 4,819 | 5,164 | 5,350 | 4,092 | 4,122 |
| Depreciation and Amortization | 2,214 | 2,336 | 1,991 | 2,007 | 2,023 |
| Dividends | 2,252 | 2,095 | 2,342 | 1,126 | 1,350 |
| Capital Expenditures | 4,083 | 3,756 | 3,464 | 3,348 | 3,282 |
| Principal Payments | 1,233 | 2,734 | 993 | 2,651 | 2,562 |
| Gross Interest Expense | 2,703 | 2,863 | 2,864 | 2,624 | 2,460 |
| **Capital Structure** | | | | | |
| Unrestricted Cash | 2,589 | 3,915 | 3,127 | 3,229 | 338 |
| Other Liquidity (Credit Facilities, Bank Lines) | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Available Commercial Paper | 2,229 | 2,159 | 2,221 | 2,225 | 2,225 |
| Short-Term Debt | 29 | 91 | 73 | 25 | 20 |
| Long-Term Debt | 38,264 | 36,415 | 34,534 | 34,427 | 34,427 |
| **Total Debt** | **38,293** | **36,506** | **34,607** | **34,452** | **34,447** |
| Equity | 22,395 | 22,062 | 20,892 | 18,840 | 17,376 |
| Total Capital | 60,688 | 58,568 | 55,499 | 53,292 | 51,823 |
| Net Utility Plant | 57,760 | 54,987 | 53,228 | 51,813 | 50,373 |

[a]Based on funds available for debt service (FADS) coverage of annual debt service payments. FADS is calculated as operating income plus depreciation, amortization, and investment income. [b]Includes transfers to local/provincial government for various taxes, water power fees, etc., and treats those expenses as debt service (does not include dividend to province). Dividends declared in current fiscal year but not distributed until next fiscal year. [c]Funds from operations is calculated as cash from operations less noncash working-capital changes.
Source: Company annual reports.

FitchRatings

# FITCH RATES HYDRO-QUEBEC'S C$500MM DEBENTURES SERIES JN 'AA-'

Fitch Ratings-New York-19 July 2013: Fitch Ratings assigns an additional C$500 million to Hydro-Quebec's (HQ) existing debentures series JN which are currently rated 'AA-'. The debentures are due Feb. 15, 2050. This tranche of series JN debentures is in addition to C$6 billion presently outstanding and due in 2050. The additional increase is part of HQ's borrowing program for 2013. The bond proceeds will be used to pay for a portion of HQ's capital investment program, refund a portion of outstanding debt and for general corporate purposes.

In addition, Fitch affirms the following ratings for HQ:

--Long-term Issuer Default rating (IDR) at 'AA-';
--$42.8 billion parity unsecured debentures and medium-term notes at 'AA-'.

The Rating Outlook is Stable.

SECURITY

HQ's debt is secured by the net revenues of the consolidated HQ system. HQ's bonds are further secured by an irrevocable and unconditional payment guarantee by the Province of Quebec (rated 'AA-' with a Stable Outlook by Fitch).

KEY RATING DRIVERS

GOVERNMENT-OWNED CORPORATION: HQ generates, transmits and distributes electricity with a total installed capacity of 35,829 MW.  HQ has been able to use considerable renewable generating options under contract and develop large hydropower projects, with over 40% of Canada's water resources in Quebec. The company serves the Quebec market and sells its surplus on wholesale markets in northeastern North America.

PROVINCIAL GUARANTEE: HQ's credit ratings are driven by an irrevocable and unconditional guarantee provided by the government of Quebec. This guarantee ranks equally in right of payment with all other unsecured obligations for borrowed money of the province of Quebec.

LOW-COST HYDROELECTRIC POWER: HQ is an integrated utility with low-cost and largely carbon-free hydroelectric power resources (average production cost of 2.1 cents per kWh [kilowatt hour] for 2012).

COMPETITIVE ELECTRIC RATES: HQ's distribution division, regulated on a cost-of-service basis, maintains some of the lowest retail rates in North America (average residential customer rate of 6.76 cents/kWh). Despite distribution rate decreases approved by the Regie de l'energie of 0.41% (effective April 1, 2011) and 0.45% for the period between April 1, 2012 and March 31, 2013, HQ's financial performance continues to be solid.

RESERVOIRS SUPPORT HYDROPOWER OPERATIONS: HQ's hydropower resource base benefits from substantial reservoirs, which help mitigate exposure to variable hydrological conditions.

SOUND FINANCIAL POSITION: HQ has a history of solid financial performance, with debt service coverage averaging 2.16x over the past five years, and equity-to-total capitalization presently stable around 30%.

LARGE CAPITAL PROGRAM: HQ is currently in the midst of a substantial capital program, with associated construction risks related to the build-out of several large hydroelectric and transmission projects through 2020. Positively, the projects are proceeding on time and within budget. HQ's borrowing program for 2013 is estimated at $2.4 billion.

INCREASING BUT MANAGEABLE LEVERAGE: The capital expenditure program is estimated at about $10 billion for 2013-2014 and will be approximately 50% debt financed. As a result, leverage has increased over the last five years and should stabilize at around 70% by FY 2013. This level of debt is slightly above Fitch's rating category median of 53.7%, but is supportable at the 'AA-' level given HQ's sound financial position and the provincial guarantee.

FINANCIAL METRICS TIGHTER THROUGH 2013: Financial metrics have tightened modestly through the capital expenditure program thus far, as projected in HQ's Strategic Plan for 2009 - 2013, but remain adequate for the 'AA-' rating category.

RATINGS SENSITIVITY

QUEBEC PROVINCIAL RATING LINKAGE: The explicit guarantee by the government of Quebec results in a direct linkage between the rating on HQ-issued debt and the provincial rating. Any change in the provincial rating would likely result in a corresponding rating action for HQ.

CREDIT SUMMARY

HQ is a vertically integrated electric system in Canada, providing electric service to virtually all of Quebec, encompassing roughly four million customer accounts. Ownership of over 35,829 MW of installed generating capacity and 33,911 kilometers of transmission lines places HQ among the largest electric systems in North America. Gentilly-2, a 675 MW nuclear generating station, ceased to operate in December 2012 as refurbishing costs rendered the unit uneconomical to operate.

HQ is composed of four principal operating divisions:

--Hydro-Quebec Production (power generation);
--Hydro-Quebec TransEnergie (transmission service);
--Hydro-Quebec Distribution;
--Hydro-Quebec Equipement et Services partages and Societe d'energie de la Baie James (construction division).

Transmission and distribution services are provided under regulated tariffs, while generation services are unregulated. The production division continued to supply a considerable portion of HQ consolidated revenues, accounting for 50.2% in FY 2012. Going forward, the reliance on net income from the unregulated production division is projected to rise as off-system sales continue to grow, primarily from power exports to the United States.

STABLE FINANCIAL PROFILE

Consolidated net income reached $860 million for FY 2012 compared to $2.6 billion in FY 2011. This decrease is a result of the $1.9 billion one-off impairment charge from the closure of the Gentilly-2 station. Dividends paid to the sole shareholder (the Province of Quebec) decreased as a function of the lower profits recorded, but debt service coverage remained strong at 2.11x in FY 2012. Unrestricted cash balances remain healthy averaging 203 days cash on hand over the last five years. A $1.64 billion credit facility is available to HQ, which further enhances liquidity to 388 days on hand.

