DEMANDE DE RENSEIGNEMENTS N° 1 DE LA AQCIE-CIFQ (PEG) À HYDRO-QUÉBEC DANS SES ACTIVITÉS DE TRANSPORT D'ÉLECTRICITÉ (LE TRANSPORTEUR) RELATIVE À LA DEMANDE DU TRANSPORTEUR DE MODIFICATION DES TARIFS ET CONDITIONS DES SERVICES DE TRANSPORT POUR LES ANNÉES 2021 ET 2022

ECONOMETRIC RESEARCH

1. Références : (i) Pièce B-0012, p. III-26;
(ii) Piece B-0012, p.VII-63

Préambule :

(i) « In 2018, Hydro One Sault Ste. Marie filed an application with the Ontario Energy Board to escalate transmission rates through an IRM. Hydro One proposed a revenue cap formulation and through its consultants Power System Engineering, Inc. ("PSE"), conducted a TFP study and an econometric benchmarking study that determined the S-factor. PEG also submitted a TFP study and an econometric benchmarking study ».

(ii) « Our econometric cost comparison analysis utilizes the results from the estimated total cost model to predict costs for each company ».

R-squared is a widely-used statistic that indicates the explanatory power of econometric models.

Demandes:

1.1 Please compare the R-squared values reported for the featured total cost benchmarking models of PSE in its study for Hydro One and of Brattle and PEG in this proceeding. How much lower is the R-squared in the Brattle model?,

1.2 Please provide commentary on any reasons why the R-squared value in the Brattle study is lower.

ECONOMETRIC RESEARCH

2. Références : (i) Pièce B-0012, p.VII-62
(ii) Pièce B-0012, p. VII-63, Table 14

Préambule :

(i) « Table 14 presents the coefficient estimates for the final regression models. We use model (3) for our cost comparison analysis and model (2) for the output weights in our TFP model. Model (2) implies: a 1% increase in transmission line length, increases total real costs by 0.30%; a 1% increase in ratcheted peak demand, increases total real costs by 0.39%; a 1% increase in total energy output, increases total real costs by 0.05%, but is statistically insignificant ».

(ii) The parameter estimates for the scale variables in the featured benchmarking model 3 on Table 14 are 0.255 for km, 0.162 for MW, and 0.0522 for MWh.

Demandes :

2.1 What do these results seem to suggest about the importance of scale economies in the power transmission industry?

2.2 Does model three imply that a 1% increase in km, MWh and capacity to produce a 0.4692% (0.255+0.161+0.0522) increase in predicted cost in the long run? Is that a reasonable result?

2.3 Please discuss why the fixed effects model implies much larger economies of scale than the random effects model.

OUTPUT VARIABLES

3. Références : (i) Pièce B-0012, p. I-2;
(ii) Pièce B-0012, p. VII-60
(iii) Pièce B-0012, p. I-2; and Federal Energy Regulatory Commission, FERC Form 1
(iv) Pièce B-0012, p. VI-46

Préambule :

(i) « Our output measure [in the productivity study] consists of a cost-weighted average of peak demand and total miles of transmission lines—with 60% weight given to peak demand and 40% given to miles of transmission lines ».

(ii) « We use the same output metrics as we used in our TFP study with the exception that for peak demand we use ratcheted peak demand. Ratcheted peak demand for a given year is the maximum value of peak demand observed since the beginning of the study period up to that year. For example, the ratcheted peak demand for 1995 is the maximum of the peak demand for 1994 and 1995. Similarly, the ratcheted peak demand for 2014 is the maximum peak demand observed over the 1994-2014 period. We believe ratcheted peak demand is a more correct output variable for an econometric model of transmission costs than peak demand because an increase in peak demand in a given year may not necessarily result in capacity additions and additional costs. If the existing capacity is sufficient, an increase in peak demand may not require additional investments. On the other hand, it is more likely that an increase in ratcheted peak demand will require capacity additions and result in additional costs ».

(iii) Brattle «assembled a database of the costs, output and operating characteristics of U.S. electricity transmission companies using the FERC Form 1 data. »

(iv) « Companies report the total peak demand on their transmission system, if any. This metric, however, is only available from 2004, which would restrict the sample period for this study. We use an alternative definition of peak demand in the FERC data, which is available starting in 1994. This quantity is in megawatts (MW) of peak demand observed during a given year».

