

RÉGIE DE L'ÉNERGIE

DEMANDE DU TRANSPORTEUR DE MODIFICATION
DES TARIFS ET CONDITIONS DES SERVICES DE
TRANSPORT POUR LES ANNÉES 2021 ET 2022

DOSSIER : R-4167-2021

RÉGISSEURS : Me NICOLAS ROY, président
Me LISE DUQUETTE
M. JOCELIN DUMAS

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PAR VISIOCONFÉRENCE

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RIOPEL GAGNON LAROSE & ASSOCIÉS
Sténographes officiels

COMPARUTIONS :

Me JEAN-FRANÇOIS OUIMETTE
Me ALEXANDRE DE REPRESENTIGNY
Me LOUIS LEGAULT
avocats de la Régie

REQUÉRANTE :

Me YVES FRÉCHETTE
avocat d'Hydro-Québec Transport (HQT)

INTERVENANTS :

Me STEVE CADRIN
avocat de l'Association hôtellerie Québec et de
l'Association restauration Québec (AHQ-ARQ);

Me SYLVAIN LANOIX
avocat de l'Association québécoise des
consommateurs industriels d'électricité et du
Conseil de l'industrie forestière du Québec (AQCIE-
CIFQ);

Me ANDRÉ TURMEL
avocat de la Fédération canadienne de l'entreprise
indépendante (FCEI);

Me ÉRIC McDEVITT DAVID
avocat de Option consommateurs (OC);

Me DOMINIQUE NEUMAN
avocat du Regroupement pour la transition,
l'innovation et l'efficacité énergétiques (RTIEÉ).

TABLE DES MATIÈRES

	<u>PAGE</u>
LISTE DES ENGAGEMENTS	4
PRÉLIMINAIRES	5
PREUVE DE HQT - PANEL 3 (Étude PMF, Facteurs X et S)	
AGUSTIN J. ROS	
MARCO VÉZINA	
STÉPHANE VERRET	
INTERROGÉS PAR Me YVES FRÉCHETTE	12
CONTRE-INTERROGÉS PAR Me SYLVAIN LANOIX	49
CONTRE-INTERROGÉS PAR Me STEVE CADRIN	91
CONTRE-INTERROGÉS PAR Me ÉRIC McDEVITT DAVID	131
CONTRE-INTERROGÉS PAR Me DOMINIQUE NEUMAN	163

LISTE DES ENGAGEMENTS

PAGE

E-9 (HQT) : Valider les données apparaissant à la
pièce B-0061, page 12, pour les
compagnies Central Maine Power Company
et Ohio Valley Electric Corporation
(demandé par AHQ-ARQ) 117

1 L'AN DEUX MILLE VINGT ET UN (2021), ce treizième
2 (13e) jour du mois de décembre :

3

4 PRÉLIMINAIRES

5

6 LE GREFFIER :

7 Protocole d'ouverture. Audience du treize (13)
8 décembre deux mille vingt et un (2021) par
9 visioconférence. Dossier R-4167-2021 : Demande du
10 Transporteur de modification des Tarifs et
11 conditions des services de transport pour les
12 années 2021 et 2022. Poursuite de l'audience.

13 LE PRÉSIDENT :

14 Bonjour. Maître Fréchette, est-ce que vous
15 m'entendez?

16 Me YVES FRÉCHETTE :

17 Tout à fait. Tout à fait, Monsieur le Président.
18 Bonjour à vous trois.

19 LE PRÉSIDENT :

20 On est tous un peu en situation d'apprentissage
21 ici. Merci. Et bienvenue à tous pour cette journée
22 d'audience. Avant de débiter, peut-être quelques
23 points d'intérêt. Maître Fréchette, est-ce que vous
24 avez quelque chose à nous dire sur les suivis pour
25 les engagements ou c'est trop tôt encore?

1 Me YVES FRÉCHETTE :

2 Non. Il y en a un. Bonjour aussi au panel et
3 confrères et les autres personnes qui sont en
4 ligne. Alors, effectivement, ayons de l'indulgence
5 pour nous tous aujourd'hui avec cette journée
6 technologique. Alors ayons de la bienveillance
7 envers nous tous pour passer à travers cette
8 journée.

9 En ce qui concerne maintenant les suivis
10 des engagements. Un engagement a été déposé
11 vendredi dernier et plusieurs ont progressé ce
12 week-end. En fin de journée, nous allons refaire
13 une revue de ce qui est déjà prêt. Nous devrions
14 être en mesure de vous offrir une autre série
15 d'engagements dans la foulée. Vous vous souviendrez
16 de ceux de l'AQCIE qui étaient quand même assez
17 anciens, ce qui nous exigeait, là, un travail de
18 fouiller un petit peu.

19 Si vous me permettez, je peux rester un
20 petit peu dans l'intendance, Monsieur le Président,
21 parce que j'ai le micro puis que ça a l'air à
22 fonctionner, puis que vous m'entendez bien. Si vous
23 me faites un petit « pop », je vous ai vu... Donc,
24 ça devrait être correct que vous m'entendez.

25 Alors, pour les notes sténographiques et le

1 caviardage que vous m'avez demandé de regarder ça
2 pour pas traîner la chose, j'allais vous offrir une
3 date en janvier équivalente à celle du retour pour
4 l'expert pour le compte d'écart. Est-ce que le
5 vingt-cinq (25) janvier, ça vous irait? Je pourrais
6 vous revenir...

7 LE PRÉSIDENT :

8 Est-ce que vous pouvez parler un petit peu plus
9 fort s'il vous plaît? On vous entend pas très
10 clairement.

11 Me YVES FRÉCHETTE :

12 Bon. Je vais y aller un petit peu plus fort. Alors,
13 je vais mettre le micro... Je vous ai changé de
14 profil. Vous allez voir ma petite main en l'air.
15 C'est pour mettre le micro plus près de la bouche.
16 Tout ça pour dire que je vous entretenais sur la
17 demande que vous m'avez faite pour caviarder
18 certains extraits des témoignages du huis clos et
19 d'identifier des portions qui sont publiques.
20 Alors, je vous offrirais une proposition à la fin
21 du mois de janvier au même moment que le compte
22 d'écart, ce matin ma mémoire déraile, mais je
23 crois que c'est le vingt-cinq (25) janvier que vous
24 aviez fixé pour un suivi pour l'expertise du compte
25 d'écart. Ça serait au même moment la proposition

1 pour (interruption de son) caviarder certains
2 extraits par rapport au huis clos de la journée de
3 vendredi dernier, si ça vous convient.

4 Présentation aussi que j'ai mentionné.
5 C'est que la présentation de monsieur Ros, je l'ai
6 transmise à tous mes collègues, confrères plutôt,
7 hier après-midi, ainsi qu'à madame Dubois et madame
8 Lis, ainsi qu'au sténographe et la traductrice.
9 Donc, tout le monde devrait avoir en main la
10 présentation que monsieur Ros fera ce matin.

11 PAR LE STÉNOGRAPHE :

12 Maître Fréchette, je suis désolé, ce n'est pas
13 beaucoup mieux. Ça coupe encore. C'est hachuré.

14 Me YVES FRÉCHETTE :

15 Bon. Est-ce que, Monsieur le Sténographe, est-ce
16 que ceci fonctionne mieux?

17 PAR LE STÉNOGRAPHE :

18 On peut s'essayer encore. C'est que votre voix
19 monte et baisse. Je ne sais pas pourquoi.

20 Me YVES FRÉCHETTE :

21 Écoutez, je vous assure que je garde un ton sobre.
22 Je ne vois pas ce que je peux y faire de mieux,
23 Monsieur le Sténographe. Je me croise les doigts
24 que vous allez survivre à cette mauvaise journée,
25 Monsieur le Sténographe.

1 PAR LE STÉNOGRAPHE :

2 Je les croise moi aussi.

3 Me YVES FRÉCHETTE :

4 Alors, ça complétait mes propos d'introduction,
5 Monsieur le Président. Si vous avez quelque chose
6 pour moi, je ferme mon micro aléatoire.

7 LE PRÉSIDENT :

8 Peut-être avant de débiter avec vos témoins. Pour
9 aujourd'hui, au niveau des contre-interrogatoires,
10 juste de rappeler que le premier intervenant serait
11 l'AQCIE-CIFQ, suivi de l'AHQ-ARQ, de la FCEI,
12 Option consommateurs, RTIÉE et la Régie. Ce serait
13 l'ordre des contre-interrogatoires. Pour la
14 reconnaissance de monsieur Ros comme expert, vous
15 voulez procéder comment? Lors de l'assermentation
16 ou...

17 Me YVES FRÉCHETTE :

18 Oui, si vous permettez, Monsieur le Président, je
19 vous avais déjà fait la demande initialement.

20 LE PRÉSIDENT :

21 Oui.

22 Me YVES FRÉCHETTE :

23 La requête n'a pas été contestée. Alors, dans ces
24 circonstances-là, je n'anticipais pas aller avec un
25 contre-interrogatoire, un voir-dire, si vous me

1 permettez l'expression. Et je ne voyais pas la
2 nécessité que mon collègue Lanoix le fasse non
3 plus, question qu'on puisse procéder directement.
4 Mais je suis bien à l'aise de le faire si vous
5 voulez le faire.

6 LE PRÉSIDENT :

7 Non, non.

8 Me YVES FRÉCHETTE :

9 Si vous l'exigez ou si vous le demandez.

10 LE PRÉSIDENT :

11 Un petit instant. Alors, la formation reconnaît
12 comme expert monsieur Ros dans le contexte du Total
13 Factor Productivity and Econometrics expert, comme
14 ça a été demandé. Est-ce que cela vous convient?

15 Me YVES FRÉCHETTE :

16 Oui, c'est parfait. Je vous remercie. Il n'y a pas
17 de souci. Alors, nous en serions à la formalité de
18 l'assermentation, à moins que vous ayez autre chose
19 pour moi.

20 LE PRÉSIDENT :

21 Pour le moment non. Nous sommes en mesure de
22 débuter si la traduction fonctionne bien. Ah, je
23 vois maître Cadrin.

24 Me STEVE CADRIN :

25 Je m'excuse, j'attendais le bon moment pour

1 interrompre les choses. J'ai levé la main,
2 simplement pour indiquer à la Régie que nous aurons
3 des questions à poser en lien avec l'engagement
4 numéro 1 qui nous a été fourni pour lequel on
5 remercie mon confrère. Alors, je ne sais pas quand
6 et comment, mais je voulais simplement vous le
7 mentionner, on sera prêt quand vous nous le direz,
8 dans le fond. Et je comprends que, là, on a la
9 traduction simultanée ce matin. Alors, ce n'est
10 peut-être pas le meilleur moment. Alors, j'attends
11 vos instructions.

12 LE PRÉSIDENT :

13 On vous revient là-dessus dès que possible.

14 Me YVES FRÉCHETTE :

15 Si je peux me permettre peut-être, Maître Cadrin, à
16 la pause ou sur l'heure du dîner, donnez-moi un
17 petit coup de fil sur le cellulaire, parce que ce
18 n'est pas le même panel. Peut-être me donner un
19 petit coup de fil pour discuter, si possible.

20 Me STEVE CADRIN :

21 Parfait. Je vais le faire. Il n'y a pas de
22 problème.

23 LE PRÉSIDENT :

24 Merci. Alors Maître Fréchette.

25

1 Me YVES FRÉCHETTE :

2 Oui. Rebonjour. En souhaitant que tout fonctionne.

3 Alors, nous sommes, Monsieur le Greffier, à

4 l'assermentation du panel s'il vous plaît.

5

6 PREUVE DE HQT - PANEL 3 (Étude PMF, Facteurs X et
7 S)

8

9 L'AN DEUX MILLE VINGT ET UN (2021), ce treizième
10 (13e) jour du mois décembre, ONT COMPARU :

11

12 AGUSTIN J. ROS, Principal at the Brattle Group, One
13 Beacon Street, Boston, Massachusetts (USA),

14

15 WHO, after having made a solemn affirmation, doth
16 depose and saith as follows :

17

18 MARCO VÉZINA (sous la même affirmation solennelle);

19

20 STÉPHANE VERRET (sous la même affirmation
21 solennelle);

22

23 INTERROGÉS PAR Me YVES FRÉCHETTE :

24 Q. **[1]** I will start with you, Mister Ros. So your
25 study and report that were filed before the Régie

1 along with all the support documents and responses
2 to IRs. These exhibits have been prepared by you
3 and you adopt them as your testimony in this file?

4 Dr. AUGUSTIN J. ROS :

5 R. Yes I do.

6 Q. **[2]** Thank you mister Ros.

7 Me YVES FRÉCHETTE :

8 Alors, monsieur Vézina maintenant qui vous
9 entretiendra, Monsieur le Président, sur le sujet
10 du Facteur-S.

11 Alors, Monsieur Vézina, les pièces HQT-5
12 DOC 1 page 10 et les réponses aux demandes de
13 renseignements à ce sujet ont été préparées par
14 vous sous votre contrôle et vous les adoptez comme
15 étant votre témoignage?

16 R. Oui. Tout à fait.

17 Q. **[3]** Merci. Alors, Monsieur Verret, bien a déjà
18 assermenté l'ensemble de l'oeuvre si vous le
19 permettez.

20 Alors, all these formalities completed
21 Mister Ros. So it's the time for you to start your
22 presentation and if there is some difficulty we'll
23 look at Mister President, to lead us and maybe try
24 to... At least we can communicate by signs and of
25 course since the presentation was filed before the

1 Régie, it would be helpful to present it.

2 So Mister Ros while you testify you can ask
3 to change page and each time it will done by the
4 person who will assist you at the Régie. Is it
5 clear?

6 R. Yes. I think I have control of the presentation.

7 Q. **[4]** Oh you have it? Okay.

8 R. Yes.

9 Q. **[5]** Perfect.

10 R. Can everybody see the first screen?

11 Q. **[6]** Yes. On my side it's fine. Thank you very much.

12 R. Okay. I will then begin. Thank you. Good morning
13 Mister President, good morning Commissioners and
14 good morning to all the participants here this
15 morning.

16 My name is Agustin J. Ros. I'm the
17 principal at the Brattle group and I will be
18 providing the presentation on the work that I
19 performed on the Productivity and Cost Benchmarking
20 studies.

21 There were two studies that we have
22 performed. The Productivity Study which is used to
23 set the X-Factor in the MRI plan and the Cost
24 Benchmarking Study which is used to set the Stretch
25 Factor in the MRI plan.

1 The presentation this morning will be split
2 into two sections. The first section I will be
3 discussing the productivity and the X-Factor. I
4 will begin with a little bit of background on the
5 topic.

6 I will then present our results, the
7 Productivity Study and I will also compare our
8 results to the other study that was submitted in
9 evidence by the specific economic group and I will
10 end the section with what our X-Factor
11 recommendation is for the MRI plan.

12 The second section of the presentation will
13 be devoted to the Cost Benchmarking and the Stretch
14 Factor and I will begin similarly with a little bit
15 of background on the topic. I will present our
16 results for the Cost Benchmarking. Again compare
17 them to the results of Pacific Economics Group and
18 then with our Stretch Factor recommendation. So
19 that's the outline of the presentation for this
20 morning.

21 The first section of the productivity and
22 the X-Factor. I'll begin here. A little bit of
23 background.

24 You know that the Régie requested a total
25 factor productivity study. We refer to that as

1 "TFP". It can also be referred to as Multifactor
2 Productivity. So either "TFP" or "MFP". Merci.

3 And the Régie requested the study to
4 measure the growth of the overall productivity of
5 the electricity transmission industry and giving
6 preference to the electricity transmission industry
7 in North America.

8 So we're interested in what the
9 productivity is of the industry we're not
10 necessarily focused on what the productivity is of
11 the company. It focuses on what the industry total
12 factor productivity is which is the basis of the X-
13 Factor in the MRI plan.

14 So the industry productivity growth is used
15 to set the X-Factor in a performance based plan,
16 sometimes referred to as "PBR" or in French the
17 "MRI Plan".

18 And the X-Factor is used for directly
19 regulating a company's prices or it's revenues. In
20 this case the MRI Plan that regulates the company's
21 revenues.