STAGGERED BUT LARGE DEBT MATURITIES

Despite HQ'S substantial debt capitalization, debt maturities are staggered with some of the largest coming due between 2035 and 2050. Near-term maturities include modest debt (relative to the HQ 2012 revenues of 12.2 billion) maturities ranging from $123 million to $2.3 billion for the period 2013-2019. It is Fitch's view that HQ should be able to sustain cash flow interest coverage in the 1.75x range and equity capitalization of roughly 30%.

CONTINUED INVESTMENTS IN PROPERTY, PLANT AND EQUIPMENT

HQ continues to make substantial investments in its fleet of assets. FY 2012 investments totaled $3.9 billion split among generation, transmission and distribution assets. About $1.8 billion was destined for maintenance and improvement of asset quality, while the remainder was used for generation and transmission development projects such as the Eastmain-1-A/ Sarcelle/Rupert and the Romaine Complex.

Continued development of the transmission system includes interconnections in New England and New York scheduled for completion in 2017-2018. These lines will enable HQ to move more power into the North East region of the U.S. The Romaine Complex, initially, will be destined for exports and eventually meet organic load growth from within Quebec.

A large portion of HQ's capital plan will always be devoted to maintenance regardless of generation needs because of HQ's substantial asset base. However, these are long-term assets and sustained improvements will ensure maximal operational efficiency.

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In addition to the sources of information identified in Fitch's Revenue-Supported Rating Criteria and U.S. Public Power Rating Criteria, this action was informed by information from CreditScope.

Applicable Criteria and Related Research:
--'Revenue-Supported Rating Criteria' (June 2013);
--'U.S. Public Power Rating Criteria' (December 2012).

Applicable Criteria and Related Research:
U.S. Public Power Rating Criteria
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=696027
Revenue-Supported Rating Criteria
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=709499

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# Hydro-Quebec

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# Hydro-Quebec

## Major Rating Factors

| Issuer Credit Rating |
|---|
| None |

### Strengths:

- Supportive shareholder relationship, including debt guarantees
- Vertically integrated electricity monopoly
- Low-cost hydroelectric generation
- Stable regulated cash flows from core operations

### Weaknesses:

- Hydrology risk
- Aggressive financial risk profile
- Price and volume risk from short-term electricity trading in U.S. northeast wholesale electricity markets

## Rationale

The rating on regulated electric utility Hydro-Quebec's senior unsecured debt reflects the timely debt service guarantee that the Province of Quebec provides as the utility's owner. Standard & Poor's Ratings Services has not assigned a counterparty credit rating to the utility. The province does not provide a guarantee on Hydro-Quebec's guarantees to counterparties. Total reported debt outstanding as of Dec. 31, 2012, was C$43.5 billion, which Quebec guarantees.

The rating on the province reflects our view of Quebec's resilient economy, adequate cash and investment balances, exceptional access to capital markets, significant support from the federal government, and commitment to reduce its net tax-supported debt burden in the medium-to-long term. Offsetting these strengths, in our opinion, is the province's relatively high tax supported debt burden and the possibility of renewed revenue weakness.

Supporting Hydro-Quebec's solid cash flow is its monopoly status in the Quebec electricity market, regulatory support for its transmission and distribution activities, and a legislated fixed price for the bulk of its generation. In our view, a well-diversified provincial economy and government ownership also strengthen the utility's credit risk profile. We believe offsetting factors include an aggressive financial risk profile and hydrology risk. As well, cash flow from merchant electricity arbitrage and exports face volume and price risk, which long-term contracts mitigate somewhat.

Standard & Poor's believes Hydro-Quebec's monopoly position in provincial transmission and the bulk of distribution and market dominance in generation is secure. Further market restructuring is not part of the province's public energy strategy.

Hydro-Quebec's domestic operations generate the bulk of its revenues and provide an underlying amount of stable cash flow sufficient to sustain the company's existing assets. Distribution and transmission tariffs, which are regulated, allow the utility to recoup its costs and earn what we consider a modest regulated return on equity. For the first 165 terawatt-hours (TWh) sold in Quebec, the company is assured, by law, a fixed commodity price of C$27.90 per megawatt-hour (MWh). In 2012, the utility sold about 168 TWh to its domestic market and about 35 TWh to neighboring ones. The growth in volume is attributable to the performance of the generating facilities and the transmission system. The cyclical nature of industrial demand does not pose a large risk to cash flow, given the utility's access to alternative export markets.

In Standard & Poor's opinion, continued government ownership of Hydro-Quebec is not in question, and the close relationship between the company and sole shareholder is unlikely to change anytime soon. The province benefits from the utility's cash dividends. In 2012, the dividend was C$645 million, compared with C$1.96 billion in 2011. The reduction was largely due to losses from discontinued operations.

Although aggressive in our view, Hydro-Quebec's financial risk profile is in line with those of other government-owned utilities. In 2012, adjusted funds from operations (AFFO) interest coverage and AFFO-to-total debt remained largely consistent at 2.4x and 10.3%, respectively.

Hydrology risk is material, but what we consider significant water storage capacity of 175 TWh largely mitigates this in the near term. Hydro-Quebec manages water levels so as to maintain an energy reserve that could offset a potential runoff deficit of 64 TWh for two consecutive years or 98 TWh for four. Based on historical data, this scenario has a 2% probability of happening. Reservoir storage in 2012 was 110.7 TWh, marginally higher than the previous year's 102.8 TWh.

Earnings contributions from trading and export activities in neighboring markets rely on on-peak and off-peak electricity price differentials, and can vary significantly from year to year. Hydro-Quebec buys short-term, off-peak power outside the province and resells the energy back to those markets at higher, on-peak prices. Given its large water storage capacity, even in low water runoff years, we believe the utility can still take advantage of ongoing short-term physical arbitrage opportunities. Earnings from export sales face price risk and water availability. Combined, these two activities generated revenues of C$1.2 billion in 2012 (net electricity exports), compared with a nine-year low of C$384 million in 2004.

## Liquidity

In our view, Hydro-Quebec's liquidity is adequate after taking the province's guarantee on the company's senior unsecured debt into consideration. We expect available capacity through established programs with preauthorized provincial debt guarantees can meet the company's borrowing requirements in the next 12 months. As of Dec. 31, 2012, medium-term note program capacity was C$5.7 billion (or equivalent in U.S. dollars) and US$2.7 billion (or equivalent in other currency).

Hydro-Quebec's US$3.5 billion (or Canadian equivalent) commercial paper program is guaranteed by the province and backstopped by a committed revolving credit facility (also provincially guaranteed) that was undrawn as of Dec. 31, 2012. The company also has access to undrawn lines of credit of C$397 million as of Dec. 31, 2012. In April 2013, Hydro-Quebec negotiated a new US$2 billion guaranteed, committed bank facility that matures in 2018.

## Outlook

Standard & Poor's has not assigned an outlook to the debt rating. The outlook on the utility's owner and debt guarantor, Quebec, is stable. A change in the rating on the province would likely result in a similar change to the guaranteed debt rating on the utility.