Demandes :

3.1 The productivity work in the report features peak demand. However, the econometric work features a *ratcheted* peak. If ratcheting was preferable for the econometric study, why was it not also preferable for the productivity study?

3.2 If peak demand is an output subindex in the productivity study, why is its 60% econometric weight based on a cost elasticity that was calculated using a *ratcheted* peak demand variable? What would the weight be if it were based on econometric work for peak demand instead of ratcheted peak?

3.3 Please recalculate the productivity trends using ratcheted peak demand and compare the results to those obtained using (unratcheted) peak demand.

3.4 How does the cost performance of HQT change if a model using peak demand were used instead of ratcheted peak?

3.5 Why couldn't Brattle have used the transmission peak in its econometric benchmarking study and monthly peak in its productivity study? Which peak load variable is more consistent with the peak data that HQT reports? Please reestimate the featured total cost benchmarking model and benchmark HQT using the alternative transmission variable.

CAPITAL COST

4. Références :

(i) Pièce B-0012, p. I-3;
(ii) Pièce B-0012, p. IV-35
(iii) Piece B-0012, p. IV-33
(iv) Piece B-0012, p. IV-38-39
(v) Pièce B-0013

Préambule :

(i) « We find that our results are sensitive to certain assumptions that we make, including the period used for the analysis, the methodology used for capital services—*i.e. One-Hoss Shay* vs. *Geometric Decay*—the asset life assumption, the output measure used and the inclusion or exclusion of common costs—*i.e.*, Administrative and General ("A&G") expenses and General Plant ».

(ii) « Specifically, the capital quantity index is created by adding deflated gross additions and subtracting deflated gross retirements from the previous year's quantity index, where retirement assets are deflated by the index from the year when the assets came into service ».

(iii) « In order to measure capital quantity and the services that a unit of capital provides, one needs to make an assumption about how the flows of capital services change throughout the life of the asset—*i.e.*, how does the asset depreciate? Specifically, does the asset produce a relatively constant flow of capital services throughout its life—a methodology known as O*ne-Hoss Shay* depreciation. Alternatively, does the asset provide a flow of capital services that diminishes over time as the asset ages, and at what rate does that diminution occur—with one such methodology being the G*eometric Decay (Geometric Depreciation).* ».

(iv) « The services provided by a unit of transmission capital corresponds to certain "functionalities" underlying the asset. For example, the functionality provided by towers and poles is to support, sustain and carry the overhead conductors and devices—*i.e.*, the transmission lines. Either the towers and poles provide this functionality or they do not, there really is no in-between. The functionality provided by towers and poles, therefore, are more consistent with *One-Hoss Shay*».

(v) «Document de soutien 1» of the Brattle Report.

Demandes :

4.1 Brattle's one hoss shay method requires data on the value of plant additions and retirements. The plant additions will have been put in service close to the time at which they are reported on FERC Form 1 and therefore assigning a price to the dollars of additions is reliable. However, it is not obvious how one can accurately determine the age of assets that are *retired.* Please discuss how much confidence one should have that the prices Brattle assigns to the dollars of retirements reflect the years when those assets were put in service.

4.2 Please confirm that in Brattle's study, as in most productivity and benchmarking studies, it is customary to measure each year the quantity of plant additions associated with a *cohort of assets* with varied service lives and not the quantities of *individual* assets. Doesn't it make sense then to choose the method that best models the service flow of the *cohort*?

4.3 Please prepare a table detailing the capital cost specification used in each of the productivity studies

that Dr. Ros has prepared. If Dr. Ros used geometric decay in some or all of his telecommunications studies, doesn't the one hoss shay specification better reflect the service flow of individual telecommunications assets?

4.4 Please confirm that the cost of operating and maintaining transmission assets tends to rise as they age. Doesn't that suggest that their capital service quantity is diminishing?

4.5 Which capital cost specification is used by the U.S. government in its sectoral productivity studies?

4.6 Researchers using one hoss shay capital cost specifications sometimes encounter negative capital quantities. [redacted]

CAPITAL COST

5. Références : (i) Pièce B-0012, p. IV-34
(ii) Pièce B-0012, p. VI-42
(iii) Pièce B-0012, p. VI-44

Préambule :

(i) « The benchmark year refers to the first year for which capital information is available. For the U.S. sample of transmission companies, the first year of readily available data is 1988. For HQT, the first year with available data is 2001. We calculate the capital stock in the benchmark year by deflating the benchmark year plant in service by a weighted average capital price index. For the U.S. sample of utilities, we use the Handy-Whitman index to deflate the capital expenses. For HQT, we used a composite capital price index. The following is the benchmark year capital stock formula that we use in our study:

$$Benchmark\ Capital\ stock = \frac{Gross(or\ Net)\ Plant\ in\ service_{Benchmark\ year}}{\sum_{i=1}^{s}\left(i \times \left(\frac{P_{Benchmark-s+i}}{\sum_{i=1}^{s} i}\right)\right)} \qquad (18)$$

».