22 The general approach in an MRI Plan is that
23 the allowed revenues is equal to an inflation index
24 minus an X-Factor which is the general plan we have
25 in place here.

1 So in this proceeding... Oh and just when
2 you can see when the X-Factor increases in absolute
3 value the allowed revenues are allowed to increase
4 and when the X-Factor is lower the allowed revenues
5 are able to increase.

6 So in this proceeding we can use the
7 results of the Productivity Study to reset the X-
8 Factor for Hydro-Québec TransÉnergie in the last
9 year of it's MRI Plan in twenty twenty-two (2022)
10 and that plan applies to it's operations and
11 maintenance.

12 So the current MRI Plan regulates under
13 this plan the O&M part of HQT's business. Capital
14 remains under a cost of service methodology.

15 So therefore the X-Factor that we were
16 discussing today and throughout the report, the
17 reply reports, the one that's most relevant for the
18 last year is the Productivity of O&M.

19 The results of the study that look at the
20 productivity of all the company's services it can
21 be used in the subsequent MRI Plan that regulates
22 both O&M and Capital.

23 Now very briefly what is productivity
24 growth?

25 Productivity growth is defined as the

1 difference between the growth rate of a company's
2 output and the growth rate of the company's inputs.

3 So you see the figure here in this graph.
4 We have Hypothetical Total Factor Productivity
5 Growth and we have an index of outputs growing over
6 time, an index of inputs growing over time and the
7 productivity is the difference of a relationship
8 between that index of outputs in that index of
9 inputs.

10 This is a Total Factor Productivity
11 example. The other example that's very relevant for
12 our purposes is Partial Factor Productivity and
13 that is the measure of the difference between the
14 growth rate of a company's output and the growth
15 rate of some component of its inputs and in this
16 case we can calculate an O&M productivity growth
17 and use that for the last year of the MRI Plan for
18 coming up with the X-Factor.

19 Coming up with an index of outputs and an
20 index of inputs is a challenging process as
21 described in our report and in the Pacific
22 Economics Group reports.

23 It requires making different choices about
24 things like the outputs and things like the inputs
25 and I'll discuss a little bit about that throughout

1 this presentation.

2 Now what data can be used to measure
3 productivity growth?

4 US data is commonly used in Canadian X-
5 Factor proceedings.

6 Comprehensive Canadian data are just not
7 readily available to assist in measuring Canadian
8 specific or North American transmission
9 productivity and it is common practice in Canadian
10 proceedings to use US companies.

11 And we developed a productivity model using
12 seventy-four (74) US electricity companies that
13 provide transmission services over the period
14 nineteen ninety-five to two thousand nineteen (1995
15 - 2019) and we used a US Federal Energy Regulatory
16 Commission -- I'll be referring to it throughout
17 this presentation as the "FERC" -- we used the FERC
18 Form 1 data to do our productivity study.

19 The FERC data are a comprehensive database
20 on investments, expenses and outputs of
21 investor-owned US electricity companies.

22 The FERC data has a very long history in
23 regulatory accounting. It's been around since the
24 middle of the last century, it's used frequently in
25 US Federal rate proceedings, litigation disputes

1 followed by state public utility commissions and
2 also it's been a model of other regulatory
3 accounting techniques in other countries.

4 Recent transmission productivity studies in
5 Ontario and distribution productivity studies in
6 Alberta have used the same FERC Form 1 data for
7 their Total Factor Productivity and X-Factor
8 proceedings and recent studies in British Columbia
9 also used the FERC Form 1 data for unit cost
10 comparisons between BC Hydro and US electricity
11 companies.

12 So we used the FERC Form 1 data. We
13 recommended the use of the FERC Form 1 in US
14 companies for measuring the productivity of the
15 North American transmission industry and in setting
16 the X-Factor.

17 Now there have been some recent studies
18 done on Transmission Total Factor Productivity in
19 addition to the Brattle study presented in this
20 proceedings and the Pacific Economics Group. A
21 study presented also in this proceeding.

22 This table here provides a summary of North
23 American Transmission Productivity studies that
24 have been done recently.

25 Now if you see to the left there are five

1 studies identified in this table. In fact there are
2 really three in the sense that Pacific Economics
3 Group, PEG, has two studies and they are for the
4 most part adding additional years of data to the
5 study.

6 The methodology is very similar and the PSE
7 study mentioned and the Clearspring study are done
8 by the same author. And so in reality we're talking
9 about, you know, three studies that have looked at
10 Transmission TFP.

11 Prior to these there's really little to
12 none comprehensive type studies like this for the
13 North American Transmission industry. So we're
14 talking about relatively new studies done for
15 transmission.

16 When you look at this table there's a
17 couple of other facts that emerge. In the first one
18 you'll notice that both transmission TFP and
19 operation and maintenance productivity growth have
20 all been negative.

21 For all five studies in four different time
22 periods. So that's one fact that emerges from this
23 table.

24 The other fact is if you see on the right
25 all five studies use the same US FERC database.

1 Now we do differ somewhat in some of the
2 choices we make about which accounts we should
3 include in our study which accounts not to include,
4 but the ultimate selection is the US FERC Form 1
5 data.

6 You see also the table there especially
7 with the O&M productivity, there is divergence they
8 are all negative but there is a fairly wide range
9 of results.

10 If you look at the total factor
11 productivity study on the other hand it's a much
12 narrower range of results.

13 And the next slide I think emphasizes that
14 point. These are the three most recent studies all
15 done in twenty twenty-one (2021).

16 The Pacific Economics Group study in this
17 proceeding, the Brattle study in this proceeding
18 and the Clearspring study that was submitted before
19 the Ontario Energy Board.

20 And what we see here, what I did here was
21 put the study on a comparable period. Although our
22 study goes from nineteen ninety-five to two
23 thousand nineteen (1995-2019) and the Pacific
24 Economics Group study goes from nineteen ninety-six
25 to two thousand nineteen (1996-2019).

1 I just put everything on the same period of
2 two thousand to two thousand nineteen (2000-2019)
3 and you can see that the results are within a
4 fairly tight range of thirty-four (34) basis
5 points.

6 Now the point to keep in mind that these
7 studies, they use different approaches. Some of the
8 key inputs like how to measure capital, how to
9 measure output, what O&M costs to include in the
10 study or not and nevertheless from a total factor
11 productivity point of view over this common period
12 there seems to be a fairly close consensus on
13 results.

14 Not as much for the partial productivity
15 growth results which I'll talk about in a couple of
16 slides. There there is significant variants in the
17 results but we believe we know that the main
18 reasons for the differences in the results in those
19 studies and we can identify those and discuss
20 those.

21 Okay, a couple more slides and background
22 issues before I get to the results of the Brattle
23 study.

24 So a negative productivity growth means a
25 negative X-Factor in this particular MRI because

1 the inflation factor is what it is. A specific
2 measure of input inflation.

3 So economic theory behind the MRI does not
4 rule out a negative X-Factor from an economic
5 perspective.

6 The X-Factor to derive from the constraint
7 observed in competitive markets that industry
8 economic profits tend to zero in the long run.

9 When output growth is less than input
10 growth over a period, a negative X-Factor is
11 required to ensure zero economic profits.

12 In fact in non regulated markets when you
13 have a sector with output prices, increasing faster
14 than inflation that implicitly is the negative X-
15 Factor.

16 Regulators have adopted negative X-Factors
17 in MRI plans. For example the example the
18 Massachusetts Department of Public Utilities for
19 NSTAR electric utility distribution and the FERC
20 for interstate oil pipelines.

21 The last background slide I have before
22 getting to the results are points about the
23 incentive properties of MRIs and its implications.

24 So, in theory, under textbook cost of
25 service/rate-of-return regulation, an increase in

1 approved costs results in an increase in rates,
2 which provide a relatively weak incentive for a
3 cost containment. So as if your cost go up and
4 you're approved, you get to charge more, and if you
5 cut cost, you don't necessarily benefit from that
6 until the next rate case.

7 The key source of efficiency benefits in an
8 MRI derives from severing or breaking the link
9 between a firm's own costs and the rates it is
10 permitted to charge. So, that's key feature of an
11 incentive plan and we want to break that link to
12 give the firm an incentive to cut cost and not have
13 to turn over those cost benefits immediately.

14 This implies that in an MRI plan, kind that
15 we are discussing here, HQT competes against the
16 industry's costs and the industry's TFP. So, in an
17 MRI plan, that we're contemplating, we are not
18 looking to find the X-Factor that perfectly matches
19 HQT's, the firm's own costs are not the focus. The
20 goal is measuring the industry productivity growth
21 and using that as the benchmark.

22 Thus updates to, for example, the "Kahn"
23 X-Factor approach using HQT's specific data we
24 provide weaker cost containment incentives than
25 using the industry X-Factor, because ultimately,

1 HQT's allowed prices/revenues are tied to its
2 costs.

3 So, now I'll start going in to our results
4 and start off with this slide. This slide and the
5 next several ones will show the results of our
6 study and as well compare it to specific economic
7 groups studies and discuss what I think are the
8 major reasons for the differences.

9 So, the graph shows we calculated TFP
10 (total factor productivity) plus the partial factor
11 productivity for O&M and for capital, and we did it
12 over different time periods, the long run time
13 period we have is nineteen ninety-five (1995) to
14 two thousand nineteen (2019), though we also broke
15 that into different periods as well if you think of
16 a long run versus short run.

17 So, these are our recommended results, what
18 we call our base case results in our direct study,
19 and it comes about from decisions we made with
20 respect to important assumptions or inputs in the
21 studies such as how should capital services be
22 treated or measured, how should output be measured,
23 what operation and maintenance accounts or expenses
24 should be included, information about the assets
25 life that we use, all those things form our base

1 case. And in addition, we also in our direct report
2 conducted a fair amount of sensitivity analysis
3 where we change some of these key assumptions and
4 looked out what the impact was, and presented
5 results based on that sensitivity analysis as well.

6 So, from this table, there is a couple of
7 things that stand out in terms of the most relevant
8 one for this proceeding which is the partial fact
9 productivity for O&M. You can see that it has
10 remained relatively constant throughout the period.
11 Its high is a negative 3.3 range, but it has been
12 constant over the period. So, for example, you can
13 rule out any type of structural changes or issues
14 occurring during this period as the O&M
15 productivity hadn't fluctuated much over the time
16 period.

17 Total factor productivity, on the other
18 hand, has a... is also negative and has gotten more
19 negative over the period, it's almost become twice
20 as negative, if we can say that, over the... the
21 period. And this is driven primarily by the capital
22 productivity also decreasing significantly over the
23 period.

24 Now, it's always difficult in these
25 productivities to say what is the reason for why

1 this is happening, and there are many reasons in a
2 productivity study that can explain what it is. It
3 is very difficult to identify the one or two or
4 three main issues. There's a lot of moving parts in
5 productivity studies and it's difficult to isolate
6 and say, you know, this is the most important
7 reason. However, with respect to capital, what's
8 going on there, quite literally by definition,
9 capital growth has increased much more than output
10 growth, so the capital that's being added during
11 this period has been added perhaps to replace aging
12 assets, perhaps to connect more distance generation
13 sources, less necessarily to meet with increasing
14 peak demand.

15 So, this is our results and now we'll
16 compare some of the highlights of this result to
17 the Pacific Economics Group results, so we can see
18 the differences between the results in the two
19 studies. So, on the left we have our results for
20 the period 1995 to 2019, and on the right we have
21 Pacific Economics Group results for the period
22 almost identical, one year difference, their study
23 goes from 1996 to 2019.

24 You can see our TFP results are slower by
25 about 50 basis points, our O&M productivity is much

1 more negative than Pacific Economics Group
2 productive... O&M productivity by more than 200
3 basis points, and we have faster capital PF...
4 partial factor productivity growth over the period
5 by about 40 basis points.

6 Now, there are many methodological
7 differences between the studies. I am going to
8 focus on what I think are the two most relevant one
9 of important ones explaining the O&M, the
10 difference in the O&M productivity results between
11 the two studies.

12 The first one is the treatment of certain
13 transmission O&M expenses, and the second is the
14 companies that we have in our study and the
15 companies that PEG has in its study.

16 So, let me begin first with the
17 transmission operation and maintenance accounts.
18 So, not to go into too much into the weeds, but
19 FERC Form 1 data has around 30 separate accounts or
20 sub-accounts that the FERC's accounting system has
21 classified as transmission O&M expenses. So, we use
22 all FERC transmission O&M expenses and PEG
23 recommends excluding three of the accounts. Now,
24 three of the 30 might not seem a lot, but when you
25 look at the three accounts, they are large

1 accounts. In our study, the three accounts that PEG
2 excludes represent more than sixty percent (60%) of
3 all FERC transmission O&M expenses. And for PEG's
4 study, it counts for close to sixty percent (60%)
5 of all FERC transmission O&M expenses. There's a
6 difference in the two, because we have seventy-four
7 (74) companies and PEG has fifty-one (51)
8 companies.

9 I mentioned earlier that Clearspring study,
10 in their study, they also looked at the O&M
11 accounts and they exclude one of the accounts. So,
12 they include two of the three that PEG excludes and
13 they exclude one and I'll tell you which one in a
14 moment.

15 Okay. So, here the description of the three
16 accounts that are major driver in the difference in
17 results found between our study and Pacific
18 Economics Group studies, their account 561, 565 and
19 566. The 561 accounts deal with, first part of a
20 deal with reliability issues in load dispatching,
21 monitoring and operating the transmission system
22 related to load dispatching, transmission service
23 and scheduling related to load dispatching, and in
24 other expenses such as planning and standards
25 development and service studies. That include, that

1 accounts for about eleven percent (11%) of total
2 transmission O&M expenses in our study. And then
3 there is study 565 which is a transmission of
4 electricity by others, which is if you are
5 purchasing energy say from a purchase power
6 agreement or generation source that's not growing
7 and you need to wheel in the power for your
8 customers, you at times pay transmission to others
9 to get the electricity to your territory. So, that
10 is what account 565 has... and that's a large
11 account that counts for about thirty-five percent
12 (35%) of the study, of the total transmission O&M
13 expenses.

14 And finally we have account 566 which is
15 something called "Miscellaneous transmission
16 expenses" and that includes every type of expense
17 that can not go into one of the other 30 accounts
18 fall in to miscellaneous transmission expenses. So,
19 we include all three of these, Pacific Economics
20 Group excludes all three and I mentioned earlier
21 the... the study by Clearspring excludes account
22 56... 565 in their study.

23 Why do we include these accounts in our
24 study? The transmission O&M expenses in the studies
25 are transmission expenses that the U.S. companies

1 incur to provide transmission services and are a
2 part of a companies' production process. They have
3 been classified as such by the FERC, an account
4 have been in place for a very long period. As such,
5 these expenses should be an integral part of the
6 industries' productivity analysis, in our opinion,
7 failure to include them would bias the results of
8 the study. U.S. companies routinely use these
9 expenses in accounts to set just and reasonable
10 transmission rates. So, the rates that customers
11 pay for transmission services are based on all
12 these accounts and are used to set just and
13 reasonable rates.

14 We understand that HQT incurs similar
15 expenses as those contained in the three accounts
16 and those similar expenses are regulated under
17 HQT's current MRI.

18 So, this issue of including or not
19 including the three accounts are – is – a major
20 driver of difference in our study and Pacific
21 Economics Group study. In a data request, we asked
22 Pacific Economics Group to re-run its model and to
23 include the three O&M accounts in its model, and
24 this table here presents the results as can see.

25 In the first row is PEG's base case, their

1 base case results, and we asked them to do a
2 sensitivity including the three accounts and you
3 can see that when PEG adds in the three accounts,
4 TFP growth becomes -1.12%, which is much closer to
5 our base case result of -1.04%. O&M productivity
6 growth becomes -2.38%, still far removed from our
7 base case result of -3.38%, and I'll mention why I
8 think that's the case in a second.