## Business Description

Hydro-Quebec, Canada's largest electric utility, generates, transmits, and distributes electricity to more than 4 million residential, commercial, and industrial customer accounts in Quebec (see table 2). The utility's generating fleet, as of Dec. 31, 2012, was 98% hydroelectric by installed capacity and was capable of producing close to 213.3 TWh of electricity annually (see table 1). Hydro-Quebec supplies electricity to nine municipal systems in Quebec, and one regional cooperative. It also sells electricity opportunistically in neighboring jurisdictions, including Ontario and New Brunswick, and in the U.S. northeast.

**Table 1**

**Hydro-Quebec--Relative Contribution Of Each Segment As Of Dec. 31, 2012**

| (Reported amount in mil. C$) | Revenue | % of total | Net income | % of total | Total assets | % of total |
|---|---|---|---|---|---|---|
| Distribution | 10,731 | 53.7 | 503 | 67.2 | 13,434 | 21.1 |
| Transmission | 3,105 | 15.5 | 572 | 76.4 | 19,144 | 30.1 |
| Generation | 6,141 | 30.7 | (326) | (43.5) | 31,066 | 48.8 |
| Total | 19,977 | N/A | 749 | N/A | 63,644 | N/A |

N/A--Not applicable.

The separation of Hydro-Quebec's generation, transmission, and distribution activities into separate business divisions, which the U.S. Federal Energy Regulatory Commission has deemed sufficient to ensure third parties fair access to transmission services in the province, allows the utility to trade in U.S. wholesale electricity markets. In Canada, the utility has interconnections and does trade with Ontario and the Maritimes. In 2012, it also imported almost 31 TWh under a low-price, long-term contract with Labrador-based Churchill Falls Co. (jointly owned by Nalcor Energy Inc.) that will expire in 2041.

**Table 2**

**Hydro-Quebec--Operating Statistics As Of Dec. 31, 2012**

| | 2012 | 2011 | 2010 | 2009 | 2008 |
|---|---|---|---|---|---|
| Domestic sales (TWh) | 168.4 | 170 | 169.5 | 165.3 | 170.4 |
| External sales (TWh) | 35.3 | 26.8 | 23.3 | 23.4 | 21.3 |
| Total annual sales (TWh) | 203.7 | 197 | 193 | 189 | 192 |
| Total capacity (MW) | 35,829 | 36,971 | 36,671 | 36,813 | 36,432 |
| Hydroelectric (%) | 98 | 95 | 94 | 94 | 94 |
| Thermal (%) | 2 | 3 | 4 | 4 | 4 |
| Nuclear (%) | 0 | 2 | 2 | 2 | 2 |
| Transmission circuit (kilometers) | 33,911 | 33,630 | 33,453 | 33,244 | 33,058 |

**Table 2**

| Hydro-Quebec--Operating Statistics As Of Dec. 31, 2012 (cont.) | | | | | |
|---|---|---|---|---|---|
| Distribution circuit (kilometers)* | 114,649 | 113,525 | 112,089 | 111,205 | 110,127 |
| No. of customer accounts | 4,107,426 | 4,060,195 | 4,011,789 | 3,960,332 | 3,913,444 |

TWh--Terawatt-hours. MW--Megawatts.

### Government ownership

The province owns Hydro-Quebec. The government appoints the company's board of directors; the utility's strategy is aligned with the government's political and economic objectives as described in Quebec's consistent energy policy.

The current government policy objectives are clear: increased profitability and dividends for the shareholder; fostering Quebec's industrial and economic growth through competitively priced electricity; and economic partnerships with aboriginal communities and municipalities to enable further development of the province's energy resources. The key focus is further hydroelectric development in advance of Quebec's demand for electricity with a secondary goal of increasing profitable power exports and related dividends and water royalties to the owner.

We understand that Hydro-Quebec will continue to pay water-power royalties based on used water volume to the province. The first payment came in 2007, the transition year. The company paid approximately C$593 million and C$617 million in 2011 and 2012, respectively, based on used water volume.

We expect the government to retain ownership of Hydro-Quebec; the province benefits from the utility's substantial dividends that averaged C$2 billion per year from 2007-2011. The dividend was lower in 2012 due to losses in connection with the decision to terminate nuclear operations at the Gentilly-2 facility. Furthermore, we do not expect any change to the government provision of an unconditional and timely guarantee for all Hydro-Quebec's long-term debt issuance. Each year, the province preapproves guaranteed borrowing through an Order in Council based on the utility's projected financing needs.

## Business Risk Profile

### Profitability and cash flows

Three key factors affect the profitability of generation and energy trading and export sales activities that dominate the company's earnings: weather; hydrology; and electricity commodity prices in neighboring jurisdictions, in particular on- and off-peak price differentials.

The profitability of the transmission and distribution business segments is largely a function of the company's ability to earn the low returns on thin equity layers allowed for in the tariffs that the Regie de l'energie, Quebec's regulator, sets. Economic and weather conditions can affect volumes and cause modest annual fluctuations in regulated revenue and profit.

### Competitive risk is negligible

What we view as Hydro-Quebec's strong competitive position is due to:

- Its monopoly status in the Quebec electricity market;
- The capital-intensive nature of large hydroelectric developments coupled with the utility's expertise in design and

construction;

- Its unique position as a low-cost electricity provider surrounded by higher-priced markets driven by fossil fuel on the margin; and
- Low penetration of often higher-priced alternative fuels.

### Domestic market is solid

Compared with other utilities, competitive pricing somewhat reduces the risk of revenue volume reduction due to poor economic conditions or conservation measures. We typically expect demand for electricity to increase on long-term average by about 1% per year, linked to population and GDP growth. In 2012, about 88% of revenues came from domestic electricity sales distributed between residential and farm (43%), industrial (29%), and commercial and other (28%) customers.

### Provincial economy has emerged from recession

Quebec is Canada's second-most populous province, with a population of about 8.1 million people in 2012. We believe the provincial economy has considerable depth and scale, including several world-class clusters in aerospace, telecommunications, electricity generation, and aluminum production. Key sectors are finance, manufacturing, trade, and public services (health, education, and public administration). Canada appears to be at a crossroad. After being a growth leader among advanced economies in 2010 and 2011, Standard & Poor's now sees the country taking a back seat in the global recovery. Growth prospects for Canada's natural resource producers are diminishing along with the pullback in commodity prices since 2011 -- before then, when some other advanced economies were struggling to return to growth after the recession, rising commodity prices were an important source of growth for the country.

Quebec's economy is following a similar growth pattern to Canada. The province saw continued growth in 2012; however, economic activity slowed significantly and has been more modest than anticipated for the year to date. Real GDP grew at an estimated 1.0% in 2012, according to the province's March budget update, which is below the national average and represents a downward revision to last year's outlook. The forecast calls for gradual improvement in economic activity over the next two years with provincial economic growth edging up by 1.3% in 2013 and 1.8% in 2014.

(For more information on Quebec, see the analysis published May 15, 2013, on RatingsDirect on the Global Credit Portal.)

### Hydro-Quebec Distribution

Hydro-Quebec Distribution, with its close to 114,649-kilometer system and about 3.8 million residential and farm customers as of Dec. 31, 2012, is responsible for procuring electricity and distributing it.