(ii) « Our primary data source for this study uses the processed FERC Form 1 data released by SNL Financial, a financial analytics company ».

(iii) « To carry out this study, we required transmission capital cost data from 1988 to 2019 and data for all other variables (summarized in Table 7) from 1994 to 2019. ».

Demandes :

5.1 Equation 18 provides the formulas used to calculate the benchmark capital stock. The numerator evidently differs depending on whether geometric decay or one hoss shay is being used. The denominator does not appear to depend upon which method is being used. Since prices have risen over time, it seems unlikely that the price at which *net* plant was acquired would be the same as that for *gross* plant because the more depreciated plant included in gross plant was acquired at lower prices. Please explain the mathematical reasoning for using the same deflation formula for both methods.

5.2 If the denominators were actually different for gross and net plant, please provide each of the formulas.

5.3 Does the gross plant in service reported by HQT in 2001 reflect the total gross amount of historical investment in plant and equipment still in service? Was there ever a time in the history of the company or predecessor entities when gross plant in service was restated at net plant value or some other alternative valuation?

5.4 Please confirm that Brattle used 1988 as the benchmark year for the capital quantity index because that was one of the earliest years that was possible using SNL Financial plant value data. Please also confirm that an earlier benchmark year would have been more accurate but would have involved substantial incremental work.

IMPACT OF STRUCTURAL CHANGE ON COST

6. Références : (i) Pièce B-0012, p. IV-33
(ii) Pièce B-0012, p. IV-13
(iii) Federal Energy Regulatory Commission, FERC Form 1
(iv) Pièce B-0012, p. VI-50

Préambule :

(i) « Labor and MR&S make up a utility's operations and maintenance (O&M) expenses. Labor expenses are readily available from the FERC Form 1 data and we calculate MR&S expenses from the same data. We obtain quantity indices for these two inputs by deflating their respective expenses by an appropriate input price index—a labor input price index and an MR&S input price index. We provide the data used and the details of this approach in Section VI ».

(ii) « The time horizon must be at least 15 years and allow the long-term growth of the industry to be measured and should be long enough to smooth out variations that could distort the measurement of long-term productivity growth in the power transmission industry or an alternative industry. Our TFP model measures TFP growth from 1994 to 2019, a period of twenty-five years and we provide TFP growth results for each year as well as for different periods ».

(iii) Brattle assembled a database of the costs, output and operating characteristics of U.S. electricity transmission companies using FERC Form 1 data.

(iv) « Table 10 below presents a summary of the annual growth rates for the three input quantities, input prices and the shares of the inputs. The fastest growing input quantity during the period was MR&S, averaging 5.58%, followed by capital at 0.93% and labor at 0.69% ».

Demandes :

6.1 What steps did Brattle undertake during its study to ascertain the effect of U.S. transmission industry structural change (e.g., the emergence of ISOs and RTOs) on the cost and productivity trends of sampled distributors?

6.2 Please discuss how changes in the transmission industry may have affected reported expenses of utilities in account 565 (transmission of electricity for others), accounts 561-561.8 (dispatching) and account 566 (miscellaneous transmission expenses).

6.3 Which transmission O&M accounts, if any, were excluded from the O&M expenses used in the study? Please provide the rationale any excluded accounts.

6.4 If account 565 was included, please explain the rationale for its inclusion.

6.5 Please discuss why the reliance of sampled utilities on transmission by others may have increased during the sample period.

6.6 Could the inclusion of transmission by other expenses explain why the quantity of materials, rents, and services grew far more rapidly than the quantities of labor or capital, and the rapid decline in O&M productivity?

6.7 Did you include the cost of HQT's transmission by others in your benchmarking study. If yes, were these as large, relative to other O&M expenses, as those of the U.S. transmitters in the sample?

6.8 Please recalculate the productivity trends and benchmarking results excluding this cost item.

6.9 How do the average trends in transmission by others, dispatching expenses, and miscellaneous transmission expenses compare to the trend in the other (residual) transmission O&M expenses?