9 So, this... this shows sensitivity of the
10 result of PEG's model when these accounts are
11 included, and likewise as we show in our reply
12 report, when we... when we remove these three
13 accounts from our study, we get much higher
14 productivity growth. In fact, our productivity
15 growth, when we remove the three accounts, becomes
16 even, you know, more positive than... than PEG's
17 base case, and we have this in our reply report. It
18 just shows the importance of whether these three
19 accounts are included or not included in these
20 studies.

21 Now, there is still a difference as I
22 mentioned between the -2.38% Pacific Economics
23 Group gets when they include the three accounts and
24 our base case of -3.38%, and we think that that's
25 driven by the difference in companies. Though, in

1 terms of sample selection, our general approach is
2 to use the readily-available FERC data and select
3 as many companies as possible limited only by data
4 constraints preventing the inclusion of a company.
5 So, we began with all the FERC companies that are
6 available and excluded companies only if the data
7 were not completely available for the period.

8 We selected a final sample of seventy-four
9 (74) companies based on companies specific data
10 issues, like, for example, was there incomplete
11 data, was there, you know, a merger related issue
12 that required us to no longer be able to follow
13 that company after the merger or just any other
14 type of missing data, and we detailed our reasons
15 for not accepting other companies that we could
16 potentially have accepted and how we ended up with
17 seventy-four (74) companies. There were more than a
18 hundred companies that we looked at and we had to
19 remove them, some of them, because of these data
20 issues, and we... we specified specifically what
21 the issues were for each of the companies that we
22 don't use.

23 We understand PEG use of fifty-one (51)
24 companies is driven very much by its work in the
25 Ontario proceeding where the given point was the

1 work by the Hydro One consultant in the sample size
2 that Hydro One's consultant had, and that is a
3 driver of the methodology that resulted in the
4 fifty-one (51) companies. The Hydro One's
5 consultants are referred to the PSE study in the
6 previous line, and that's what I'm referring to
7 there.

8 Now, among the companies excluded in
9 Pacific Economics Group sample were Pacific Gas and
10 Electric, which is the largest company in our
11 sample, Georgia Power, which is the fourth largest,
12 and Central Main Power, which is a company in close
13 proximity to HQT.

14 So, what impact thus the difference in
15 samples have between the two studies. What we...
16 what we did here is, we re-ran our model on a
17 smaller sample to see what impact this smaller
18 sample would have on our productivity results.
19 Specifically, we re-ran our model with the 47
20 companies that overlapped our sample and PEG's
21 sample. So, there are 47 companies that are in our
22 sample that are in PEG sample.

23 And what we found when we did that was we
24 got higher productivity growth from the smaller
25 sample. And so, the difference there reflects how

1 much the companies that were missing impact they
2 had on productivity growth. So, we found about a 30
3 basis point of fact, on total factor productivity,
4 from the difference between the samples of the two
5 studies, but we found much higher productivity bias
6 from the partial factor productivity O&M of 81
7 basis points. Okay. For Capital, we found not much
8 of a bias when it came to Capital sample.

9 So, given the importance of the O&M
10 productivity in this proceeding, this issue of
11 sample is more important than perhaps it could be
12 if the focus was just TFP, but even then, it's
13 still focus.

14 So, what's going on is that the companies
15 not included in PEG's sample somehow have lower
16 productivity growth with respect to O&M and TFP
17 overall. So, those are, in my opinion, the two most
18 important drivers of the O&M productivity results.
19 There are other differences in the models that are
20 discussed in the direct and the reply reports and
21 also in the data request.

22 For example, PEG identifies certain
23 concerns with our approach including the Capital
24 benchmark, Levelized capital prices, Labor price
25 index, Common costs, and Measure Output. In our

1 opinion, these are mainly methodological
2 differences among experts and we respond to them in
3 our reply report. Importantly, these have
4 relatively little impact on the O&M productivity,
5 which is the focus of this proceeding and mostly
6 modest impacts on TFP growth.

7 So, what are our recommendations for the
8 X-Factor portion? We do recommend an X-Factor for
9 the last year of the plan of -3.38 applicable to
10 O&M. It is the entire period, the long run period.
11 In this particular case, the long run and the short
12 run remain relatively constant and generally agree
13 with each other and we think that -3.38% reflects
14 the long run industry-wide productivity growth and
15 provides a reasonable benchmark for HQT to compete
16 against the last year of the MRI plan.

17 In terms of the X-Factor overall, if you
18 had a plan that was both for O&M and Capital, it's
19 not an issue in the last year of the current MRI
20 plan, as the plan only applies to O&M. Use of the
21 entire period is, we recommend the long run
22 1995-2019, which gives a long run TFP growth of
23 -1.04, it is, you know, reasonable to monitor
24 updates to see if the recent negative trends
25 continue, that would not be something unreasonable

1 to do. So, that's the part of the productivity part
2 of the presentation.

3 The next section that I would talk about is
4 the Cost Benchmarking and The Stretch Factor. A
5 little bit of background on this again.

6 The Régie views the Stretch Factor as
7 aiming to determine the additional efficiency
8 effort required from the Transmission Provider in
9 order to bring its productivity to a level
10 comparable to that of other Transmission utilities.
11 And the Régie indicated that the TFP study must be
12 accompanied by a statistical benchmarking or
13 econometric cost comparison to establish a Stretch
14 Factor.

15 So, we conducted an econometric cost
16 comparison, call it a benchmarking analysis, by
17 estimating an econometric cost model and using that
18 model to predict HQT's costs. Okay. And the
19 difference between the actual HQT cost and what our
20 model predicts, one can look at that as a measure
21 of efficiency. So, that is the econometric cost
22 benchmarking general approach that we did.

23 Now, in addition, we examined stretch
24 factor decisions in other jurisdictions and use
25 some amount of regulatory judgement in informing on

1 the appropriate Stretch Factor.

2 Now, cost benchmarking can be challenging
3 in general: are companies comparable and how you
4 decide if they are comparable. For example,
5 different countries, different regulatory regimes,
6 comparative, corporate structures, all these are
7 relevant things to consider in a benchmarking
8 analysis. And we believe that benchmarking HTQ's
9 costs are particularly challenging and we talk
10 about why in the next slide or two.

11 Now, to perform the econometric cost
12 benchmarking, we use the same U.S. data we used for
13 the productivity study, and we obtained similar
14 data from HQT. So, HQT and U.S. companies are
15 different and as I mentioned, it makes cost
16 benchmarking a challenge given that the objective
17 in cost benchmarking is to predict HQT's efficient
18 cost level, unlike in the productivity study where
19 the focus is more on measuring productivity growth
20 rates over time, not levels.

21 HQT has significant economic and business
22 characteristics that are outside the control of
23 management and that need to be controlled for as
24 much as possible in cost benchmarking otherwise HQT
25 management is unfairly penalized. Okay.

1 So, if the econometric model does not
2 adequately capture the significant economic and
3 businesses differences between HQT and the U.S.
4 firms, the results are unreliable.

5 What are some examples of HQT challenges.
6 Here some... a table we put together that has a
7 list of some of the economic and business
8 characteristics that are challenging to model in
9 the study. Many of these actually come from the
10 Pacific Economics Group direct Report. They include
11 things like the fact that HQT is a crown
12 corporation, it's a government-owned enterprise.
13 Our study has investor-owned utilities, so we are
14 comparing a sample of government-owned versus
15 investor-owned utilities.

16 There could be reasons why that could have
17 a negative impact on costs, there's certainly
18 literature out there on state-owned enterprise
19 versus investor-owned companies. On the other hand,
20 there could be some advantages also, cost
21 advantages, that are mentioned in the report as
22 well.

23 In any event, the net effect of all that is
24 something that needs to be accounted for, because
25 that's certainly something outside of HQT's

1 management control.

2 Then there is a series of, you know,
3 potential operating and logistical challenges that
4 can affect cost, facilities are distant from good
5 roads, innovative technologies, hard rock close to
6 the surface. All these things are things that are
7 outside any management control and there could be,
8 you know, some of this affecting our U.S. sample as
9 well, and it would be important to make sure that
10 those things are not counted against any of the
11 U.S. companies as well, because they are also
12 outside of the control management. And certainly
13 these things are not influenced by the Stretch
14 Factor.

15 Now, without going into too much detail of
16 our methodology, econometric methodology, and
17 Pacific Economics Group's econometric methodology,
18 this is certainly outlined in our direct report and
19 our reply report and certainly in the data request.
20 But at a high level, we use a model methodology
21 called a fixed effects model that controls for
22 HQT's distinctive cost features.

23 As an example, our model does not penalize
24 HQT for the fact that it is a crown corporation or
25 that many facilities are distant from good roads.

1 So, when making predictions, our approach
2 recognizes that these factors are outside of HQT's
3 control, and that no stretch... no stretch factor
4 can influence them.

5 Pacific Economics Group estimates a model
6 using a different methodology called pooled OLS,
7 that in our opinion does not adequately control for
8 HQT's distinctive cost features. So, in PEG's model
9 the cost disadvantage of having facilities far from
10 roads or being a crown corporation is counted
11 against HQT's score. So, that explains the
12 difference in the scores we give to HQT in the cost
13 benchmarking analysis.

14 This table here summarize the differences
15 in our conclusions about cost benchmarking. At high
16 level, our conclusion is that HQT is a median
17 performer using this methodology, again, it is an
18 econometric cost benchmarking methodology. Our
19 conclusion is that HQT is in the middle. And what
20 we mean by that is if we compare HQT's actual cost
21 to what our model predicted should be HQT's actual
22 cost... HQT actual cost were 1.7% below our model's
23 predicted value. Okay. That's what we mean by
24 median performer, it's close to what the model
25 actually predicts.

1 PEG's conclusion is that HQT is a very poor
2 cost performer, specifically PEG concludes that
3 HQT's actual costs are 67% above its model's
4 prediction. So, these are very significant
5 differences in results. An implication of this 67%
6 means that new HQT management could come in and
7 lower HQT's cost dramatically, in this case by
8 close to 50% and just... and that is just to get to
9 the average level of performance such as to bring
10 it down to what the model would project.

11 So, clearly these are very different
12 results and based on different methodologies. All
13 of this is discussed in our direct reply and in the
14 numerous data requests on this topic. Okay.

15 So, how do we use this information to set a
16 stretch factor? Well, there is a lack of
17 theoretical consensus as to how specifically to
18 translate a cost benchmarking result into a
19 specific Stretch Factor, and economic theory is not
20 well developed on the topic, so there is judgement
21 that is required.

22 The Ontario Energy Board has come up with
23 one way of doing it. This table here presents their
24 methodology for coming up with a stretch factor
25 based upon costs benchmarking results. So, what

1 they do is they ask the parties to estimate similar
2 models as we have done, and to use the models to
3 make predictions about costs and compare it to the
4 actual costs. And they have grouped the results
5 into five categories.

6 So, the first one, as you can see, if the
7 actual costs of a company are 25% or more below its
8 predicted costs, then the Ontario Energy Board says
9 the Stretch Factor should be 0. Okay.

10 If you look at the third category, if the
11 results are that the actual costs are within a
12 +/-10% of predicted costs, then the Stretch Factor
13 should be 0.30%.

14 And finally, if actual costs are 25% or
15 more above predicted costs, then the Stretch Factor
16 should be 0.60%.

17 So, this is one piece of evidence that can
18 be use to set the stretch factor based on the cost
19 benchmarking itself.

20 We also find it valuable to look at what
21 other jurisdictions have already decided with
22 respect to the Stretch Factor and use that as
23 additional information when making our
24 recommendation.

25 So, this table here as some recent stretch

1 factors in electricity distribution, in
2 transmission and each one is different, has its own
3 circumstances but we found a range of between 0.10
4 to 0.30%. So, we use this information as well when
5 coming up with our recommendation.

6 And finally, what is our recommendation
7 with the stretch factor? So, based upon our
8 econometric cost benchmarking analysis, HQT's
9 actual costs fall within a range of +/-10% of the
10 model's predicted costs over the entire period
11 which if we were in Ontario would have resulted in
12 a Stretch Factor of 0.3%.

13 Recent stretch factor as the previous slide
14 shows, in Canada and Massachusetts, showed a range
15 of between 0.1 and 0.3% for the stretch factors.
16 So, our overall conclusion is that the selection of
17 a stretch factor depends on some judgement and
18 based on the totality of the evidence a stretch
19 factor range of between 0.1% to 0.3% is a
20 reasonable one for an MRI plan that re-sets the
21 X-Factor in year 4 of the plan.

22 That is the last slide and I'll just end
23 with a very brief bio of myself. As I mentioned,
24 I'm a Principal at the Brattle Group in its
25 electricity practice. I'm also an Adjunct Professor

1 at Brandeis University here in close to Boston
2 where I teach class on regulatory economics.

3 I have been qualified before as an expert
4 in TFP and X-Factors proceedings in several
5 high-profile cases including the first generation
6 Total Factor Productivity proceeding in Alberta,
7 Canada, where I appeared as an expert on behalf of
8 the Alberta Utility Commission and produced a TFP
9 study that was accepted by the Commission.

10 I worked on one of the first Total Factor
11 Productivity studies in U.S. telecommunications. At
12 the time I was an assistant to the Chairman of the
13 Illinois Commerce Commission, and subsequent to
14 that worked on many follow-up studies presented
15 before state public utility commissions.

16 I have published widely on econometric
17 modelling in peer reviewed journals, frequently
18 asked to peer reviews articles that involve
19 econometrics and occasionally productivity
20 analysis, and I've co-published a paper with
21 Professor Jerry A. Hausman, one of the world's
22 leading econometricians and inventor of the Hausman
23 test, on econometric benchmarking modelling.

24 So, that's the final slide of my
25 presentation. Getting back to you, Yves.

1 Me YVES FRÉCHETTE :

2 Yes. I hope everybody listen... hear me correctly.

3 If you don't mind, Mister President, I will go on
4 with... with my bad English just to be sure that
5 Mister Ros understands me if he didn't get the
6 translation, so he will hear me.

7 I will ask, Mister President, the favour to
8 have a small recess for ten minutes, just in order
9 for us to open telephone... telephone channel
10 between the witnesses if they have to consult
11 during the cross-examination. So, if you are okay
12 with it, I would ask for a recess up until ten
13 thirty (10:30), so it would be helpful for us, it
14 will be sufficient time to put all the wires
15 together, to... to have this consulting device to
16 work, and after that we will be ready to... for
17 cross-examination up until noon.

18 LE PRÉSIDENT:

19 Alors, la formation est d'accord pour revenir à dix
20 heures trente (10 h 30), prendre une pause d'une
21 dizaine de minutes. Ça vous convient?

22 Me YVES FRÉCHETTE:

23 Mister Ros? If you don't understand, Mister
24 President just grant us a few minutes up until ten
25 thirty (10:30) to... to fix this alternate channel

1 for you to consult with Marco and Stéphane.

2 R. Okay.

3 Me YVES FRÉCHETTE:

4 Thank you very much, Mister President.

5 LE PRÉSIDENT:

6 So, we'll be back at ten thirty (10:30). Thanks.

7 SUSPENSION DE L'AUDIENCE

8

9 REPRISE DE L'AUDIENCE

10 LE PRÉSIDENT :

11 Nous sommes de retour, Maître Fréchette.

12 Me YVES FRÉCHETTE :

13 Alors rebonjour à tous, alors on m'a fait le
14 message de tenir le micro devant la bouche. Our
15 witnesses are ready for cross-examination by my
16 colleagues.

17 LE PRÉSIDENT :

18 Let's roll if I can say so.

19 Me YVES FRÉCHETTE :

20 Okay. Thank you.

21 LE PRÉSIDENT :

22 AQCIE-CIFQ, Maître Lanoix? Maître Lanoix vous aviez
23 mentionné trente minutes (3 MIN). Est-ce que c'est
24 toujours le même temps que vous prévoyez?

25

1 Me SYLVAIN LANOIX :

2 En fait, est-ce que vous m'entendez bien?

3 LE PRÉSIDENT :

4 Très bien oui.

5 Me SYLVAIN LANOIX :

6 Très bien. Parfait. Alors, nous avons annoncé au
7 total pour les trois Panel une heure et demie
8 (1 h 30). Nous avons utilisé approximativement
9 trente minutes (30 MIN) pour le Panel 1.