***Regulation supports cash flows.*** Since 1996, the Regie has regulated the distribution division, determining the distribution arm's tariff by approving an annual revenue requirement based on the segment's forecast cost of service plus a deemed cost of capital. The cost of capital is based on a thin equity layer of 35%. The approved, low return on the rate base was 6.189% for 2013, similar to the previous year's 6.369%. The utility is able to recover its deemed cost of debt.

***Heritage pool meets the bulk of domestic needs.*** Hydro-Quebec Distribution is also charged with the obligation to procure electricity for its customers. The fixed-price heritage pool (up to 165.0 TWh per year) was marginally insufficient to meet domestic sales of about 168.4 TWh in 2012 and it cannot cover the utility's reserve energy



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requirements. Hydro-Quebec Production and independent power producers (primarily wind developers) therefore compete to supply Hydro-Quebec Distribution through a public tendering process for additional energy requirements.

Hydro-Quebec Distribution placed its first public call for tenders in February 2002 for 1,200 megawatts (MW) of new generation supply, in anticipation of provincial consumption exceeding the heritage pool supply. To date, it has contracted for 3,000 MW of wind power from independent power producers that will come into service from 2006-2015 and 600 MW of hydroelectric power from Hydro-Quebec Production already in service. Hydro-Quebec Distribution expects a long-term average 35% capacity factor from the wind farms, which we view as high. However, given the flexibility of the unit's diverse hydroelectric fleet, due to ample storage, the usual challenges of absorbing wind capacity into the grid will be less challenging for Hydro-Quebec than for most utilities. By agreement, Hydro-Quebec Production offers Hydro-Quebec Distribution a balancing service to mitigate the impact of hourly fluctuations in the quantity of wind power carried on the transmission system.

### Hydro-Quebec Production

***Hydrology risk managed through extensive reservoirs.*** Extensive reservoirs allow the utility to maintain energy reserves sufficient to compensate for a runoff deficit of 64 TWh in two consecutive years or 98 TWh in four. Management believes the probability of exceeding this runoff deficit level is 2%. The generation segment has 26 large reservoirs covering a surface area of more than 20,000 square kilometers. The reservoirs have a maximum storage capacity of 175 TWh, about 85% of the province's total energy and reserve requirement. Reservoir storage was 110.7 TWh as of Dec. 31, 2012. The generation division generally maintains capacity reserves at about 8% above its contractual commitments.

***Construction risk is well-managed.*** Hydro-Quebec has a large, well-qualified workforce whose key competency is the design and construction of hydroelectric generation facilities. For example, all three generating units at Eastmain 1-A powerhouse were commissioned in 2011 and January 2012, on time and budget.

In 2012, on Hydro-Quebec's recommendation, the provincial government announced that the company would not proceed with the refurbishment of Gentilly-2 nuclear generating station. The facility ceased operation at the end of December, with decommissioning activities beginning in January. This decision resulted in a one-time charge to earnings of approximately C$1.9 billion. We don't expect the station to resume operations.

***Buy low, sell high.*** A key driver of Hydro-Quebec's profitability is the serendipitous combination of low-cost production, an ability to store water, and proximity to jurisdictions with fossil fuel driving market prices. Hydro-Quebec Production opportunistically buys power in neighboring jurisdictions to meet its domestic needs in off-peak hours, reducing its water use and maximizing storage in those hours. Hydro-Quebec Production is then able to sell resulting surplus energy to its neighbors at higher on-peak prices without negatively affecting its own long-term energy reserves. Nevertheless, the profits are significantly exposed to foreign exchange risk. Profits from this activity go through very long-term cycles. The amount of surplus Hydro-Quebec can play without compromising its reserves is a function of unpredictable hydrology, variability in domestic load, and the long lead time required to develop hydroelectric assets. When it develops a large facility such as James Bay, it has, at times, temporarily committed itself to firm export sales contracts in addition to its arbitrage activities. Profits are also subject to on- and off-peak price differentials which generally would be higher during periods of high natural gas prices.

### Hydro-Quebec TransEnergie

***Low-risk operations.*** Hydro-Quebec TransEnergie operates and maintains the Quebec-based transmission system which includes 33,911 kilometers of high-voltage transmission lines throughout the 1.5 million square-kilometer province (about 15% of Canada's surface area). Customers are concentrated along the St. Lawrence River in the south.

The transmission system's asynchronous nature limits the utility's ability to lean on neighboring regions; however, it also minimizes the impact of neighboring system disturbances (such as the August 2003 blackout that affected Ontario and part of the U.S. northeast).

***Interconnections facilitate trade.*** Hydro-Quebec's transmission system includes 17 interconnections with neighboring jurisdictions, which allows the company to import and export energy with the U.S. northeast (New York and New England), Newfoundland and Labrador, Ontario, and New Brunswick (see table 3). In 2010, the company completed a 1,250 MW connection with Ontario. Furthermore, Hydro-Quebec signed a 40-year transmission service agreement for a 1, 200 MW line with New Hampshire-based Northern Pass Transmission LLC. This will allow the company to increase its exports to New England. The target in-service date is 2017, pending permits and regulatory approval. Of its existing import capability, 5,150 MW is dedicated solely to importing power from the Churchill Falls facility in Labrador.

**Table 3**

**Hydro-Quebec TransEnergie--Interconnections As Of Dec. 31, 2012**

| (MW) | Import mode | Export mode | Total |
|---|---|---|---|
| New England | 2,170 | 2,275 | 4,445 |
| New York | 1,100 | 2,000 | 3,100 |
| Newfoundland and Labrador | 5,150 | 0 | 5,150 |
| Ontario | 1,970 | 2,735 | 4,705 |
| New Brunswick | 785 | 1,029 | 1,814 |
| Total | 11,175 | 8,039 | 19,214 |

MW--Megawatts.

***Cost-of-service regulation also supports transmission cash flow.*** The Régie approves transmission tariffs based on Hydro-Quebec TransEnergie's cost of service and a modest allowed return on equity. The regulator approved an allowed return on the rate base of almost 6.391% in 2012 on a deemed equity layer of 30%. The transmission segment generally earns its allowed rate of return and to date has not been subject to explicit performance standards or related penalties or rewards.

## Financial Risk Profile

### Accounting

Consistent with Standard & Poor's consolidated rating approach, Hydro-Quebec's financial statements include the accounts of the corporation, its subsidiaries (all of which are wholly owned), and its joint ventures. Hydro-Quebec prepared its 2012 statements according to Canadian generally accepted accounting principles, in Canadian currency, and based on a December fiscal year-end. Our analytical adjustments to Hydro-Quebec's financial statistics (see table 4) include the company's asset retirement obligations and postretirement benefit obligations. In analyzing Hydro-Quebec's financial risk profile, Standard & Poor's includes perpetual debt (C$275 million as of Dec. 31, 2012) in the company's reported long-term debt. Regulatory assets and liabilities as of Dec. 31 were not material. The deferred cash recovery of costs incurred is not material to the ratings. We expect the utility to eventually recover prudent costs incurred.