GENERAL COSTS

7. Référence : (i) Pièce B-0012, p.VI-51

Préambule :

(i) Brattle's study « Does not include a share of A&G expenses nor a share of the general plant in transmission capital expenses ».

Demande :

7.1 Please explain why it is reasonable that the alternative results that Brattle calculated including A&G and general plant should cause such radical differences in productivity results. What is the average A&G cost used in this alternative analysis as a percentage of the Transmission O&M included? What is the average General Plant capital cost used in this alternative analysis as a percentage of the Transmission capital cost?

7.2 Please report the average trend in the O&M productivity of sampled transmitters when A&G expenses are included.

INPUT PRICE INDEXES

8. Références : (i) Pièce B-0012, p.VI-48;
(ii) Pièce B-0012, p. VI-49;
(iii) Pièce B-0012, p. IV-36;
(iv) Pièce B-0012, p. VII-56;
(v) Pièce B-0012, p. VII-59
(vi) Pièces B-0013 et B-0019

Préambule :

(i) « We define the quantity index for labor as the ratio of the total wages paid and a labor price index—*i.e.*, we calculated deflated wages. For the labor price index, we use data from the Occupational Employment Statistics ("OES"), which measures the average wage for all occupations. The OES is an annual report published by the Bureau of Labor Statistics at the state level for a range of industries in the U.S. We use the mean 2019 wage level for the *Electric Generation, Distribution and Transmission Industry* ».

(ii) « Similar to labor quantity, we obtain the MR&S quantity index by deflating MR&S expenses by a price index. For the U.S. sample, we use the Gross Domestic Product Price Index (GDP-PI), adjusted for the GDP-PI from the base year, to determine MR&S quantity ».

(iii) « With respect to the "price" of capital—*i.e.*, the opportunity cost/rental price of owning a unit of capital—*One-Hoss Shay* implies a certain rental price formula. With *One-Hoss Shay*, the asset provides the same amount of services each year over the life of the asset. Therefore, the annual payments are constant, apart from the effect of inflation in the purchase price of new assets. In order to justify the purchase of the new asset, the discounted sum of the annual payments—adjusted for asset inflation—would equal the purchase price. Specifically, the "rental" price of capital is:

$$P_t = \left(\frac{1-k-uz}{1-u}\right) \times \frac{(r-i)}{(1+r)} \times \left[1-\left(\frac{1+i}{1+r}\right)^{s}\right]^{-1} \times HW_{t-1} \qquad (20)$$

».

(iv) « With respect to HQT O&M costs, unlike FERC Form 1, HQT tracks the employee headcount for transmission services in terms of full-time equivalent ("FTE") of employees. We use this variable as a direct measure of the labor quantity for HQT. For the labor price, we calculate it as the ratio of the total payroll expenses to the FTE for a given year. We exclude pension and benefits from the definition of total payroll and we exclude capitalized labor from the definition of labor because these expenses are included in the company's capital expenses ».

(v) « Econometric analysis involves a dependent variable that is the variable that is being "explained" in the model—in our case total costs—and a set of independent variables, the variables that are the "explanatory" variables. The dependent variable is a variable that we estimate a relationship for, whose value depends on a set of external variables. The independent variables help define the relationship and form the basis on which we model the dependent variable ».

(vi) Price levels vary for different regions of the U.S. [redacted]

Demandes :

8.1 For each of the labor, MR&S, and capital price indexes used in the econometric work, please explain whether and how differences between the price *levels* of sampled U.S. transmitters were captured in the input price indexes. Did these indexes satisfactorily reflect differences in local price levels?

8.2 How did the study deal with differences in the prices faced by HQT and the sampled US companies, which are expressed in different currencies?

8.3 Why was an *endogenous* labor price used for HQT and an *exogenous* price used for U.S. companies? If the actual labor cost data for a company is used to calculate the labor price that is used in the benchmarking work, then is it the case that how much the company pays it employees is not being benchmarked?

8.4 Is it the case that the labor price used for HQT cannot be considered part of a set of "external" explanatory variables?

8.5 Is the P used in equation 19 the same as the P defined in equation 20?

EXPERIENCE OF THE BRATTLE TEAM

9. Référence : (i) Pièce B-0012, p. Appendix 85-86

Préambule :

(i) **«** Dr. Ros has worked on dozens of TFP studies involving electricity, gas and telecommunications **».**

PEG seeks to better understand the experience of Dr. Ros and the Brattle team when it comes to conducting energy utility productivity and benchmarking studies.