10 Donc, c'est ce que nous avons planifié pour
11 aujourd'hui c'est une heure (1 h) pour combler le
12 temps total annoncé.

13 LE PRÉSIDENT :

14 Merci.

15 CONTRE-INTERROGÉS PAR Me SYLVAIN LANOIX :

16 Alors, bonjour au Panel. Alors, mon premier groupe
17 de questions va s'adresser à docteur Ros tout
18 d'abord.

19 Q. **[7]** Alors, good morning Doctor Ros.

20 R. Good morning.

21 Q. **[8]** My name is Sylvain Lanoix. I'm the attorney of
22 the Quebec Association of Industrial Consumers of
23 Electricity and the Quebec Forest Industry Council.
24 I will have questions for you about your report or
25 study.

1 R. Okay.

2 Me YVES FRÉCHETTE :

3 Il y a quelque chose qui se passe, Maître Lanoix.

4 Ça buzz. Moi je ne vous entends plus. Je vois vos

5 lèvres, mais je ne vous entends plus.

6 DR. AGUSTIN J. ROS :

7 I see mister Lowry has it's mike open. So it could

8 explain the throwback.

9 Me YVES FRÉCHETTE :

10 So it is important Mister Lowry that you close your

11 microphone. If I can say so Mister Roy I think your

12 mike is open too. We don't know if it's a cause

13 of...

14 Me NICOLAS ROY :

15 Okay.

16 Me SYLVAIN LANOIX :

17 Est-ce que tout le monde m'entend?

18 LE PRÉSIDENT :

19 Très bien?

20 Me SYLVAIN LANOIX :

21 Très bien? Parfait. Le problème semble réglé? Très

22 bien.

23 Q. [9] Alors, we'll come back to you Doctor Ros. So

24 we'll talk first of all about the productivity

25 evidence.

1 incentive properties of zero economic profits. So I
2 like to use a long-term estimate of what total
3 factor productivity is.

4 It's consistent with my recommendation in
5 the Alberta Utility Commission where I also
6 recommended a long run period and so that's the
7 basic reason why I make that recommendation.

8 Q. **[13]** Is there any limit that you would impose
9 yourself if you would have access to more than
10 twenty-five (25) years of data?

11 R. Could you please repeat the question?

12 Q. **[14]** Is there a limit that you would have imposed
13 yourself in the selection of the appropriate sample
14 period if you would have access for a longer period
15 than twenty-five (25) years?

16 R. So in general a longer period of breath is better
17 if the data are readily available, if it's not too
18 much work to get additional data and if you think
19 that the longer period is consistent with the
20 shorter period then that would be fine.

21 Q. **[15]** So you would have taken as long a period as
22 you would have available for these studies?

23 R. Yes. In the Alberta proceedings we did more than
24 twenty-five (25) years. I think we used thirty-six
25 (36) years. So if the data were readily available I

1 would consider it.

2 Q. [16] And your recommendation in the Alberta case
3 was based on a thirty-six (36) period sample
4 result?

5 R. If I remember correctly that was the bracket. Yes.

6 Q. [17] Okay. Now I want to ask you some questions
7 about O&M transmission accounts that are used in
8 your study. In your answer to question 6.3 of the
9 Request For Information from PEG. It's Exhibit
10 B-0064, Mister Clerk, page 18.

11 You declare that in your productivity
12 study...

13 Me YVES FRÉCHETTE :

14 Do you mind Mister Lanoix that we have the time to
15 get it?

16 Me SYLVAIN LANOIX :

17 Yes. No problem. I will do the same.

18 Me YVES FRÉCHETTE :

19 Pouvez-vous nous donner la page s'il vous plaît
20 puis la référence?

21 Me SYLVAIN LANOIX :

22 Oui. C'est la page 18.

23 Me YVES FRÉCHETTE :

24 It's B-0064?

25

1 Me SYLVAIN LANOIX :

2 Yes.

3 LE PRÉSIDENT :

4 B-0064, Monsieur Specte.

5 R. I'm trying to look for this. Hold on.

6 Me SYLVAIN LANOIX :

7 Q. **[18]** Maybe it's not necessary. Perfect. So I will
8 go to it. So if you go at page 18...

9 R. Can you just give me one moment. I'm trying to find
10 it in my...

11 Q. **[19]** You can look at the screen if you want. The
12 clerk just showed I suppose the appropriate page.
13 So you the question 6.3.

14 Me YVES FRÉCHETTE :

15 Un instant. J'y arrive moi aussi si vous permettez.

16 Me SYLVAIN LANOIX :

17 Yes.

18 Q. **[20]** That was maybe not the most important page of
19 the exhibit but since we all there why not?

20 R. Okay.

21 Q. **[21]** So at question 6.3 the question was: Which
22 transmission O&M accounts, if any, were excluded
23 from the O&M expenses used in the study? And your
24 answer: We excluded none.

25 And so we understand that you didn't

1 exclude any FERC transmission O&M account from the
2 O&M expenses used in your study. Am I correct?

3 R. Yes. That's correct.

4 Q. **[22]** So transmission account 565 concerning
5 expenses for transmission by other networks was
6 therefore included in your productivity study.

7 Mister Clerk you can remove the document if
8 you would like.

9 So Doctor Ros do you agree that the costs
10 for owning and operating a transmission network is
11 not effected by payments to other companies to use
12 their networks?

13 R. Well it is an expense to provide output that the
14 company is providing which is peak demand, so it
15 is... it is an expense associated with an output.

16 Q. **[23]** So, but do you... do you consider that it's a
17 payment who is associated with the costs for owning
18 and operating a transmission network?

19 R. Well, like I said in one of my responses, companies
20 can either own infrastructures and build the input
21 themselves, or they can buy the inputs from the
22 market. Both are legitimate expenses in a
23 productivity study, one is you own the capital and
24 you have an annual cost associated with that
25 capital, but the other is you're buying the service

1 from the market and you need to pay for that, and
2 that is a legitimate expense in a productivity
3 study.

4 Q. **[24]** Let me give you an example. Suppose that a
5 company that is a good operator had to pay a lot to
6 use another network to gain access to some lower
7 cost owner... for lower cost power, sorry. So,
8 suppose for that the other operator had high rates
9 due to high cost due to high inefficiency, should
10 the good operator be judge as a worst transmission
11 operator due to this power supply choice?

12 R. Well, I mean, in that example there you have again
13 a firm that is needing to buy energy that it does
14 not produced itself, so it needs to purchase that
15 energy and transport it to its native load
16 customers. The decision he makes about what
17 generation agreements he wants is a separate
18 matter, what we're talking about here is, you know,
19 should you count the transmission expenses that
20 you'll incur in a purchase power agreement in this
21 study, and I don't see a reason why you would
22 exclude it.

23 Q. **[25]** If the... if the company has no choice, as
24 it's often the case, to deal with another operator
25 to... to transport, transmit his energy, what's the

1 link between the fact that the other operator had a
2 high rate due to high costs, due to high
3 inefficiency, and the whole productivity
4 performance of the company?

5 R. Well, I mean, the other company's costs are what
6 they are, you purchase what the market price is,
7 the other firm is regulated as well, but I
8 wouldn't... I wouldn't say: "Okay. This
9 transmission by other expenses, is okay, because
10 I'm purchasing from an efficient company. But this
11 other transmission expenses by others is not okay
12 because it's an inefficient company", I wouldn't do
13 that.

14 Q. **[26]** Do you agree that... do you agree the FERC
15 doesn't use the amounts in account 565 to set rates
16 for the use of a company transmission system, and
17 the amounts in account 565 are rather the results
18 of rates set for use of the other company
19 transmission system, not the cause of them?

20 R. I don't understand, can you repeat it?

21 Q. **[27]** Do you agree that the FERC doesn't use the
22 amounts in account 565 to set rates for the use of
23 a company transmission system?

24 R. I think it's a case by case basis. I have in my, I
25 think it's a data response somewhere where the FERC

1 has provided guidance on when that account is part
2 of a formula rate and when that account expenses is
3 not part of a formula rate.

4 Q. **[28]** So, am I right to say then that the amounts in
5 account 565 are the results of the rates that's set
6 for the use of other company transmission system
7 and not the cause of them?

8 R. Excuse me, and not the what of them?

9 Q. **[29]** The cause, the source, the reason for them, or
10 the cause, C-A-U-S-E, the cause.

11 R. I'm just not following this distinction you're
12 making.

13 Q. **[30]** Okay. The... Do you agree that what is within
14 the account 565 is the result of the different
15 rates that are set for a transmission company by
16 the authority?

17 R. What is in 565 is the prudently incurred rates
18 that... that are in there, similar to other
19 accounts, and I don't know the distinction with
20 56... I'm not following the distinction.

21 Q. **[31]** Do you agree with me that the amount of the
22 account 565 is just the transmission by other
23 expenses, are the results of the rates that are
24 fixed, decided, by the relevant authority, U.S.
25 authority, regarding the rates of transmission that

1 the company, the power... the transmission company
2 can apply and charge?

3 R. Well, yes in the same way that it's for all the
4 accounts. I mean, every account like 561, 565, 567,
5 those are all approved rates and form part of the
6 formula rates.

7 Q. **[32]** Okay. Since we are in the context of fixing a
8 productivity factor, why is it relevant for you in
9 order to justify the inclusion of account 565 in
10 your study to affirm that account 565 is included
11 in the total costs of a transmission company when
12 it's time to set the transmission rate under a cost
13 of service rate of return regulation?

14 R. Well, the objective here is to calculate a total
15 factor productivity for use in an X-Factor and to
16 calculate the North American transmission
17 productivity like the Régie requested, so those...
18 those costs are legitimate costs in a productivity
19 study.

20 Q. **[33]** But how is it relevant the fact that they are
21 fixed following a cost of service rate of return
22 regulation to establish that they are relevant in a
23 productivity study?

24 R. Well, all the costs that we use, all the investment
25 data that we use in a productivity study, all the

1 O&M accounts we use in a productivity study, those
2 are all expenses that come out of cost of service
3 regulation. So, the seventy-four (74) companies
4 that we have in our sample, like the fifty-one (51)
5 companies that PEG has in its sample, all those
6 expenses are from a cost of service proceeding for
7 the last, you know, twenty (20) years. So, that's
8 the data that we have to estimate productivity
9 growth, it's a very common approach.

10 Q. **[34]** Do you agree with me that rate at... the rate
11 at the difference of other expenses from
12 transmission company is different, because it's the
13 result of... of a proceeding leading to a
14 (inaudible) that lead to a decision from an
15 authority to fix a rate on a cost of service rate
16 of return regulation, while all the other expenses
17 are basically business decision from the... from
18 the company that is... that are included in the
19 process to determine a just and reasonable rate?

20 R. I'm sorry, I just... I'm not following that line of
21 question.

22 Q. **[35]** Don't you see a difference between an expense
23 like account 565, which is the result of authority
24 decision about a rate based on the addition and the
25 examination of all the expenses that a company

1 submit to the authority on their cost of service
2 rate of return regulation, don't you see a
3 difference between that rate and the other expenses
4 that are not the result of any cost of service of
5 rate of return regulation?

6 R. No. I don't... I don't see a difference.

7 Q. **[36]** In your answer to the question 6.7 of the
8 Request for Information from PEG you state and I
9 will resume what is the appropriate thing and if
10 you need to refer don't hesitate. You state that:

11 For a sampled US utilities the account
12 565 transmission of electricity by
13 others represents approximately
14 thirty-five percent (35%) of total
15 transmission O&M expenses for your
16 sample while for HQT, this account
17 only represent three percent (3%) of
18 total transmission O&M.

19 So you want to have the exact reference it's B-0064
20 page 19.

21 R. Yes. I'm just trying to look for it.

22 Me YVES FRÉCHETTE :

23 Merci, Maître Lanoix. Moi aussi je viens de le
24 trouver. Vous voulez qu'on l'affiche? Document 3.1.

25 R. Wait. Sorry. I just need to bring it up.

1 Me YVES FRÉCHETTE :

2 It's the response 6.7. C'est ça, Maître Lanoix?

3 Me SYLVAIN LANOIX :

4 Yes. Alors, je ne pense pas que ce soit nécessaire
5 de l'afficher à moins que...

6 Me YVES FRÉCHETTE :

7 On va l'afficher.

8 Me SYLVAIN LANOIX :

9 On va l'afficher. Très bien. Alors, à la page 7.

10 Oui, vous l'avez, thank you Mister Clerk.

11 R. I'm sorry. I'm just trying to get to it.

12 Q. **[37]** You just have to look at the screen.

13 R. Oh okay. Perfect.

14 Q. **[38]** So you see your answer to the question 6.7?

15 R. Yes.

16 Q. **[39]** For the US transmission of electricity
17 by others represents approximately
18 thirty-five percent (35%) of total
19 transmission O&M expenses for our
20 sample...

21 R. Yes.

22 Q. **[40]** ... with variation within companies as
23 some companies exhibited a low,
24 single-digit percent while others
25 higher than the average.

1 For HQT, the account labelled
2 "transmission purchases" represents
3 three percent (3%) of total
4 transmission O&M expenses and is
5 captured in the "Other" expenses
6 category and not directly under
7 transmission O&M.

8 So in that context my question: Why should we take
9 into consideration account 565 in a productivity
10 study aiming to apply an X-Factor to HQT?

11 R. So as I said in my opening we're not looking to
12 look at the X-Factor that perfectly matches HQT's.
13 That's not the purpose of our proceeding or our
14 interest in the productivity study.

15 Our sample of seventy-four (74) companies
16 have a wide range of percent of transmission
17 expenses. Some of them the average is thirty-four
18 (34). Some other companies are much lower than
19 thirty-four (34).

20 This reflects each company's what I call in
21 economics "Make or Buy Decision". Now what is the
22 best way for you to provide services to your
23 customers.

24 And some of them relied more on purchasing
25 transmission from others because they may have

1 purchased more, Purchase Power Agreements. Others
2 have a network that requires less of transmission
3 by others like HQT.

4 In a productivity study we're not looking
5 for a sample of companies that are identical to HQT
6 for example on this specific issue.

7 This is no impediment at all to calculating
8 the industry productivity and using that industry
9 productivity is the X-Factor.

10 Q. **[41]** So you didn't apply any sort of criteria to
11 exclude those kinds of company who has a so
12 different portion of their revenues... Sorry. A so
13 different portion of their expense concerning the
14 transmission by others?

15 R. No. Nor do I do that for any of the other accounts.
16 I'm sure if you look at some of these accounts they
17 are very different for HQT than they are for the US
18 sample but that's not the point of what we are
19 doing in this productivity study.

20 Q. **[42]** And for benchmarking do you do any kind of
21 adjustment?

22 R. I use the same data for the benchmarking.

23 Q. **[43]** Thanks. As you know the Pacific Economics
24 Group's research did exclude the account 565 in its
25 productivity study.

1 They mainly were concerned that they were
2 sensitive to the restructuration of the
3 transmission industry and this restructuring, I
4 believe, it's irrelevant to MRI for HQT.

5 That were the two main concerns that were
6 expressed by PEG to justify the exclusion of
7 account 565 in their study.

8 You are also aware that doctor
9 Steve Fenrick from Clearspring Energy Advisor took
10 the same position in his productivity studies made
11 for the Hydro One in support of his transmission
12 and distribution joint rate application.

13 Now let me quote a passage of February two
14 thousand one (2001) study and for that, Monsieur le
15 Greffier, si vous pourriez afficher la pièce
16 C-AQCIE-CIFQ-0052 à la page 32 du document PDF. So
17 I just asked the clerk to post the relevant
18 excerpt.

19 R. Okay.

20 Q. **[44]** Thank you. Merci. So you see at the third
21 paragraph of this page and I will read. I will
22 quote:

23 Clearspring used a definition of
24 "cost" for Hydro One that allowed us
25 to achieve comparability with the

1 definition used for the US sample. The
2 cost of transmission services
3 purchased by US utilities from other
4 utilities is removed from the
5 transmission cost definition for the
6 US sample. Subtracting "transmission
7 of electricity by others" expenses
8 creates a more comparable cost
9 definition to Hydro One and, if not
10 removed, would yield an unfair
11 advantage to Hydro One, since certain
12 US utilities would have inflated
13 expenses without commensurate output
14 values. Clearspring also subtracted
15 pensions and benefit expenses from the
16 cost definition for both the US and
17 Hydro One.