**Table 4**

**Reconciliation Of Hydro-Quebec Reported Amounts With Standard & Poor's Adjusted Amounts (Mil. C$)**

| | --Fiscal year ended Dec. 31, 2012-- | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hydro-Quebec reported amounts** | **Debt** | **Shareholders' equity** | **Revenues** | **EBITDA** | **Operating income** | **Interest expense** | **Cash flow from operations** | **Cash flow from operations** | **Dividends paid** | **Capital expenditures** |
| Reported | 43,543.0 | 18,982.0 | 12,228.0 | 8,589.0 | 6,174.0 | 2,469.0 | 4,768.0 | 4,768.0 | 1,958.0 | 3,673.0 |
| **Standard & Poor's adjustments** | | | | | | | | | | |
| Postretirement benefit obligations | 2,527.2 | (4,173.7) | N/A | (98.0) | (98.0) | N/A | 345.2 | 345.2 | N/A | N/A |
| Capitalized interest | N/A | N/A | N/A | N/A | N/A | 306.0 | (306.0) | (306.0) | N/A | (306.0) |
| Asset retirement obligations | 618.8 | N/A | N/A | 37.0 | 37.0 | 37.0 | (27.3) | (27.3) | N/A | N/A |
| Reclassification of nonoperating income (expenses) | N/A | N/A | N/A | N/A | 28.0 | N/A | N/A | N/A | N/A | N/A |
| Reclassification of working-capital cash flow changes | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 94.0 | N/A | N/A |
| Debt -- accrued interest not included in reported debt | 835.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total adjustments | 3,981.0 | (4,173.7) | 0.0 | (61.0) | (33.0) | 343.0 | 11.9 | 105.9 | 0.0 | (306.0) |
| **Standard & Poor's adjusted amounts** | **Debt** | **Equity** | **Revenues** | **EBITDA** | **EBIT** | **Interest expense** | **Cash flow from operations** | **Funds from operations** | **Dividends paid** | **Capital expenditures** |
| Adjusted | 47,524.0 | 14,808.4 | 12,228.0 | 8,528.0 | 6,141.0 | 2,812.0 | 4,779.9 | 4,873.9 | 1,958.0 | 3,367.0 |

N/A--Not applicable.

## Governance, financial policy, and risk tolerance

The government appoints board members. Hydro-Quebec appears to run its affairs relatively independent of government operations but in line with government energy policy. The Quebec government declares dividends whenever the company's capitalization ratio is more than 25%. As of 2007, dividend payouts were restricted by law. Based on the legislation, we estimate that dividends are not likely to exceed 75% of net income. Reported dividend payout was about 75% of net income from 2007-2012.

## Cash flow adequacy

Cash flow coverage ratios are aggressive based on our corporate criteria, but are not a concern for the guaranteed debt rating, since we believe the guarantee would be honored in a timely fashion. As of Dec. 31, 2012, AFFO interest coverage was 2.4x, similar to, 2.5x a year earlier. AFFO-to-total debt was approximately the same, at 10.4%, compared with 11% in 2011. We do not expect any material change to these cash flow coverage ratios.

### Liability and liquidity management

The company manages both interest rate and foreign currency risks through its hedging program. Before 2006, Hydro-Quebec maintained floating-rate debt at about 20% of total debt and less than 50% of total debt in U.S. dollars. However, since then, the company has substantially reduced its exposure to floating-rate debt, to 8%-10%. As of Dec 31, 2012, its floating-rate debt represented about 11% of total long term debt. U.S.-dollar-denominated debt (at the time of issue) accounts for about 20% of total debt. Debt maturities are generally well-spread but substantial, given the company's size. In the next five years (2013-2017), we expect Hydro-Quebec to refinance about C$4.9 billion in long-term debt with provincial debt guarantees. Debt maturities amount C$678 million in 2013 and C$2.1 billion in 2014. In 2018 and 2019, maturities are C$41 million on average.

Except for the company's long-term disability insurance plan, most postretirement benefits are not funded. This is common among Hydro-Quebec's peers. A nuclear waste management trust fund has been set up in accordance with Canadian law.

### Financial flexibility

Hydro-Quebec derives financial flexibility largely from the provincial guarantee supporting the utility's access to the debt capital markets. The company has raised debt in U.S., Canadian, and (to a much lesser extent) European markets.

The utility has a modest degree of flexibility in its capital expenditure program. Some maintenance work could be deferred for a short period, if necessary. Furthermore, development projects not yet under construction could be delayed if necessary. Hydro-Quebec has no access to equity, but we view dividend payments to the province as another potential source of flexibility, because the government owner is unlikely to push such a key asset into distress.

**Table 5**

**Hydro-Quebec--Peer Comparison**

**Industry Sector: Electric Utility**

| **(Mil. C$)** | **Hydro-Quebec** | **Manitoba Hydro-Electric Board** | **British Columbia Hydro & Power Authority** |
|---|---|---|---|
| Debt rating as of May 30, 2013 | A+; A-1+ | A-1+ | AAA |
| | | **--Average of past three fiscal years--** | |
| Revenues | 12,319.3 | 1,991.3 | 4,174.0 |
| EBITDA | 7,869.7 | 940.3 | 1,509.3 |
| Net income from continuing operations | 2,558.0 | 124.7 | 531.3 |
| Funds from operations (FFO) | 4,822.0 | 448.7 | 746.4 |
| Capital expenditures | 3,405.0 | 992.3 | 1,594.0 |
| Free operating cash flow | 1,483.0 | (543.7) | (864.3) |
| Discretionary cash flow | (521.0) | (543.7) | (1,034.3) |
| Cash and short-term investments | 2,127.7 | 98.0 | 16.0 |
| Debt | 44,606.1 | 8,620.3 | 12,720.8 |
| Equity | 15,580.0 | 2,710.7 | 2,368.7 |
| **Adjusted ratios** | | | |
| EBITDA margin (%) | 63.9 | 47.2 | 36.2 |
| EBITDA interest coverage (x) | 2.8 | 1.7 | 2.9 |
| EBIT interest coverage (x) | 1.9 | 1.0 | 1.8 |

**Table 5**

| Hydro-Quebec--Peer Comparison (cont.) | | | |
|---|---|---|---|
| Return on capital (%) | 8.9 | 5.2 | 6.6 |
| FFO/debt (%) | 10.8 | 5.2 | 5.9 |
| Free operating cash flow/debt (%) | 3.3 | (6.3) | (6.8) |
| Debt/EBITDA (x) | 5.7 | 9.2 | 8.4 |
| Total debt/debt plus equity (%) | 74.1 | 76.1 | 84.3 |