Demandes :

9.1 Please provide CVs for all of the named authors.

9.2 How many productivity studies of energy utilities have been undertaken by the named authors? How many of these addressed power transmission? Please list the energy utility studies in the public domain and provide copies of these studies.

9.3 How many cost benchmarking studies of energy utilities have been undertaken by the named authors? How many of these addressed power transmission? Please list the energy utility studies in the public domain and provide copies of these studies. How many of these benchmarking studies used multinational data?

ECONOMETRIC RESEARCH

10. Reference : (i) Pièces B-0013 et B-0019

Préambule :

[redacted]

Demande :

10.1 Please provide the final values for all of the business condition (explanatory) variables that Brattle used in its econometric models.

10.2 Please provide a brief description of the [redacted] including its source. If this index is from Statistics Canada, please provide the table number containing this data. If the index was constructed by HQT or Brattle, please also provide the calculations underlying this index.

ECONOMETRIC RESEARCH

11. Références : (i) Pièce B-0012, p. VII-61.
(ii) Pièce B-0019

Préambule :

(i) Brattle states that « panel data estimation does not require an observation for a given company for every single year ».

(ii) In the R code provided for Controls Processing, observations with missing values are summarily removed.

Demandes :

11.1 Please confirm that this statement is only true if the missing observations are not missing due to some related reason, and that failing to analyze the reason for the missing data could introduce material bias into the model.

11.2 Did Brattle do an investigation of any patterns in the missing values? If so, please provide a summary.

ECONOMETRIC RESEARCH

12. Référence : (i) Pièce B-0012, p. VII-63-70.
(ii) Pièce B-0019

Préambule :

(i) Brattle presents parameter estimates and relevant benchmarking model statistics in the report.

(ii) Brattle provides code for replicating the models which estimates each model twice – once without HQT in the sample and once with HQT in the sample.

Demande :

12.1 Please report full benchmarking results for HQT using the sample that excluded HQT**.**

ECONOMETRIC ESTIMATION PROCEDURE

13 Référence : (i) Pièce B-0012, p. VII-61.

Préambule :

(i) « We consider two common estimators to deal with panel dataset—the fixed effects ("FE") estimator and random effects ("RE") estimator. FE assumes that the unobservable company-specific variables are related to one or more of the model's independent variables and failure to control for them could bias the parameter estimates. Therefore, it removes the unobserved effect from the error term prior to model estimation using a data transformation process.145 During this process, other independent variables that are constant over time are also removed meaning that the FE estimation cannot estimate the impact of variables that remain constant over time. The benefit, however, of FE is that it controls for company-specific factors that are not observable but that remain constant over time. One key example is the geographic territory, climate and the difficulty or ease of providing transmission services. RE is a reasonable alternative to FE when a researcher is able to explicitly control for all potential independent variables and has a good reason to think that any unobservable variable is not correlated with any of the model's independent variables. An advantage of the RE estimator is that it allows for the estimation of variables that remain constant over time ».

Brattle states in footnote 146 that: « The FE estimator thus removes and controls for all unobservable company effects that remain constant over time, ensuring the remaining coefficients are not biased».

Brattle indicates they used a Hausman test to determine whether an RE or an FE estimator is appropriate.

Demandes :

13.1 Why were these the only estimators considered?

13.2 Please comment on whether using FE in econometric benchmarking essentially benchmarks each company against its own average costs during the sample period, rather than against the other companies in the sample, and whether this undermines the purpose of a benchmarking exercise.

13.3 Please confirm that, in econometric research, the precision of parameter estimates is increased to the extent that the variables have a wide range of values in the sample. Please also confirm that, in econometric cost research, FE greatly reduces the range of values. Is this a reason why parameter estimates in the random effects models have greater statistical significance?

13.4 Please explain why FE is not preferable for estimating the cost elasticities used in the productivity research but is preferable for evaluating HQT's performance.

13.5 Was a sensitivity analysis performed for other estimator choices and model specifications?

13.6 In view of your answers to the preceding questions, does Brattle believe that FE is preferable to RE in econometric cost benchmarking unless ALL potential independent variables are controlled for and the researcher has good reason to think that ANY unobservable variables are not correlated with the model's independent variables?