18 So how do you explain despite your rational to
19 justify the inclusion of account 565 that a major
20 company like Hydro One considers that it would
21 yield an unfair advantage to include this type of
22 transmission cost?

23 R. So I did mention this in my presentation this
24 morning that the Hydro One consultant removes
25 account 565. I also quoted the same section in my

1 reply report in saying that I disagree with mister
2 Fenrick on this point.

3 I view it differently. I view this as being
4 a "Make or Buy Decision" similar to the answer I
5 gave previously. In some instances in order to get
6 your energy to your native load you have to pay
7 transmission expenses and I would not exclude that
8 from a productivity study.

9 And then more I gave the example of doing a
10 generation productivity study and excluding
11 purchased power from the study just because you
12 don't own the generation facility.

13 So this is an area where mister Fenrick and
14 I disagree.

15 Q. [45] You're talking about a "Make or Buy Approach".
16 Do you agree with me that when a transmission
17 company has to use the service of another
18 transmission company it's not really a situation
19 generally where they can make this service. So is
20 it really a case where the motto "Make or Buy" is
21 applicable?

22 R. Sure. Sure it is. I mean every company has their
23 own network. The network is, you know, growing at
24 times. Every company is making a decision of
25 whether to build its own generation or to purchase

1 generation.

2 The outputs in the study peak demand or
3 ratcheted peak demand those are... You can't have
4 those without the transmission by others if you're
5 purchasing the generation from, you know, some are
6 where you are not operating under.

7 Q. **[46]** Okay. Now I would like to talk about some
8 rapid growing expenses that are showed in the... in
9 the data of the studies. We just have discuss
10 specifically of the transmission by other expenses,
11 I would like also to include now the miscellaneous
12 transmission expenses, so the account 566, and the
13 low...

14 R. Yes.

15 Q. **[47]** ... the load dispatching expenses in our
16 discussion. So, can you confirm that the
17 miscellaneous transmission expenses are those that
18 the utility can not place in the other transmission
19 O&M accounts, this is where one might find large
20 one time expenses that are not likely to be
21 repeated?

22 R. I think that's correct, that's my understanding
23 that it's, you know, where they don't fit perfectly
24 in some of those other 30 accounts there is this
25 general account called miscellaneous, yes.

1 Q. **[48]** And can you confirm that the load dispatching
2 expenses are the costs to monitor the transmission
3 system, provide reliable service, scheduling
4 service, conduct studies of performance of the
5 network, and forecast future needs?

6 R. Which number 561 is it?

7 Q. **[49]** If you look the whole category load
8 dispatching expenses.

9 R. Yes.

10 Q. **[50]** So, it covers more than one account, they
11 cover some accounts, so...

12 R. Yes. Oh, I'm sorry... I'm sorry.

13 Q. **[51]** Go ahead, go ahead.

14 R. Yes. My presentation this morning, I had all the
15 561.1 to 561.8 and it has, you know, I think four
16 categories that have load dispatching associated
17 with it or dispatching associate with it, and then
18 another that looked more like planning service,
19 transmission service studies, interconnection
20 studies, and a reliability planning.

21 Q. **[52]** Okay. So... so, can you answer to the question
22 6.9 of the request for information from PEG, so
23 it's Exhibit B-0064, at page 22.

24 R. Yes.

25 Q. **[53]** So, you provided... you included a table

1 providing the average long-run growth rate for the
2 respective O&M expenses items listed in FERC Form
3 1.

4 R. Yes.

5 Q. **[54]** This table shows that transmission by others
6 expense grew by 11.26%, the miscellaneous
7 transmission expenses grew by 13.13%, and load
8 dispatching expenses grew by 10.02%. And meanwhile,
9 the growth of all other transmission O&M expenses
10 grew by only 5.12%. And my understanding is
11 correct?

12 R. That is correct, yes.

13 Q. **[55]** Okay. Those percentages are for which period?
14 You talk about the long-run growth, can you just
15 precise the period covered by this table?

16 R. Yes, I believe it's our entire period, nineteen
17 ninety-five - two thousand nineteen (1995-2019).

18 Q. **[56]** Okay. So, nineteen ninety-five to two thousand
19 nineteen (1995-2019).

20 R. Two thousand nineteen (2019).

21 Q. **[57]** Does it concern you that these two
22 transmission expense categories grow so much more
23 rapidly than the others?

24 R. No. Not at all.

25 Q. **[58]** Why?

1 R. Because these are legitimate transmission O&M
2 expenses that you need to... you need to provide
3 transmission services and it's reflecting the fact
4 that over this time period transmission... O&M
5 transmission productivity has been very negative.

6 Q. **[59]** And how do you explain those three
7 transmission accounts grew that much more rapidly
8 than the others?

9 R. Well, whatever was going on during this time
10 period, like I said, in these productivity studies
11 it's very difficult to isolate one or two factors
12 than can explain why TFP is high of why TFP is low.
13 There could be lot of factors about why, you know,
14 I think I give some information about increasing
15 wholesale competition, perhaps more service quality
16 requirements, but those are all the possibilities
17 for what explains... what explains this.

18 Q. **[60]** Could it be... could it be explain by an
19 important restructuring of the U.S. transmission
20 industry during you sample period?

21 R. Well, like I said in the presentation, over the
22 period of nineteen ninety-five to two thousand
23 nineteen (1995-2019) the O&M productivity has been
24 pretty constant, so I don't think that's... You'd
25 have to define when exactly... what is meant by

1 restructuring, what is the period that
2 restructuring happened and examine, you know,
3 before and after. What I find is that O&M
4 productivity has been around a -3% from nineteen
5 ninety-five to two thousand nineteen (1995-2019)
6 and when I cut up the period into different
7 sub-samples I'm finding the same amount of, you
8 know, -3 productivity growth.

9 Q. **[61]** Okay. At the question 6.8 of the PEG's request
10 for information, you were asked to recalculate, and
11 I'm still talking about Exhibit B-0064.

12 R. Yes.

13 Q. **[62]** And if you look for the reference, it's at
14 page 20. So, you were ask to recalculate the
15 productivity... the productivity trends and
16 benchmarking results excluding the three
17 transmission cost items we are talking about. The
18 results are showed at your Figure 4 at page 21 of
19 your answers. Thank you. Merci, Monsieur le
20 Greffier.

21 We see that for their full sample period,
22 the O&M productivity trend grows from -3.38 to
23 -2.44, why the multi... the multi factor
24 productivity trend grows from -1.04% to -0.78%? So,
25 that's the first line, the line concerning the

1 nineteen ninety-five - two thousand nineteen
2 (1995-2019) sample period. And all that despite a
3 drop in the... in the output quantity trend from
4 0.89% to 0.74%, that's the column B. Over the two
5 thousand five - two thousand nineteen (2005-2019)
6 sample period, the multi factor productivity trend
7 grows from -1.69% to -1.52%, while the O&M
8 productivity trend grows from -3.09% to -2.79%,
9 that's the fourth line of this figure. Do you agree
10 with me that those differences in result are
11 material, strictly speaking, that those result are
12 material?

13 R. I'm sorry, what is the last work you used?

14 Q. **[63]** Material or substantial.

15 R. Material, substantial. I think I just want to make
16 sure I'm clear about your view of this figure. Did
17 you mention in the beginning of your question that
18 this figure represents us removing all three
19 accounts or what did you refer to?

20 Q. **[64]** That's it. You were asked by PEG to
21 recalculate the productivity trends and
22 benchmarking result excluding the three
23 transmission cost item we are talking about.

24 So we are talking transmission by others,
25 the miscellaneous transmission expenses and the low

1 dispatching expenses. So the three items that we
2 just talked about.

3 So that's the context of this figure and I
4 was asking you do you agree with me that those
5 differences show in Figure 4 are material?

6 R. So I wanna answer the question but I do first want
7 to correct question 6.8 specifically is asking
8 something different.

9 Q. **[65]** Just precise your thought.

10 R. I'm sorry?

11 Q. **[66]** Can you just precise you thought about that?

12 R. Oh sure so...

13 Q. **[67]** So question 6.8 it's:

14 Please recalculate the productivity
15 trends and benchmarking results
16 excluding this cost item.

17 So I understand that Figure 4 shows the result...

18 R. I'm very sorry.

19 Q. **[68]** So my question. We understand the context of
20 this figure is to show what would be the growth of
21 the PFP and other and TFP also. What would be the
22 new PFP and TFP if we would exclude those three
23 items.

24 R. Okay.

25 Q. **[69]** So my question is that the difference between

1 those results and the result in your report...

2 R. Okay.

3 Q. **[70]** ... do you agree with me that they are
4 material.

5 R. Yes. As I stated in the presentation today they are
6 significant differences whether you include the
7 three accounts or not is what's driving much of the
8 difference between PEG's study and our study.

9 So I definitely agree that they are
10 material. But just to be clear on the record this
11 question is asking for the exclusion of one item.

12 Q. **[71]** So you tell me it's only for... Is it for the
13 account 565 only?

14 R. Yes. 565.

15 Q. **[72]** Okay. Thanks for the precision. So I guess if
16 we have still the two other items the difference
17 would of course would have been...

18 R. Yes and we have that in our reply. In our reply
19 evidence we have a table showing if we remove all
20 three of our accounts what our result would be. And
21 so we have that in our reply.

22 Q. **[73]** Okay. Now I would like to move on the
23 benchmarking evidence.

24 R. Okay.

25 Q. **[74]** So am I right to say that it's also your first

1 Transmission Econometric Benchmarking study?

2 R. Yes. There's only been three done. So yes. This is
3 my first Econometric Cost Benchmarking...

4 Q. [75] For the same context than for the
5 productivity...

6 R. Right.

7 Q. [76] Okay.

8 R. Okay.

9 Q. [77] I would like to address to begin the labour
10 price question.

11 R. Sure.

12 Q. [78] I understand from your report that after
13 having determined a mean wage for two thousand
14 nineteen (2019) we deflate this wage for each year
15 of your sample using the Employment Cost Index. So
16 what you call the "ECI".

17 You confirm in your response to PEG's
18 commentary that this Employment Cost Index is only
19 available at the national level.

20 So am I correct to say that the deflating
21 operation made by Brattle for the labor cost of
22 each year of the sample didn't take into account
23 the regional differences in labor market
24 conditions.

25 R. Yes. We started off with data that did have

1 differences across states and then when we refine
2 that in our final calculation that precision was
3 lost.

4 Q. **[79]** Okay. You mention in your Response to PEG
5 commentary regarding this issue and I can refer to
6 your commentary at Exhibit B-0094 at page 27.

7 R. 27. Yes.

8 Q. **[80]** You said:

9 As a sensitivity, Brattle used the
10 same regionalized cost indexes as
11 described by PEG in their Direct
12 Report and found virtually no impact
13 on our TFP or cost benchmarking
14 conclusions.

15 Can you tell us exactly where in the PEG's working
16 papers are the regionalized indexes as described by
17 PEG in their Direct Report. So I quote your
18 mention. So where are the working papers that you
19 used to perform the sensitivity test you are
20 referring to?

21 R. What we did there is look at PEG's general
22 methodology for how they deflate labor price and
23 use a similar methodology using our own data and
24 apply that to our own data.

25 Q. **[81]** Can you, it might take the form of an

1 undertaking, but can you communicate to us
2 precisely which exhibit in the file, at which pages
3 you are referring when you say that you used the
4 same approach or the same information than PEG to
5 do your sensitivity analyzing?

6 R. Sure and let me just read the last sentence
7 carefully. When we say "Brattle used the same
8 regionalized cost indexes...

9 Q. **[82]** Exactly.

10 R. ... as described by PEG...

11 Q. **[83]** Yes.

12 R. ... in their Direct Report".

13 Q. **[84]** So can you just mention... Tell us which costs
14 indexes at which reference can we find the regional
15 cost indexes that you are referring to.

16 R. You do want me to answer that right now?

17 Q. **[85]** If you can and if it takes to long I offer you
18 to take an undertaking and come back today if
19 possible.

20 R. Yes. I'll take an undertaking on that.

21 Q. **[86]** No problem.

22 Me YVES FRÉCHETTE :

23 So if you don't mind, Mister Lanoix, maybe we
24 can... I'm sorry I'm just trying to open my camera.
25 Do you mind if we take your question into account

1 and come back after lunch because maybe we would
2 have it right away.

3 Me SYLVAIN LANOIX :

4 Non. Je n'ai pas de problèmes avec cette approche.
5 Je ne veux simplement pas que ça tombe entre deux
6 chaises, mais je n'ai pas de problèmes.

7 R. Of course we won't forget it.

8 Q. [87] Yes. So if there is any problem we could take
9 an undertaking after lunch but I accept your
10 proposal to come back to us with an answer. Maybe
11 after lunch Doctor Ros you could bring us... Come
12 back to us with the answer. That's perfect.

13 R. Yes. We can...

14 Me YVES FRÉCHETTE :

15 You understand, Mister Ros that you will have the
16 chance to give the reference to mister Lanoix. I
17 think you need a little more time?

18 R. Yes I might need a little time to...

19 Me YVES FRÉCHETTE :

20 Just a little time to stop his cross-examination.

21 R. Yes. I might need a little time to look into this
22 specific... Thank you.

23 Me YVES FRÉCHETTE :

24 Thank you, Mister Lanoix.

25

1 Me SYLVAIN LANOIX :

2 Q. **[88]** Now I would like to talk about the outcome
3 variable. I understand that there are two types of
4 transmission peaks variable available on FERC Form
5 1.

6 First there is the Transmission System Peak
7 Load from page 400 of the Form 1 and secondly there
8 is the Monthly Peaks that we can find on page 401
9 b) of the Form 1 of the FERC.

10 Which one of the two is the most comparable
11 to the transmission peak that are reported by HQT?

12 R. I think there are both comparable. Perhaps the
13 transmission one is a little bit more comparable
14 than HQT's. It's because of the transmission. So
15 that would be my answer.

16 Q. **[89]** So the Transmission System Peak Load from page
17 400 would be the best comparable to the HQT data?

18 R. Yes. It's more comparable.

19 Q. **[90]** Yes.

20 R. That's correct.

21 Q. **[91]** So why did you not use this type of
22 transmission peak in your benchmarking work?

23 R. Well our benchmarking work... A couple of reasons.
24 Our benchmarking work begins in two thousand one
25 (2001), the transmission data are not available

1 until I think two thousand four - two thousand five
2 (2004-2005). The other issue, I know PEG in its
3 proceeding in Ontario did raise some concerns about
4 the transmission data as well, and so we kind of
5 were looking at that, and I think we did in our
6 reply report we did a sensitivity test. Let me just
7 make sure I have the correct... if you could just
8 give me just one second. Yes. We did a sensitivity
9 in our reply where we use the transmission system
10 peak for our cost benchmarking analysis and we
11 nearly found no difference.

12 Q. **[92]** But apart of your sensitivity cost, which is
13 an afterward...

14 R. Yes.

15 Q. **[93]** ... examination, don't you consider that the
16 reliability of the transmission system peak load
17 since two thousand four (2004) was good enough to
18 perform your benchmarking work and that a longer
19 sample period was far less important than for the
20 productivity research?

21 R. No, I wouldn't agree with this.

22 Q. **[94]** PEG note at page 18 of its commentary that in
23 your sample, the transmission system peak load is
24 about 11% higher on average than the monthly
25 peak... the monthly peak for the (two thousand four

1 - two thousand nineteen (2004-2019) period, and
2 about 5 to 8% higher on average for recent period.

3 Do you agree that using monthly peak in
4 benchmarking tends to advantage HQT?

5 R. Well, using monthly peak is consistent with using a
6 physical measure of output. Ratcheted peak is not a
7 physical measure of output in a given year, the
8 actual peak provided could be less than the
9 ratcheted peak demand, so with the physical peak.
10 In terms of favouring my client, you know, there
11 are many decisions made in these productivity
12 studies and I don't begin my analysis picking
13 issues only if they benefit my client or not.