**Table 6**

**Hydro-Quebec--Financial Summary**

**Industry Sector: Electric Utility**

| | --Fiscal year ended Dec. 31-- | | | | |
|---|---|---|---|---|---|
| **(Mil. C$)** | **2012** | **2011** | **2010** | **2009** | **2008** |
| Debt rating history | A+; A-1+ | A+; A-1+ | A+; A-1+ | A+; A-1+ | A+; A-1+ |
| Revenues | 12,228.0 | 12,392.0 | 12,338.0 | 12,334.0 | 12,717.0 |
| EBITDA | 8,528.0 | 7,676.0 | 7,405.0 | 7,798.0 | 7,874.0 |
| Net income from continuing operations | 2,736.0 | 2,611.0 | 2,327.0 | 3,065.0 | 2,940.0 |
| Funds from operations (FFO) | 4,873.9 | 5,035.3 | 4,556.9 | 4,809.8 | 4,973.7 |
| Capital expenditures | 3,367.0 | 3,208.0 | 3,640.0 | 3,704.0 | 3,450.0 |
| Dividends paid | 1,958.0 | 1,886.0 | 2,168.0 | 2,252.0 | 2,095.0 |
| Debt | 47,524.0 | 45,264.4 | 41,030.0 | 39,935.6 | 37,905.9 |
| Equity | 14,808.4 | 15,521.0 | 16,410.6 | 20,960.5 | 21,466.6 |
| Debt and equity | 62,332.4 | 60,785.3 | 57,440.6 | 60,896.0 | 59,372.5 |
| **Adjusted ratios** | | | | | |
| EBITDA margin (%) | 69.7 | 61.9 | 60.0 | 63.2 | 61.9 |
| EBIT interest coverage (x) | 2.2 | 1.8 | 1.7 | 2.0 | 2.0 |
| FFO interest coverage (x) | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 |
| FFO/debt (%) | 10.3 | 11.1 | 11.1 | 12.0 | 13.1 |
| Discretionary cash flow/debt (%) | (1.1) | 0.2 | (2.8) | (3.0) | (1.9) |
| Net cash flow/capex (%) | 86.6 | 98.2 | 65.6 | 69.1 | 83.4 |
| Debt/debt and equity (%) | 76.2 | 74.5 | 71.4 | 65.6 | 63.8 |
| Return on capital (%) | 10.0 | 8.6 | 8.1 | 9.3 | 9.7 |
| Return on common equity (%) | 12.9 | 12.4 | 10.0 | 12.4 | 12.3 |
| Common dividend payout ratio (unadjusted; %) | 23.6 | 75.0 | 81.0 | 70.7 | 76.6 |

| Data as of 12/28/12<br>Value Line Electric Utility Company | Ticker | Proxy<br>Group | Bloomberg<br>Beta | Credit Ratings<br>S&P | <br>Moody's | Pays<br>Dividends | EPS Growth<br>>2 Analysts | % of Total Rev.<br>from Reg. Ops. ('09-11) | % of Reg. Rev.<br>from Elec. Util. Ops. ('09-11) | Market Cap.<br>($million) | M&A<br>Activity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Consolidated Edison, Inc. | ED | Y | 0.52 | A- | Baa1 | Yes | Yes | 85.9% | 77.9% | $16,088 | No |
| NextEra Energy, Inc. | NEE | Y | 0.68 | A- | Baa1 | Yes | Yes | 70.4% | 100.0% | $28,884 | No |
| Northeast Utilities | NU | Y | 0.70 | A- | Baa2 | Yes | Yes | 99.0% | 78.3% | $12,068 | No |
| Southern Company | SO | Y | 0.52 | A | n/a | Yes | Yes | 102.5% | 100.0% | $37,001 | No |
| Wisconsin Energy Corporation | WEC | Y | 0.61 | A- | A3 | Yes | Yes | 99.2% | 69.5% | $8,393 | No |
| Xcel Energy Inc. | XEL | Y | 0.61 | A- | Baa1 | Yes | Yes | 99.3% | 82.0% | $12,800 | No |
| ALLETE, Inc. | ALE | N | 0.80 | BBB+ | Baa1 | Yes | Yes | 91.3% | 87.8% | $1,564 | No |
| Alliant Energy Corporation | LNT | N | 0.71 | BBB+ | Baa1 | Yes | Yes | 90.4% | 82.0% | $4,835 | No |
| Ameren Corporation | AEE | N | 0.67 | BBB- | Baa3 | Yes | Yes | 81.2% | 82.0% | $7,357 | No |
| American Electric Power Company, Inc. | AEP | N | 0.63 | BBB | n/a | Yes | Yes | 94.8% | 100.0% | $20,482 | No |
| Avista Corporation | AVA | N | 0.80 | BBB | Baa2 | Yes | Yes | 90.8% | 66.8% | $1,418 | No |
| Black Hills Corporation | BKH | N | 0.81 | BBB- | Baa3 | Yes | Yes | 89.6% | 48.2% | $1,580 | No |
| CenterPoint Energy, Inc. | CNP | N | 0.75 | BBB+ | Baa3 | Yes | Yes | 69.6% | 37.0% | $8,121 | No |
| Cleco Corporation | CNL | N | 0.77 | BBB | n/a | Yes | Yes | 98.2% | 100.0% | $2,401 | No |
| CMS Energy Corporation | CMS | N | 0.71 | BBB- | n/a | Yes | Yes | 96.0% | 60.5% | $6,378 | No |
| Dominion Resources, Inc. | D | N | 0.57 | A- | n/a | Yes | Yes | 104.1% | 23.7% | $29,351 | No |
| DTE Energy Company | DTE | N | 0.72 | BBB+ | n/a | Yes | Yes | 78.9% | 74.1% | $10,223 | No |
| Duke Energy Corporation | DUK | N | 0.58 | BBB+ | Baa2 | Yes | Yes | 73.8% | 94.9% | $44,374 | Yes |
| Edison International | EIX | N | 0.68 | BBB- | Baa2 | Yes | Yes | 81.3% | 100.0% | $14,587 | No |
| El Paso Electric Company | EE | N | 0.61 | BBB | Baa2 | Yes | Yes | 84.8% | 100.0% | $1,244 | No |
| Empire District Electric Company | EDE | N | 0.76 | BBB- | Baa2 | Yes | Yes | 99.0% | 90.2% | $854 | No |
| Entergy Corporation | ETR | N | 0.65 | BBB | Baa3 | Yes | Yes | 77.2% | 98.2% | $11,123 | Yes |
| Exelon Corporation | EXC | N | 0.63 | BBB | Baa2 | Yes | Yes | 59.5% | 90.8% | $24,825 | No |
| FirstEnergy Corporation | FE | N | 0.63 | BBB- | Baa3 | Yes | Yes | 72.8% | 100.0% | $17,222 | No |
| Great Plains Energy Inc. | GXP | N | 0.77 | BBB | n/a | Yes | Yes | 100.0% | 100.0% | $3,073 | No |
| Hawaiian Electric Industries, Inc. | HE | N | 0.74 | BBB- | n/a | Yes | Yes | 89.8% | 100.0% | $2,414 | No |
| IDACORP, Inc. | IDA | N | 0.81 | BBB | Baa2 | Yes | Yes | 99.7% | 100.0% | $2,126 | No |
| Integrys Energy Group, Inc. | TEG | N | 0.74 | A- | n/a | Yes | Yes | 60.9% | 38.6% | $4,040 | No |
| ITC Holdings Corporation | ITC | N | 0.66 | BBB+ | n/a | Yes | Yes | 100.0% | 100.0% | $3,923 | Yes |
| MGE Energy, Inc. | MGEE | N | 0.67 | AA- | n/a | Yes | Yes | 100.8% | 65.8% | $1,161 | No |
| NorthWestern Corporation | NWE | N | 0.76 | BBB | WR | Yes | Yes | 99.8% | 70.5% | $1,274 | No |
| NV Energy, Inc. | NVE | N | 0.74 | BB+ | Ba1 | Yes | Yes | 100.0% | 94.2% | $4,233 | No |
| OGE Energy Corporation | OGE | N | 0.79 | BBB+ | n/a | Yes | Yes | 69.9% | 83.2% | $5,486 | No |
| Otter Tail Corporation | OTTR | N | 0.76 | BBB- | n/a | Yes | Yes | 36.3% | 100.0% | $887 | No |
| Pepco Holdings, Inc. | POM | N | 0.68 | BBB+ | Baa3 | Yes | Yes | 72.8% | 95.4% | $4,431 | No |
| PG&E Corporation | PCG | N | 0.56 | BBB | Baa1 | Yes | Yes | 100.0% | 77.0% | $17,075 | No |
| Pinnacle West Capital Corporation | PNW | N | 0.71 | BBB+ | Baa2 | Yes | Yes | 99.8% | 100.0% | $5,542 | No |
| PNM Resources, Inc. | PNM | N | 0.68 | BBB- | n/a | Yes | Yes | 72.7% | 100.0% | $1,615 | No |
| Portland General Electric Company | POR | N | 0.75 | BBB | Baa2 | Yes | Yes | 100.0% | 100.0% | $2,039 | No |
| PPL Corporation | PPL | N | 0.57 | BBB | Baa3 | Yes | Yes | 38.1% | 96.9% | $16,392 | No |
| Public Service Enterprise Group Inc. | PEG | N | 0.70 | BBB | n/a | Yes | Yes | 67.1% | 66.9% | $15,147 | No |
| SCANA Corporation | SCG | N | 0.66 | BBB+ | Baa3 | Yes | Yes | 73.2% | 71.4% | $5,944 | No |
| Sempra Energy | SRE | N | 0.72 | BBB+ | Baa1 | Yes | Yes | 83.1% | 7.0% | $16,976 | No |
| TECO Energy, Inc. | TE | N | 0.81 | BBB+ | n/a | Yes | Yes | 77.2% | 81.4% | $3,587 | No |
| UIL Holdings Corporation | UIL | N | 0.69 | BBB | Baa3 | Yes | Yes | 100.0% | 62.1% | $1,782 | No |
| UNS Energy Corporation | UNS | N | 0.70 | BB+ | n/a | Yes | Yes | 99.9% | 89.9% | $1,739 | No |
| Vectren Corporation | VVC | N | 0.70 | A- | n/a | Yes | Yes | 70.8% | 38.6% | $2,383 | No |
| Westar Energy, Inc. | WR | N | 0.69 | BBB | Baa2 | Yes | Yes | 100.0% | 100.0% | $3,561 | No |