13.7 Please provide full benchmarking results for HQT using the random effects versions of the models.

13.8 Brattle seems to indicate that the choice between FE and RE does not matter if the conclusions reached are similar. If the RE model does not control for important unobservable time-invariant variables, could the models' similar results instead be an indication of model misspecification resulting in biased estimates?

13.9 Are fixed-effects models widely used in econometric benchmarking studies?

13.10 Since the FE models have low statistical power and the interpretation of the coefficients for slow-moving variables is complicated, how can the predictions based on that model be relied upon?

13.11 Please provide the Hausman test results.

13.12 Please confirm that the Hausman test indicated that the utility-specific errors are correlated with the regressors.

13.13 Did the version of the Hausman test Brattle used assume homoskedasticity of the error terms?

13.14 Were other statistical tests – such as the Wooldridge, Breusch-Pagan, or related tests – performed for heteroskedasticity, autocorrelation, and/or alternative model specification? If so, please provide the results.

13.15 Should Hausman test results be the sole basis for deciding whether to use the FE estimator in benchmarking?

ECONOMETRIC RESEARCH

14. Références : (i) Pièce B-0012, p. VII-63-70.
(ii) Pièce B-0019

Préambule :

Brattle reports econometric parameter estimates for total cost, capital cost, and CNE models using various estimation procedures and samples. In all of these models the business condition variables are the same.

Demandes :

14.1 Please comment on the pros and cons of the variables being identical in the 3 models, and whether the low R-squared value and large number of insignificant variables for the CNE model suggests that it may not be suitable for benchmarking purposes due to potential model misspecification and/or omitted variable issues.

14.2 Brattle clustered the model standard errors by company. Please discuss the pros and cons of company-level clustering. Specifically, discuss whether by company-level clustering Brattle posits that each company's errors are independent and not systematically correlated with any another company's – so the error terms for companies in the same ISO or state would be completely unrelated.

14.3 Please comment on how selecting an inappropriate level of standard error clustering could affect the statistical significance tests for the variables.

ECONOMETRIC RESEARCH

15. Référence : (i) Pièce B-0012, p. VII-62

Préambule :

(i) « The regression specification we employ uses a logarithmic functional form. In this model, we express the dependent variable and the three output metrics in natural logarithms, which is common practice in econometric literature… We also tested specifications that included quadratic forms (squared terms) of the output metrics, as well as interactions but these did not yield conclusive results. ».

Demandes :

15.1 How should an econometric researcher decide whether to include second-order terms in an econometric cost model?

15.2 In what sense were the results sufficiently inclusive for Brattle to decide not to include second order terms in their models?

STRETCH FACTORS

16. Référence : (i) Pièce B-0012, p. I-23

Préambule :

(i) « When initially moving from rate-of-return regulation to PBR, the change in regulatory structure can lead to efficiency gains by the regulated firm. The stretch factor provides customers with a "first cut" of the share of the increased productivity growth due to the initial incentive effects of PBR. Thus, a stretch factor should be more common in "first generation" PBR plans than in subsequent generation plans ».

Demandes :

16.1 Please comment on the propriety of statistical benchmarking and stretch factors in later plans.

16.2 Do firms in competitive markets all have efficient operations or does their operating efficiency vary?

16.3 Does continued benchmarking strengthen utility performance incentives?

STRETCH FACTORS

17. Référence : Pièce B-0012, p. I-24

Préambule :

(i) « The sample of companies used for the TFP study is also relevant. If the sample consists of companies that are operating under a PBR plan, then the measured productivity growth already contains some of the effects of the stretch factor. In contrast, a TFP study sample that includes only companies under rate-of-return regulation would not capture this effect. Our sample of U.S. transmission companies are under cost-of-service regulation by the FERC. Many of those companies are under "formula rates" meaning that the companies' rates are frequently aligned with underlying costs and there is less ability to take advantage of regulatory lag. At the same time, the FERC also provides incentives to transmission companies, most in the form of premiums on return on equity for meeting certain public policy objectives ».

Demandes :

17.1 Isn't the ROE premium discussed above fairly widely applied to transmitter capital expenditures by the FERC? Doesn't this materially weaken transmitter capex containment incentives?

17.2 If a TFP study sample that includes companies operating under multiyear rate plans to that extent *reduces* the appropriate stretch factor, doesn't a sample with numerous companies operating under formula rates and premium allowed rates of return on equity to that extent *increase* the appropriate stretch factor?