14 Q. [95] But don't you agree that the transmission peak
15 load is a more comparable data for HQT? I guess you
16 agree as well that the... the transmission system
17 peak... the transmission peak load is generally
18 higher than monthly peak, so...

19 R. I don't know that, I don't.

20 Q. [96] You don't know that? You don't... Can you
21 explain us the difference between the transmission
22 system peak load and the monthly peak, the two
23 transmission?

24 R. Well, the monthly... Yes, the monthly peak is kind
25 of what you measure at, you know, generation park.

1 It could be down to the... could be down to the
2 customer level as well and then the transmission
3 was measured at the transmission system. It depends
4 where you measure it, the peak, there could be
5 losses involves in it as well.

6 Q. **[97]** So, that's for... that's your definition of
7 transmission system peak load?

8 R. Transmission system peak load is the peak on the
9 transmission system, they have to measure there on
10 the transmission system.

11 Q. **[98]** And what's the difference with the monthly
12 peak according to you?

13 R. Well, the monthly peak could either... is either
14 measured at the generation or at the customer
15 level, one or the other.

16 Q. **[99]** Would you agree that the difference between a
17 monthly peak and a transmission system peak load is
18 that the second one is more... is more firm because
19 it removes all the optional charge or load that
20 could... can be cancelled or remove?

21 R. I don't know. Can you repeat that? I don't know
22 what you mean by cancel or remove.

23 Q. **[100]** Yes. Sometime, the load can come from the
24 fact that there is availability on the transmission
25 system and some of this energy that is transported,

1 portion of this energy can be base on firm contract
2 or engagement to transmit this energy or this
3 electricity, and other part of the load can be just
4 optional, cancellable, charge that can be removed
5 in case of need for more firm engagement. So, do
6 you... do you know if peak load exclude those, I
7 would call it optional charges or load?

8 R. I'm not sure about that.

9 Q. **[101]** So, PEG also note at page 18 of its
10 commentary that you didn't ratchet the peak demand
11 in your productivity work. Why not using a 10-year
12 rolling average of annual peak demand for your
13 productivity study like does mister Fenrick in his
14 productivity study as you mentioned in your
15 response to PEG's commentary, Exhibit 94, page 28?

16 R. Well, we were using a physical measure, we think
17 the peak demand is an appropriate physical measure
18 of output in a particular year. So, that's why
19 we're doing it.

20 Q. **[102]** Did you consider using a 10-year rolling
21 average of annual peak demand?

22 R. Did I consider it?

23 Q. **[103]** Yes.

24 R. I don't think I... No, I don't think so.

1 Me SYLVAIN LANOIX :

2 Monsieur le greffier, pourriez-vous exhiber le
3 document B-0012, en haut de la trente-troisième
4 page du document PDF?

5 Q. **[104]** I asked the clerk to exhibit Exhibit B-0012
6 at the thirty... at the 33rd page.

7 R. What document is that?

8 Q. **[105]** B-0012... it's your initial report.

9 R. Oh, initial report.

10 Q. **[106]** It's page 24 of your initial report, page 33
11 of the PDF document. So...

12 R. I think I got just a different page.

13 Q. **[107]** Yes. It's page 24 of your own document.

14 R. Oh, okay. Page 24.

15 Q. **[108]** Yes.

16 R. Okay.

17 Me SYLVAIN LANOIX :

18 Et Monsieur le greffier, il faut aller à la page 33
19 du document PDF qui correspond à ça. Parfait.

20 Alors, c'est le premier paragraphe qui m'intéresse.

21 Q. **[109]** That's the first paragraph who...

22 R. Okay. I've got it.

23 Q. **[110]** ... concern me, okay. So, as one of the
24 factors that can help the Régie to determine a
25 stretch factor, you identify at this paragraph, and

1 I quote :

2 The sample of companies used for the
3 TFP study is also relevant. If the
4 sample consists of companies that are
5 operating under a PBR plan, then the
6 measured productivity growth already
7 contains some of the effects of the
8 stretch factor. In contrast, a TFP
9 study sample that includes only
10 companies under rate-of-return
11 regulation would not capture this
12 effect. Our sample of U.S.
13 transmission companies are under
14 cost-of-service regulation by the
15 FERC. Many of those companies are
16 under 'formula rates' meaning that the
17 companies' rates are frequently
18 aligned with underlying costs and
19 there is less ability to take
20 advantage of regulatory lag. At the
21 same time, the FERC also provides
22 incentives to transmission companies,
23 most in the form of premiums on return
24 on equity for meeting certain public
25 policy objectives.

1 What was the effect of formula rates on the cost
2 containment and incentive of U.S. transmission or
3 distribution companies?

4 R. I'm sorry, I didn't catch the whole question, could
5 you repeat the question again?

6 Q. **[111]** No problem. What was the effect of formula
7 rates on the cost containment incentives of U.S.
8 transmission or distribution companies?

9 R. That is a broad question. I have to compare it with
10 another regulatory regime. A formula rates usually
11 have an annual cost of service proceeding which
12 provides relatively weak cost containment
13 incentive.

14 Q. **[112]** So, do you agree that operating under rate
15 making provision slows the productivity growth?

16 R. Well, again, though what are the sources of
17 productivity growth, there's many sources of
18 productivity growth. So, it is certainly the case
19 that formula rates result in, you know, weaker
20 incentives for cost containment, that's certainly
21 true, and if holding everything else constant if I
22 compare a regime with a formula rate to one that
23 has a... a rate that takes place every four of five
24 years, those are different incentive feature there.

25 Q. **[113]** So, is it correct to affirm that companies

1 that are... that are under formula rates have less
2 incentives to improve their productivity and
3 therefore that's a reason to... that's a cause of
4 slowing their productivity growth?

5 R. The only reason I'm just hesitating, the answer is
6 I certainly agree on the incentive for cost
7 containment. Though I would agree with that one.

8 LE PRÉSIDENT :

9 Monsieur Lanoix?

10 Me SYLVAIN LANOIX :

11 Oui.

12 LE PRÉSIDENT :

13 Simplement pour vous dire que nous sommes parvenus
14 à une heure de contre-interrogatoire. Est-ce que
15 vous en avez encore pour longtemps?

16 Me SYLVAIN LANOIX :

17 C'était ma dernière ligne de question, j'en ai pour
18 quelques minutes.

19 LE PRÉSIDENT :

20 Merci.

21 Me SYLVAIN LANOIX :

22 Q. **[114]** So, if you agree that... that the... if you
23 agree that it's... it doesn't... it's not... a
24 formula rates regime doesn't provide a very strong
25 cost containment incentive, do you draw a

1 conclusion from that about the impact of this lack
2 of incentive on cost containment on the cost of
3 service?

4 R. Well, the formula rates is a type of cost of
5 service. So, it's a general conclusion that I
6 actually said in the beginning of the presentation
7 that cost of service results are weaker, you know,
8 cost incentive, and there is the understanding that
9 in moving from that system to an MRI plan, there
10 is, you know, the hope is that productivity and
11 efficiency increases. So, yes.

12 Q. **[115]** So, I have no more question. Thank you very
13 much for... for your patience and for your answers.

14 R. Well, thank you... thank you.

15 Me SYLVAIN LANOIX :

16 Alors, sous réserve... sous réserve de la question
17 en suspens, là, c'est terminé.

18 LE PRÉSIDENT :

19 Oui, il n'y a pas de problème.

20 Me YVES FRÉCHETTE :

21 It's noted, Maître Lanoix, under reserve with your
22 question that you asked regarding the original rate
23 labour, if I remember correctly. So...

24 Me SYLVAIN LANOIX :

25 Original... yes.

1 Me YVES FRÉCHETTE :

2 On labour is that right?

3 Me SYLVAIN LANOIX :

4 Yes.

5 Me YVES FRÉCHETTE :

6 Q. **[116]** Do you remember it?

7 R. Yes. I know which one.

8 Me YVES FRÉCHETTE :

9 Well, at lunch I think we'll have the time to... to
10 take a look at it. So, it's eleven thirty (11:30),
11 Mister President, we're still ready to go on.

12 LE PRÉSIDENT :

13 On continue. Maître Cadrin, vous aviez mentionné
14 trente (30) minutes?

15 Me STEVE CADRIN :

16 Effectivement, Monsieur le Président, Steve Cadrin
17 de l'AHQ-ARQ, trente (30) minutes est toujours
18 notre meilleur estimé à date. Alors à la rigueur,
19 si jamais le lunch se fait trop appeler, vous nous
20 ferez signe et on pourra interrompre les questions
21 à un moment précis pour permettre la pause lunch et
22 retourner après le lunch au besoin.

23 LE PRÉSIDENT :

24 Parfait, alors procédez.

25

1 Me STEVE CADRIN :

2 Absolument.

3 CONTRE-INTERROGÉS PAR Me STEVE CADRIN :

4 Q. **[117]** Hello, Doctor Ros. Most of my question will
5 be to you. So we can proceed first with your
6 presentation of this morning.

7 R. Good morning. Thank you.

8 Q. **[118]** Yes good morning. I'm sorry. I will go on
9 page 13, if you could go there with me. Okay.

10 R. Yes, okay.

11 Q. **[119]** And we've talk about those FERC transmission
12 O&M accounts excluded in the X-Factor productivity
13 study, we talked about the three main branches of
14 the... the three main sections that are provided
15 for you. You talked about account 565 already
16 saying that the 34.9% of the total transmission O&M
17 expenses, this 34.9%is what it is, and what it
18 represent and for HQT it represent 3%, am I
19 correct?

20 R. Yes, that's correct, that's my understanding.

21 Q. **[120]** Would you be able to do the same thing, if I
22 would ask the same question, transferring to HQT
23 what would be the percentage for accounts 561.1 to
24 561.8 and the same thing for account 566 or would
25 you prefer to have an undertaking if you don't have

1 the answer readily available?

2 R. So let me give an answer and then see if anybody
3 else on the panel also wants to add in. My
4 understanding is that that this type of questions
5 that, I think, PEG asked of HQT, because, you know,
6 they remove these accounts, so what they wanted to
7 do was identify these accounts in HQT's system, so
8 they can easily kind of remove them. My
9 understanding is that it's a very complicated
10 thing, because some of these expenses, for example,
11 in miscellaneous are in other parts of the HQT
12 expenses accounts, and some of these FERC names for
13 load dispatching, scheduling, reliability they're
14 mixed in there with the HQT data. In my
15 understanding it was not possible to distinguish
16 those, but I'll stop and I think that might be also
17 a question for somebody else on the panel.

18 M. MARCO VÉZINA :

19 R. Oui. Je voudrais peut-être juste ajouter quelque
20 chose là-dessus. On a répondu à la question 4.1
21 dans le document Réponses du Transporteur à
22 l'AQCIE-CIFQ et PEG, je n'ai pas la traduction...
23 HQT-16, Document 1.

24 Me STEVE CADRIN :

25 Excusez-moi! Il s'agirait du document B-0064?

1 Faites juste donner la référence du document en
2 mode HQT, nous allons trouver la réponse. Si vous
3 dites que vous aviez répondu dans un document, on
4 va aller voir.

5 M. MARCO VÉZINA :

6 R. Question 4.1.

7 Me YVES FRÉCHETTE :

8 Messieurs, donnez-vous chacun une petite pause
9 parce qu'on vous perd. Ça ne peut pas être aussi
10 vivant qu'à l'habitude. On a raté un petit bout de
11 maître Cadrin, je crois que vous avez manqué la
12 référence.

13 Me STEVE CADRIN :

14 Je vais parler. Si vous pouvez donner la référence
15 en mode HQT, là, dans la terminologie HQT. On le
16 voit à l'écran, je pense.

17 LE PRÉSIDENT :

18 Est-ce que c'est la bonne pièce? C'est ça que vous
19 voulez?

20 Me STEVE CADRIN :

21 Moi, j'ai référé à cette pièce-là, mais je ne suis
22 pas certain que monsieur Vézina réfère à cette
23 pièce-là. Je vais le laisser compléter.

24 Me YVES FRÉCHETTE :

25 Monsieur Vézina, est-ce que... Il cherche.

1 M. MARCO VÉZINA :

2 R. Je vais donner la référence au greffier. C'est la
3 demande R-4048-2018 Phase 2.

4 Me YVES FRÉCHETTE :

5 Si vous permettez, je crois que ce sont les
6 réponses qui ont été faites dans le cadre de la
7 vérification de la conformité des deux études.
8 Donc, dans le dossier précédent, Maître Cadrin, si
9 vous vous souvenez, c'était la Phase 2 qui a
10 culminé avec la décision de la Régie qui disait que
11 c'était conforme. Et c'est dans le cadre de ces
12 réponses-là qu'on a répondu à votre question.

13 Me STEVE CADRIN :

14 Écoutez, je propose que... On va aller voir ce à
15 quoi vous réferez. On va tenter de trouver le bon
16 document et s'assurer que la réponse s'y trouve. Au
17 besoin, on pourra revenir. Je ne veux pas perdre
18 plus de temps à chercher les documents en direct.
19 Évidemment, ce n'est pas toujours agréable de
20 trouver ça rapidement comme ça.

21 Me YVES FRÉCHETTE :

22 Si vous permettez, on va se parler tantôt pour
23 l'autre sujet, on pourra regarder en même temps
24 pour celui-ci.

25

1 Me STEVE CADRIN :

2 Oui, absolument. C'est une bonne idée. J'accepte
3 votre proposition.

4 Q. **[121]** So moving on from this question to another
5 question which is going to be at page 24 of your
6 presentation again Doctor Ros.

7 R. Okay. 24?

8 Q. **[122]** Yes.

9 R. Okay. I see it. Yes.

10 Q. **[123]** In that slide and some other slides also
11 about challenges to HQT, and you say that many
12 facilities are a distance from good roads. That was
13 your statement and you said it I think a few slides
14 back.

15 As any analysis been done by you to prove
16 this statement that you are stating now in this
17 slide. Slide 24?

18 R. Yes. So this slide, this information, we actually
19 took from PEG's report. This is the exact language
20 that they had in PEG's report. So we use that and
21 that's something that they identified and I checked
22 with people on HQT who thought these were accurate
23 statements but I did not personally do any study to
24 look at the distance from facility to roads.

25 Q. **[124]** That was my question. Thank you. We'll move

1 to another document. I will refer you to document
2 B-0012.

3 R. Can you tell me what document that is because I
4 think they don't have the number in... Is it my
5 reply report? In my direct report?

6 Q. **[125]** I'm sorry your direct report.

7 R. Okay. Yes I have it.

8 Q. **[126]** It's a transcription. It's B-0012. We go to
9 page I-2 and the PDF version is page 11.

10 R. Okay.

11 Q. **[127]** Sorry. Just one second.

12 R. Sure.

13 Q. **[128]** I'm sorry my reference was wrong. Again we're
14 still on B-0012. It's Appendix "I" and the page
15 is... The PDF pages are 87 to 93 but I'm starting
16 on the top of the page of the PDF which is 90.

17 R. Do you know what the page number is down at the
18 bottom or...

19 Q. **[129]** We'll get there with...

20 R. Sorry.

21 Q. **[130]** It's Appendix "79" third page which is 9 for
22 the PDF. Now for the PDF c'est 90, Monsieur le
23 Greffier.

24 Me YVES FRÉCHETTE :

25 Appendix "81".

1 Me STEVE CADRIN :

2 We'll get there.

3 Me YVES FRÉCHETTE :

4 Is it the good page Mister Cadrin the one starting
5 with "The Jersey Central..."...

6 Me STEVE CADRIN :

7 Oui. We're talking about...

8 Me YVES FRÉCHETTE :

9 81.

10 R. Yes. I'm there. I see it. Yes.

11 Me STEVE CADRIN :

12 We're all there I think. Sorry for the
13 misunderstanding. So Jersey Power and Light
14 Company. And it says and on the right side:

15 Reports zero in labor costs but has a
16 non-zero O&M costs from 1999 to 2002.

17 A similar mention is made for Pennsylvania Electric
18 Company and Wisconsin Electric Power Company. For
19 this reason these three companies were not retained
20 by Brattle in the sample of the seventy-four (74)
21 companies. Is that right?