| *Operating Company* | *Description of Fuel Cost Recovery Mechanism* |
|---|---|
| Consolidated Edison of New York | Electric companies in New York State have largely adopted market power adjustment clause (MAC) or a commodity adjustment clause (CAC). The MAC/CAC allows the distribution utilities to flow through the costs of power procured to serve customers who have not selected an alternative supplier. Changes in the clause are recognized in each customer bill (i.e., monthly, bi-monthly, etc.). Although the incumbent distributors retain the provider-of-last-resort obligation, the operation of these clauses leaves the distributor insulated from any financial effects associated with changes in market prices.[1] |
| Florida Power and Light | The fuel and purchased power cost recovery clause (FPPCRC) provides for recovery of prudently incurred fuel and purchased power costs. Annual fuel factors are established based upon 12-month projections of fuel costs and energy purchases and sales. Hearings are held each November, during which the PSC sets fuel factors for the next calendar year. Subsequent to the November hearings, utilities may seek, or the PSC may require, a mid-term modification to the factors if updated projected costs for the year vary from updated projected revenues by plus or minus 10%. Interest is accrued on both over- and under recovered balances. Included in the FPPCRC is a generating performance incentive factor that provides a financial reward or penalty when a company's base load generating units' availability and heat rate vary from targets approved by the PSC. The reward or penalty is limited to a 25-basis-point ROE spread.[2] |
| Connecticut Light and Power | CL&P is permitted to recover the full costs of providing generation services to those customers who do not choose an alternative supplier.[3]<br><br>CL&P purchases power for those customers who do not choose a competitive energy supplier and passes the cost to such customers through a combined GSC and FMCC charge on customers' bills. The combined GSC and FMCC charges for both types of service recover all of CL&P's costs of procuring energy from wholesale suppliers and are adjusted periodically and reconciled semi-annually in accordance with the directives of PURA.[4] |
| NSTAR Electric | Rate for default service/basic service are market based; such rates reflect the competitive solicitations for default service supply undertaken by the distribution utility. NSTAR is not at risk |

[1] RRA New York PSC Profile, accessed January 8, 2013.
[2] RRA Florida PSC Profile, accessed January 8, 2013.
[3] RRA Connecticut PURA Profile, accessed January 8, 2013.
[4] Northeast Utilities, 2011 Form 10-K, at 4-5.

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| | for fluctuations in market prices. Basic service rates are re-set every six months for residential and small commercial customers and every three months for large commercial and industrial customers.[5] |
| Public Service of New Hampshire | PSNH recovers its cost of power through a periodically adjusted default service rate, which reflects the revenue requirements of its generating assets and the cost of power purchases. It also includes a reconciliation of the difference between the company's costs and revenues for the previous period.[6]<br><br>PSNH's ES rate recovers its generation and purchased power costs from customers on a current basis. On an annual basis, PSNH files with the NHPUC an ES/SCRC cost reconciliation filing for the preceding year. The difference between revenues and costs are included in the ES/SCRC rate calculations and refunded to or recovered from customers in the subsequent period approved by the NHPUC.[7] |
| Western Massachusetts Electric | WMECO does not own generation assets other than its solar generation; it purchases power from competitive power suppliers.[8]<br><br>Rate for default service/basic service are market based; such rates reflect the competitive solicitations for default service supply undertaken by the distribution utility. WMECO is not at risk for fluctuations in market prices. Basic service rates are re-set every six months for residential and small commercial customers and every three months for large commercial and industrial customers. [9] |
| Alabama Power | Alabama Power has established fuel cost recovery rates under Alabama Power's energy cost recovery rate (Rate ECR) as approved by the Alabama PSC. Rates are based on an estimate of future energy costs and the current over or under recovered balance. The difference in the recoverable fuel costs and amounts billed give rise to the over or under recovered amounts recorded as regulatory assets or liabilities. Alabama Power, along with the Alabama PSC, continually monitors the over or under recovered cost balance to determine whether an adjustment to billing rates is required.[10] |
| Georgia Power | A non-automatic fuel adjustment mechanism, known as the fuel cost recovery clause, is in place for Georgia Power. Hearings are |

[5] RRA Massachusetts DPU Profile, accessed January 8, 2013.

[6] RRA New Hampshire PUC Profile, accessed January 8, 2013.

[7] Northeast Utilities, 2011 Form 10-K, at 6.

[8] Northeast Utilities, 2011 Form 10-K, at 8.

[9] RRA Massachusetts DPU Profile, accessed January 8, 2013.

[10] Southern Company, 2011 Form 10-K, at II-78.