22 R. So which? So I see Jersey Central Power. What was
23 the other company that you're using?

24 Q. **[131]** It's the Pennsylvania Electric Company and
25 Wisconsin Electric Power Company. Wisconsin

1 Electric.

2 R. Yes. That is correct. Yes.

3 Q. **[132]** Thank you very much. Where there other
4 companies exhibiting zero in labor costs but a non-
5 zero O&M cost in your database that were retained
6 in the sample of the seventy-four (74) companies,
7 other than those three companies we're talking
8 about now, that you put aside because of that?

9 R. I don't think there were. I can't not rule out the
10 possibility that maybe one got in, we were now
11 trying to apply consistent methodology and so you
12 know maybe it wasn't perfect but...

13 Q. **[133]** Yes.

14 R. ... I can't rule out the fact that maybe there was
15 one that got by.

16 Q. **[134]** But from what I understand if that was so it
17 should be taken out the same as the other three
18 companies we just talked about just for the sake of
19 consistency.

20 R. Yes. There is a fair amount of, you know, some
21 judgment in case by case in these but that would be
22 fair.

23 Q. **[135]** Okay. We'll move down now to H-88.

24 R. Okay.

25 Q. **[136]** Of the PDF. We'll show that on the screen for

1 you. Now we're talking about Consolidated Edison
2 Company of New York which we see, thank you Mister
3 le Greffier.

4 R. Yes.

5 Q. **[137]** Okay. So you see on the right hand side:

6 Large jump in O&M costs in 2004...

7 R. Two thousand two (2002). Oh! this is Commonwealth
8 or Consolidated Energy.

9 Q. **[138]** I'm sorry. Just one second. I just want to
10 make sure... Read it from the screen? I'm sorry.

11 There was an error in my question. So:

12 Large jump in labor costs in 2002...

13 R. Yes.

14 Q. **[139]** ... however, we retained this company
15 since there is no clear reason to
16 adjust the Labor.

17 R. Yes.

18 Q. **[140]** Just give me one second. I'm sorry. I think
19 we got wrong line.

20 R. Okay. Sure.

21 Q. **[141]** It won't be long. Since we have the wrong
22 citation we'll move on to another citation. I'm
23 sorry. We'll discuss it later on you know to... So
24 page 92, I'm sorry, on the PDF. So four pages down
25 for you. We're talking about Southern California

1 Edison which also is number 2 in size in your
2 sample if I'm not mistaken. Is that right?

3 R. That's sounds about right. It's a very large
4 company. Yes.

5 Q. **[142]** You mention a spike in nineteen ninety-eight
6 (1998) for O&M expenses. From you data we used the
7 data and so this spike goes from seventy-two
8 million (\$72MM) from nineteen ninety-seven (1997)
9 to a hundred and ninety-two point four million
10 (\$192,4MM) which is for a large spike at hundred
11 sixty-seven percent (167%).

12 Also you don't mention another major spike
13 of a hundred percent (100%) in two thousand
14 nineteen (2019). How do you explain such large
15 spikes in your data?

16 R. I mean it could be one time significant
17 expenditures that these companies faced. I'm not
18 sure it could be wild fire issues. It could be very
19 specific in these factors. So it's not unreasonable
20 to have those kind of expenses.

21 Q. **[143]** And then why did you retain this company's
22 sample with those two spikes I'm talking about
23 other hundred sixty-seven percent (167%) and then a
24 hundred percent (100%) in two thousand nineteen
25 (2019) again.

1 R. And your question: why did I retain it?

2 Q. **[144]** Yes. Without any adjustments or...

3 R. Yes. So I begin with the proposition that these
4 FERC accounts are accurate. I mean they are... The
5 numbers in the FERC account that carries some
6 weight. They're used in formula rates. They're used
7 to set just and reasonable rates. They're used in
8 litigation. They're used in a lot of things and I'm
9 very hesitant to say this is an error. It's got to
10 be conclusive evidence for me to do that and the
11 fact that you have a one hundred percent (100%)
12 increase in one year on O&M expense it's not
13 evidence that it's wrong and this is a very large
14 company. Like you said this is number 2. HQT is
15 larger than any of our companies in the sample. So
16 and that's kind of the reason.

17 Q. **[145]** So see if I go back to the answer you gave
18 before you don't know exactly why the spikes are
19 there but you're saying there's no error. On this
20 we agree. Maybe there's no error but you don't do
21 anything with those spikes and also it's a second
22 company and as a large company... It's the
23 largest... Second largest company, I'm sorry, in
24 your evidence, I'm sorry.

25 R. Yes. No I'm not gonna do anything with those

1 spikes. What's the criteria that I have?

2 Q. **[146]** You said wild fires for instance. I'll take
3 that.

4 R. Yes. So let's say there's a wild fire why would I
5 want to adjust for a wild fire? It's a natural
6 current event and if you got to provide
7 transmission services you're gonna have to deal
8 with specific events like that every so often. I'm
9 not gonna smooth out the data to create an
10 artificial productivity study.

11 Q. **[147]** Okay. And in that case for that company you
12 don't know what are the reasons behind those
13 spikes? You didn't investigate as to what they
14 were?

15 R. I did not. No.

16 Q. **[148]** Okay. Thank you. We'll move on to page 92 or
17 move back to page 90, 91 I'm sorry. I'm gonna go
18 for PG&E or Pacific Gas and Electric Company which
19 is number 1 in your slide sample.

20 R. It is. Yes.

21 Q. **[149]** Okay. So if we look into what is written
22 there:

23 Transmission line length data are not
24 available for 1994. We imputed the
25 1994 value using the 1995 figure and

1 the transmission lines added during
2 1995.

3 So there was no spikes or jump that are mentioned
4 here. So however in your database we notice a major
5 spike of two hundred and sixty-nine percent (269%)
6 in materials and service costs in two thousand
7 nineteen (2019) going from two hundred and thirty
8 point eight million to eight hundred fifty-one
9 (\$230,8MM - 851,1MM) and in only one year.

10 R. Yes.

11 Q. **[150]** How do you explain such a large spike in that
12 case in that company.

13 R. Yes. I think that's a wild fire.

14 Q. **[151]** Alright. Is such a jump representative of
15 what HQT could face in a single year?

16 R. It's representative of what the industry
17 transmission productivity is in the same way that
18 hurricanes in Florida affect O&M costs, tornados in
19 the Midwest, ice storms in the North East. Yes.
20 Those are all environmental factors that have to be
21 taken into account into a productivity study.

22 Q. **[152]** So you do nothing with those pikes. You don't
23 adjust, you don't smooth out to use your
24 expression?

25 R. I do not. No.

1 Q. **[153]** For that specific year where there was let's
2 say a hurricane, a wild fire...

3 R. No.

4 Q. **[154]** ... or whatever natural cause it is?

5 R. I'm sorry. No. In fact those wild fires have
6 continued.

7 Q. **[155]** Okay. We'll move on to answers from the
8 Régie's first line of questions which is B-0049,
9 page 35.

10 R. Yes. I just need some time to get to it.

11 Q. **[156]** You tell me when you are ready.

12 LE STÉNOGRAPHE :

13 Quelle page, Maître Cadrin? Excusez.

14 Me STEVE CADRIN :

15 35. So it's B-0049 for the exhibit and page 35.

16 R. And these are the questions the Régie asked me.

17 Me STEVE CADRIN :

18 Q. **[157]** Yes. The first line of questions of the
19 Régie. DDR...

20 R. Okay. I have the document in front of me.

21 Q. **[158]** Okay. You should see a table which is this:
22 "Figure 1: Top 15 Transmission utilities in the
23 Brattle Sample".

24 R. Yes. I see that.

25 Q. **[159]** So the table view shows:

1 the top fifteen (15) companies in our
2 sample where the size rank is the
3 weighted average of our output
4 measures in the TFP study peak demand
5 and megawatts in kilometres of
6 transmission lines.

7 In the table we provide the two
8 thousand nineteen (2019) peak demand
9 for the top fifteen (15) companies.

10 Then you see the table of which I'm gonna to read.

11 Which of these fifteen (15) companies
12 consist of transmission and distribution only with
13 no generation?

14 R. Which of these have no generation, transmission and
15 distribution?

16 Q. **[160]** Only without any generation. Which of these?

17 R. Yes. So I don't think Commonwealth Edison has
18 generation. Maybe Niagara Mohawk Power. PPL may not
19 have generation. I think these would probably be
20 the one I would exclude.

21 Q. **[161]** Thank you very much. We'll move on to another
22 document now which is the answers given to the
23 questions of RTIEÉ which is document B-0061.

24 R. I change... Okay.

25 Q. **[162]** RTIEÉ.

1 Me YVES FRÉCHETTE :

2 Are you talking about HQT-10 DOC 6.1?

3 Me STEVE CADRIN :

4 Q. **[163]** Yes. It's B-0061 page 12.

5 R. Okay. Yes. I see it.

6 Q. **[164]** Okay. You see an another table.

7 R. Yes.

8 Q. **[165]** Table E. So if you go down to Central Main
9 Power Company.

10 R. Yes.

11 Q. **[166]** I just want to make sure we see it on the
12 screen. Yes. We see it now. I see the bottom... The
13 middle. Thank you, Mister Greffier, you can leave
14 it like that. It's perfect.

15 Okay. Which is a the two thousand nineteen
16 (2019) system peak of one thousand six hundred and
17 sixteen (1616 MW) and total annual energy of only
18 two hundred thirty two thousand two forty-five
19 (232,245 MW/h).

20 We calculate our usage factor of only one
21 point six percent (1.6%). Does that make sense to
22 you?

23 R. Yes. There might be a digit here missing or
24 something on this table.

25 Q. **[167]** Okay. Do you want to verify and maybe take

1 another undertaking to verify that we do have the
2 right numbers for Central Main Power Company just
3 to be fair and let you verify.

4 You can provide us as an undertaking any
5 answer. If it's "no" it's "no". If it's something
6 that we need to address then we'll address it maybe
7 after lunch or later?

8 R. Yes. That's fine. We can definitely do that.

9 LE PRÉSIDENT :

10 Est-ce que vous voulez un engagement formel avec
11 numéro?

12 Me STEVE CADRIN :

13 Q. **[168]** Doctor Ros would you need an undertaking or
14 would you be able to come back after lunch with the
15 answer?

16 R. I think I'll be able to come back after lunch. I'm
17 not sure what is the specific... What does
18 "undertaking" means exactly.

19 Q. **[169]** "Undertaking". We'll give you more days or
20 hours to do it. So if you can provide us with a
21 quick answer or a quicker answer that would be the
22 way to go and it's less...

23 R. Yes. We will look at this during lunch and get back
24 to you.

25 Q. **[170]** Okay. And if for whatever reason it takes

1 more time then you know you can tell us and we'll
2 move on from there and we'll take an undertaking to
3 give you more time if you need it.

4 R. Okay. Perfect.

5 Q. **[171]** Fair? Okay. We can move to another question
6 now. We're going on the other end for Ohio Valley
7 Electric Corporation which is a two thousand
8 nineteen (2019) System Peak of only... Ohio, I'll
9 give you a highlight that's all the way at the
10 bottom. A highlight again for us. Thank you very
11 much.

12 Okay. So Ohio Valley Electric Corporation
13 which is a two thousand nineteen (2019) System Peak
14 of only one thousand and zero twenty-one (1,021 MW)
15 and total annual energy of eleven... And you see
16 the rest of the numbers. We calculate a usage
17 factor of over a hundred and twenty-seven percent
18 (127%).

19 Again that same question. Does that make
20 sense or do we have an error and do you want to
21 verify over lunch?

22 R. Yes. I mean we can verify over lunch to confirm the
23 number.

24 Q. **[172]** That is my suggestion. Just to make sure...

25 R. Yes.

1 Q. **[173]** ... we got all the right data together and
2 give you the proper time to verify. You'll tell
3 after lunch.

4 R. I do want to point out though the total energy.
5 It's not used in our productivity study. We don't
6 use that at all in the productivity study.

7 Q. **[174]** But you provide the numbers and we want to
8 make sure that we have the right numbers. The right
9 numbers.

10 R. Yes. Absolutely.

11 Q. **[175]** Okay. Thank you so much. So we can move on
12 now to other answers that were given to the first
13 questions that were asked by AQCIE-CIFQ which is
14 B-0064. We've talked about this document just
15 before with Maître Lanoix and we can move on to
16 pages 19 and 20.

17 R. So I'm sorry. Can you repeat again what document
18 are you referring to now?

19 Q. **[176]** The answers given to AQCIE-CIFQ about our
20 questions which is B-0064 and then translate to
21 HQT-10 DOC 3.1.1. and that will be question or
22 answer 6.7. Mister Greffier? Thank you very much.
23 Is it there? You just did.

24 R. Okay.

25 Q. **[177]** Or you can get it on the screen or if you...

1 R. Yes. I'll look on the screen.

2 Q. **[178]** Okay. So I won't read the whole answer. I'll
3 start in the... So it's line 13:

4 For HQT, the account labelled
5 "transmission purchases" represents
6 three (3%) of total transmission O&M
7 expenses and is captured in the
8 "Other" expenses category and not
9 directly under transmission O&M. Our
10 benchmarking study results and
11 conclusions are robust to the
12 inclusion or exclusion of HQT's
13 transmission purchases.

14 From HQT's standpoint what qualifies as a
15 transmission purchases. What is it? From whom or
16 what kind of service are we talking about?

17 R. Yes. For that I might need to defer to another
18 member on the panel who could have that specific
19 information.

20 Q. **[179]** You yourself, just before we go to another
21 member of the panel, you yourself did not verify
22 that, investigate that or take that into account?

23 R. I don't know who they are purchasing transmission
24 services from. I know that they have some purchase
25 power agreements but I couldn't tell you the exact

1 companies that they are purchasing transmission
2 from

3 Q. **[180]** Okay. So they're purchasing from other
4 companies you say. I guess you're taking that into
5 account?

6 R. Excuse me?

7 Q. **[181]** Have you taken that into account the fact
8 that they are purchasing from other companies? You
9 took that into account before you answered those
10 questions in your report? I'm Sorry?

11 R. Yes. When I write the account purchases by others
12 it seemed to me that that was account... The same
13 as account 565 but I didn't specifically say who
14 are you buying the energy transmission services
15 from. What are the contracts or anything like that.

16 Q. **[182]** Okay. So we can go now to the answer maybe
17 from HQT if any other answer can be provided to us.

18 M. STÉPHANE VERRET :

19 R. Certainement. Bonjour, Maître Cadrin.

20 Me STEVE CADRIN :

21 Q. **[183]** Bonjour.

22 R. Lorsque l'information est présentée en coûts de
23 service habituellement il y avait une catégorie
24 d'achat de services de transport...

25 Q. **[184]** Je vous arrête juste un instant, parce que la

1 communication est très mauvaise. Maybe Doctor Ros
2 if you could turn off your microphone while mister
3 Verret answers, it will help us a bit.

4 M. STÉPHANE VERRET :

5 R. Est-ce que c'est mieux comme ça?

6 Q. **[185]** Un peu mieux oui effectivement. Il y a moins
7 de bruits de fond. Alors, vous pouvez y aller avec
8 la réponse. On va mieux vous comprendre
9 Monsieur Verret.

10 R. O.K. Je ne sais pas s'il y a un enjeu avec le "Web
11 switcher". La semaine dernière tout allait bien. On
12 avait les mêmes micros. Aujourd'hui c'est bien
13 compliqué, mais en tout cas, je vais aller
14 tranquillement.

15 Donc, lorsqu'on présentait les revenus
16 requis en coûts de service, il y avait une
17 catégorie qui était Achat de services de transport,
18 des transporteurs auxiliaires, et puis dans cette
19 catégorie-là on retrouvait des achats auprès de
20 RTA, Énergie La Lièvre, la SCHN, puis Cedar Rapid
21 Transmission (CRT).