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| | required before increases or decreases are implemented. Electric fuel rates are based on estimated sales and fuel costs, and any balance of previously unrecovered/over-recovered fuel costs is considered in setting new rates. The energy portion of purchased power transactions is reflected in the mechanism; the capacity component is recovered through base rates. The cost of GP's natural gas and oil procurement hedging program, including any net gains or losses, are also recovered through the fuel cost recovery clause.[11]<br><br>Georgia Power has established fuel cost recovery rates approved by the Georgia PSC. The Georgia PSC approved an increase in Georgia Power's total annual billings of approximately $373 million effective April 2010, as well as a decrease of approximately $43 million effective June 1, 2011. In addition, the Georgia PSC has authorized an interim fuel rider, which allows Georgia Power to adjust its fuel cost recovery rates prior to the next fuel case if the under recovered fuel balance exceeds budget by more than $75 million.[12] |
| Gulf Power | Fuel and other cost recovery provisions include fuel expenses, the energy component of purchased power costs, and purchased power capacity costs. Annually, the Company petitions the Florida PSC for recovery of projected fuel and purchased power costs, including any true-up amount from prior periods, and approved rates are implemented each January.[13] |
| Mississippi Power | Mississippi Power establishes, annually, a retail fuel cost recovery factor that is approved by the Mississippi PSC. The company is required to file for an adjustment to the retail fuel cost recovery factor annually.[14] |
| Wisconsin Electric Power | Embedded within base rates in WI is an amount to recover fuel costs. New fuel rules adopted in December 2010 require the company to defer, for subsequent rate recovery or refund, any under-collection or over-collection of fuel costs that are outside of the utility's symmetrical fuel cost tolerance, which the PSCW set at plus or minus 2% of the utility's approved fuel cost plan. Fuel cost plans approved by the WI PSC after January 1, 2011 are subject to the new rules. The deferred fuel costs are subject to an excess revenues test.[15]<br><br>WI statute PSC 116 governs the fuel cost recovery process and calls for annual fuel cost plans with deferral accounting and |

[11] RRA Georgia PSC Profile, accessed January 8, 2013.

[12] Southern Company, 2011 Form 10-K, at II-81.

[13] Southern Company, 2011 Form 10-K, at II-279.

[14] Southern Company, 2011 Form 10-K, at II-363.

[15] Wisconsin Electric Power Company, 2011 Form 10-K, at 53.

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| | annual reconciliations. Mid-year rate changes are allowed under extraordinary circumstances.[16] |
| Northern State Power – MN | For Northern States Power-Minnesota, the PUC permits a forecasted fuel clause that projects monthly costs and provides for a true-up to actual costs.[17] |
| Northern States Power – Wisc | Requests can be made for recovery of purchased electric energy or fuel for generation prospectively through the rate review process, which normally occurs every two years, or at an interim fuel cost hearing process. Effective 2011, NSP-Wisconsin began submitting a forward looking fuel cost plan that allows for deferral of fuel cost under-collection or over-collection, subject to PSCW hearings and approval, and other requirements.[18] |
| Public Service Co. of Colorado | PSCO's fuel and purchased energy costs are recovered through an incentive based electric commodity adjustment (ECA) that compares actual fuel and purchased power expenses to a benchmark formula. The ECA also contains certain earnings-sharing provisions related to energy trading activities.[19]<br><br>Since 2004, PSCO has utilized a purchased capacity cost adjustment (PCCA) clause that allows for recovery of the costs of purchased power not included in base rates or other recovery mechanisms.[20]<br><br>The ECA is revised quarterly. |
| Southwestern Public Service - TX | In TX, fuel and purchased power costs are recovered through a separate fuel factor, the level of which is established in base rate cases. Between base rate cases, the fuel factor may be adjusted, following hearings, based on projected fuel costs for the period the fuel factor will be in effect, subject to true-up. Capacity costs associated with purchased power are recovered through base rates, while energy costs are reflected in the fuel factor. Under- or over recoveries are deferred, with interest, for recovery over a subsequent 12 month period.[21] |
| | |
| ATCO Electric Distribution | Distribution company only. No commodity or purchase power contracts. |
| ATCO Electric Transmission | Not applicable, electric transmission company |
| Nova Scotia Power | Since January 2009, NSPI has been operating with a fuel adjustment mechanism (FAM) for fuel expense recovery, which is subject to Nova Scotia Utility and Review Board (UARB) review |

[16] Wisconsin PSC 116
[17] RRA Minnesota PUC Profile, accessed January 8, 2013.
[18] Northern States Power - Wisconsin, 2011 Form 10-K, at 38.
[19] RRA Colorado PUC Profile, accessed January 8, 2013.
[20] Public Service Company of Colorado, 2011 Form 10-K, at 6.
[21] RRA Texas PUC Profile, accessed January 8, 2013.

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| | and approval. The FAM allows NSPI to recover fluctuating fuel expenses from customers through annual fuel rate adjustments. Differences between actual fuel costs and amounts recovered from customers through electricity rates in a year are deferred to a FAM regulatory asset or liability and recovered from or returned to customers in a subsequent year.[22]<br><br>The FAM includes an incentive component, whereby NSPI retains or absorbs 10% of the over or under recovered amount to a maximum of $5 million. |
| Enbridge Gas Distribution | The company has a quarterly rate adjustment mechanism in place that allows for the quarterly adjustment of rates to reflect changes in natural gas prices. Adjustments are subject to prior approval by the OEB.[23] |
| Fortis Alberta | Distribution utility only. No commodity or purchase power exposure.[24] |
| Fortis BC Electric | FortisBC Inc. owns four regulated hydroelectric generating plants on the Kootenay River with an aggregate capacity of 223 MW, which provide approximately 45% of the company's energy needs. The majority of FortisBC Inc.'s remaining electricity supply is acquired through long-term power purchase contracts.<br><br>There are instances where a portion of the customer load may need to be supplied from the market in the form of short-term power purchases. Costs related to such purchases, provided they are prudently incurred and accurately forecasted, are recovered through customer rates.[25] |
| Newfoundland Power | Approximately 93% of Newfoundland Power's energy requirements is purchased from Newfoundland Hydro.[26]<br><br>In the Rate Stabilization Account (RSA) primarily passes through to the company's customers amounts related to changes in the cost and quantity of fuel burned by Newfoundland Hydro to produce the electricity sold to the company.<br><br>In the Rate Stabilization Account (RSA), the Energy Supply Cost Variance reflects the difference between the incremental rate which the company pays to purchase energy and the average supply cost reflected in rates. Recovery of the energy supply cost variance provides the company a reasonable opportunity to recover supply costs without requiring a general rate application. In addition, the Demand Management Incentive (DMI) Account is |

[22] Nova Scotia Power Inc, 2011 Annual Information Form, at 12-13.
[23] Enbridge Gas Distribution Company, 2011 Annual Report, p. 17.
[24] Fortis Inc. Investor Presentation, May 2012, p. 14.
[25] Fortis Inc., 2011 Annual Information Form, at 14-15.
[26] Fortis Inc., 2011 Annual Information Form, at 16.

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|---|---|
| | related to the demand charge component of supply costs as opposed to the energy charge component.[27] |
| TransCanada PipeLine | Not applicable, gas transmission pipeline. |
| Gaz Metro | The cost of natural gas is fully reflected in supply rates billed to customers by means of an automatic monthly adjustment mechanism established for this purpose, whereby variations are leveled over a forward-looking, moving 12-month period.[28] |

[27] Newfoundland Power, 2011 Annual Information Form, at 4-5.
[28] Gaz Métro Inc., 2011 Annual Information Form, at 27.