22 Donc, c'était les quatre... De mémoire, les
23 quatre transporteurs auxiliaires auxquels on
24 achetait les services de transport et comme vous le
25 savez maintenant avec la formule qui s'applique au

1 niveau des charges, bien ces achats-là de services
2 de transport figurent dans les charges qui sont...
3 Qui évoluent selon la formule.

4 Q. [186] Ça complète la réponse?

5 R. Pour HQT.

6 Q. [187] Merci. Ça complète les questions sous
7 réserves peut-être des réponses qui seront fournies
8 tout à l'heure.

9 Maybe I should switch to English? We'll be
10 waiting on the answers from doctor Ros. Maybe we
11 can continue if we have maybe some questions
12 depending on the answers that may be given after
13 lunch but we'll be short that's for sure if we do
14 have any questions. We'll see after lunch if it
15 doesn't cause a problem.

16 Me YVES FRÉCHETTE :

17 Well, I'm hearing that you were finish because you
18 were leaving us with two aspects of... Ohio and
19 Central Main Power and there's the other issue that
20 we have to discuss over lunch Mister Cadrin. I
21 think the first undertaking.

22 Me STEVE CADRIN :

23 Yes.

24 Me YVES FRÉCHETTE :

25 Okay. So is it the right time for lunch, Mister

1 President?

2 LE PRÉSIDENT :

3 Bon. Je vais vérifier auprès de vous et avec mes
4 collègues aussi. On a pris un petit peu de retard
5 par rapport à l'échéancier prévu. Je veux juste
6 voir si on peut le cas échéant prolonger. Il faut
7 vérifier aussi avec monsieur Morin. Je ne le sais
8 pas s'il est en ligne?

9 LE STÉNOGRAPHE :

10 Bien sûr. Il est là.

11 LE PRÉSIDENT :

12 Parce que ça se peut que ça se prolonge si les
13 intervenants utilisent tout le temps qu'ils ont
14 demandé. Alors, est-ce qu'on peut... On a prévu
15 finir à quinze heures (15 h). Quinze heures trente
16 (15 h 30) est-ce que ça serait...

17 LE STÉNOGRAPHE :

18 On peut aller à quinze heures trente (15 h 30). Je
19 vous ai écrit là-dessus un courriel en fin de
20 semaine. On va suivre cela. Il n'y a pas de
21 problème.

22 LE PRÉSIDENT :

23 Parfait. Merci. Alors, on revient à une heure
24 quinze (13 h 15) pour que ça soit plus simple. Est-
25 ce que c'est bien? We'll be back at one fifteen

1 (1:15) Eastern daily time. Thank you.

2 SUSPENSION DE L'AUDIENCE

3

4 REPRISE DE L'AUDIENCE

5 LE PRÉSIDENT :

6 Alors, Maître Fréchette, vous aviez déjà amorcé
7 votre propos, alors...

8 Me YVES FRÉCHETTE :

9 Ah! Pardonnez-moi.

10 LE PRÉSIDENT :

11 ... vous pouvez continuer.

12 Me YVES FRÉCHETTE :

13 Je ne voulais pas être impoli, là. C'étaient des
14 palabres comme si vous n'êtes pas arrivé puis qu'on
15 n'a pas entendu la cloche, Monsieur le Président.
16 Alors, bonjour. Yves Fréchette pour Hydro-Québec.
17 Rebonjour à tous.

18 J'ai discuté avec maître Cadrin comme je
19 m'étais engagé à le faire pendant la pause lunch.
20 Alors, je ne sais pas s'il peut apparaître, s'il
21 souhaite le faire. Steve apparaît.

22 LE PRÉSIDENT :

23 Ce serait bien.

24 Me YVES FRÉCHETTE :

25 Ah! Et voilà.

1 Me STEVE CADRIN :

2 J'ai entendu la cloche et j'étais là.

3 Me YVES FRÉCHETTE :

4 Alors, c'est bien. Alors, si vous permettez, Maître
5 Cadrin. Alors, pour les deux questions reliées aux
6 questions de précision concernant la compagnie
7 Central Maine Power et Ohio, je ne me souviens
8 plus, là, Maître... Maître Cadrin. Alors, les
9 précisions demandées, si vous permettez, feront
10 la... devront prendre la forme d'un engagement
11 écrit car, sur l'heure du lunch, on n'était pas en
12 mesure de récupérer l'information aussi rapidement.
13 Si vous voulez le formuler, Maître Cadrin?

14 LE PRÉSIDENT :

15 Êtes-vous en mesure de le formuler maintenant?

16 Me YVES FRÉCHETTE :

17 Oui. Soit moi ou soit maître Cadrin, c'est comme
18 vous le souhaitez, Maître Cadrin. Si vous avez
19 votre question, vous pouvez peut-être...

20 LE PRÉSIDENT :

21 Ce sera l'engagement numéro 9.

22 Me STEVE CADRIN :

23 Je peux tenter de formuler l'engagement numéro 9
24 d'un seul coup, ça vise deux compagnies. Je vais le
25 faire en français, mais c'est... à votre guise, là.

1 Me YVES FRÉCHETTE :

2 Pas de problème.

3 Me STEVE CADRIN :

4 Alors, donc c'est valider les données apparaissant
5 à la pièce B-0061, page 12, pour les compagnies
6 Central Maine Power Company et Ohio Valley Electric
7 Corporation.

8 Me YVES FRÉCHETTE :

9 C'est bien.

10

11 E-9 (HQT) : Valider les données apparaissant à la
12 pièce B-0061, page 12, pour les
13 compagnies Central Maine Power Company
14 et Ohio Valley Electric Corporation
15 (demandé par AHQ-ARQ)

16

17 Alors, for the benefit of Mister Ros, it's a
18 discussion we had over lunch, is that there is a
19 written undertaking regarding the... the values
20 regarding Central Maine Power Company and Ohio
21 Valley Electric Corporation that relates to HQT-10,
22 document 6.1, that you will look at and furnish a
23 written statement rapidly, shortly, if I can say
24 so.

25

And for... for you, Mister President,

1 Mister Ros was saying to me that the French, he had
2 some difficulty to reach the French translation, so
3 if you don't mind if I have some colleagues or
4 confrères who will use the... the French language,
5 well we'll have to adapt because I don't know if
6 it's on the connection between Mister Ros and
7 Webswitcher or else. So, if there is some
8 colleagues that want to use the French language
9 instead of the English language that we all use
10 since this morning, so you'll have to at least give
11 me a call first, we'll try to arrange something.
12 That was the first... first aspect.

13 Le deuxième aspect, si vous permettez, je
14 vais aller au français. Maître Cadrin, nous avons
15 discuté de la référence que je vous ai transmise
16 par texte... par messagerie texte concernant la
17 réponse au dossier de la phase 2. Alors, je ne sais
18 pas si vous voulez renchériser sur une question sur
19 cette référence.

20 LE PRÉSIDENT :

21 Est-ce qu'elle va être déposée ou... avec les
22 autres?

23 Me YVES FRÉCHETTE :

24 Je peux vous l'offrir immédiatement. Je peux vous
25 l'offrir...

1 Me STEVE CADRIN :

2 Peut-être, peut-être le consigner aux notes
3 sténographiques pour les fins de la discussion
4 maintenant. Donc, pour l'instant, nous n'avons pas
5 eu le temps d'aller valider la référence, Maître
6 Fréchette. Je m'excuse. Alors, sous réserve
7 potentiellement d'avoir une question, là, ce dont
8 je doute à ce stade-ci. Est-ce que vous pouviez
9 juste formaliser la réponse? Ce serait apprécié.

10 Me YVES FRÉCHETTE :

11 Me permettez-vous? Je ne trouve pas mon cellulaire,
12 deux instants.

13 Me STEVE CADRIN :

14 Bien, moi, je l'ai. J'ai votre référence, je veux
15 dire.

16 Me YVES FRÉCHETTE :

17 Ah! Je l'ai, donc ça va.

18 Me STEVE CADRIN :

19 O.K.

20 Me YVES FRÉCHETTE :

21 Mon coeur a cessé de battre pendant deux instants,
22 mais mademoiselle Josianne m'a dit : « Voilà! Vous
23 y êtes. » Alors, c'était dans le dossier tarifaire
24 de la phase 2, Monsieur le Président, Maître
25 Cadrin, et c'était la pièce B-0265, page 23,

1 réponse 4.1. Alors, Maître Cadrin, on croit que
2 c'est là que la réponse à votre question de ce
3 matin concernant les aspects que vous aviez
4 couverts.

5 Et puis il restait des... des questions
6 liées à l'engagement 1 que maître Cadrin avait
7 discuté. On a discuté pendant l'heure du repas. Il
8 y avait une option, là, qui était peut-être celle
9 de maximiser le temps de traduction puis de revenir
10 à la toute fin sur cette question-là. Est-ce que
11 vous êtes à cet effet-là toujours, Maître Cadrin,
12 ou pas ou...?

13 Me STEVE CADRIN :

14 Bien, moi, je suis ouvert à tout. Je n'ai pas de
15 problème. Je suis prêt à prendre les questions
16 quand vous voulez. J'ai des questions
17 complémentaires sur l'engagement 1, l'engagement a
18 été pris par le panel 1. Ce que je comprends, c'est
19 que, du panel 1, nous avons présentement monsieur
20 Verret à l'écran, également monsieur Vézina, sauf
21 erreur.

22 Me YVES FRÉCHETTE :

23 Oui.

24 Me STEVE CADRIN :

25 Il nous manquait madame Paquette, mais madame

1 Paquette, ce n'était pas, je pense, dans ses
2 sphères de documents sous sa gouverne, si je peux
3 dire ça comme ça, même si elle était dans le panel
4 1. Alors, on peut soit poser des questions
5 maintenant.

6 Moi, je suis à votre disposition pour le
7 faire, là. C'est certain que je suis prêt à les
8 poser maintenant si vous voulez. J'en ai déjà
9 quelques-unes. Par contre, ce que j'en comprends,
10 c'est qu'il a été nécessaire d'avoir un engagement
11 pour répondre à ma question et je vais rentrer un
12 peu dans la mécanique derrière la question des IFD
13 de toute façon.

14 Là je me pose la question si nous allons
15 avoir les personnes nécessaires pour répondre ou on
16 va tomber dans d'autres engagements. Alors, ça, je
17 laisse ça ouvert, là. Je pense que maître Fréchette
18 voulait peut-être qu'on tente une première
19 tentative, qu'on fasse une première tentative, je
20 pense.

21 Me YVES FRÉCHETTE :

22 Écoutez, au point où nous en sommes, là, si vous
23 permettez, Maître Cadrin, je vais prendre l'autre
24 option que vous nous aviez offert puisque la
25 traduction c'est quand même quelque chose de...

1 Me STEVE CADRIN :

2 Oui.

3 Me YVES FRÉCHETTE :

4 ... de grande valeur qu'on a maintenant et qui est
5 disponible. Puis ça, bien je pense qu'une fois
6 qu'on va revenir en français, monsieur Verret
7 pourra... Parce que ce qu'on discutait ce midi, là,
8 c'était de peut-être essayer un nouveau... un
9 premier niveau de réponse avec monsieur Verret. On
10 verra jusqu'où on peut aller, là, à partir de ce
11 moment-là et puis...

12 Ça fait que, si vous me permettez, je vous
13 fais la proposition, Maître Cadrin, à moins que
14 vous soyez bien mal à l'aise, là, puis Monsieur le
15 Président, c'est de continue avec monsieur Ros...

16 Me STEVE CADRIN :

17 Oui.

18 Me YVES FRÉCHETTE :

19 ... sur les questions en utilisant la traduction en
20 travaillant sur le PMF puis sur les engagements
21 liés à l'engagement 1, si vous permettez, Maître
22 Cadrin, peut-être à la toute fin...

23 Me STEVE CADRIN :

24 Oui.

25

1 Me YVES FRÉCHETTE :

2 ... quand monsieur... de la prestation de monsieur
3 Ros sera terminée. Bien, monsieur Vézina et
4 monsieur Verret sont présents.

5 Me STEVE CADRIN :

6 C'était ma proposition initiale sur l'heure du
7 lunch, d'attendre à la fin pour préciser...

8 LE PRÉSIDENT :

9 Ça nous semble tout à fait raisonnable. Est-ce
10 qu'il y a d'autres choses, Maître Fréchette, avant
11 de retourner au contre-interrogatoire?

12 Me YVES FRÉCHETTE :

13 Non. Oui, il y avait la question de mon collègue
14 maître Lanoix. Alors tout d'abord, merci, Maître
15 Cadrin.

16 Q. **[188]** And Mister Ros, you remember the question
17 that was left unanswered or to be continued if I
18 can say so, that was asked by my colleague, Mister
19 Sylvain Lanoix? Do you want to... to rephrase it
20 again?

21 Do you mind, Mister President, that we step
22 from Mister Cadrin to Mister Lanoix? I think it's
23 the appropriate way to deal with this.

24 LE PRÉSIDENT :

25 Alright. No problem. We were expecting it, so.

1 Me YVES FRÉCHETTE :

2 Okay. Perfect. So, Maître Lanoix, do you want to
3 say it again or...

4 LE PRÉSIDENT :

5 On ne vous entend pas, Monsieur Lanoix.

6 Me SYLVAIN LANOIX :

7 Sorry. So, I said no problem, I will rephrase the
8 question.

9 Q. **[189]** Dr. Ros, can you tell us exactly where in the
10 PEG's working paper are the regionalized indexes as
11 describe by PEG in the direct report that you used
12 to perform the sensitivity test you are referring
13 to at page 27 of the Exhibit B-0094?

14 R. Yes. Can you hear me okay? Okay. Yes. We... we used
15 the document referred to in CIFQ-0082, which is an
16 Excel spreadsheet and the tab that we used was call
17 "Salary and wages".

18 Q. **[190]** So, you said... What's the number, 00?

19 R. 0082. I understand these were work papers filed
20 with the original report.

21 Q. **[191]** The highest number of exhibit that were
22 deposited by the AQCIE-CIFQ is the Exhibit 0072, I
23 don't see Exhibit 83.

24 R. It's 82.

25 Q. 82. I got the exhibit...

1 Me YVES FRÉCHETTE :

2 Do you mind, Mister Lanoix?

3 Me SYLVAIN LANOIX :

4 No. Go ahead.

5 Me YVES FRÉCHETTE :

6 It's... it's referring to the phase 2 file. It's
7 referring to the 4058, 4058 file, it's the...

8 Me SYLVAIN LANOIX :

9 Ah, okay. So, 4058, and the year was two
10 thousand...

11 LE PRÉSIDENT :

12 18?

13 Me SYLVAIN LANOIX :

14 18? Okay. I will have a look and if there is any
15 concern I will come back to you. Thank you.

16 R. Okay.

17 LE PRÉSIDENT :

18 Thank you. Merci. Avant d'aller un peu plus loin,
19 j'avais une ou deux annonces. J'avais une ou deux
20 annonces. Pour la question du vingt-cinq (25)
21 janvier, le caviardage, ça convient à la formation.
22 Nous aimerions juste rapidement... Il y aura
23 vraisemblablement un huis clos additionnel pour
24 Option consommateurs. Et on voulait s'assurer que,
25 de la même façon qu'on a fait pour le huis clos

1 d'Hydro-Québec que chacun des procureurs nous
2 fournisse une liste des personnes qui pourront être
3 admises au huis clos. Ça, ça pourrait être fait
4 comme la dernière fois par courriel à monsieur
5 Specte, le greffier. On vous soumettrait que ça
6 devrait être fait pour demain mardi à midi. Donc,
7 on aura l'occasion de valider. Alors, pour tous
8 ceux qui nous ont fait parvenir des noms, c'est
9 peut-être les mêmes ou d'autres personnes, mais on
10 aimerait que ce soit reconfirmé.

11 Me YVES FRÉCHETTE :

12 Donc, pour l'administration de la preuve principale
13 d'OC, la liste à fournir pour un huis clos, soit
14 demain midi. C'est noté. On voit maître David
15 qui...

16 Me ÉRIC McDEVITT DAVID :

17 J'avais juste une petite question d'intendance,
18 Monsieur le Président. Moi, je prends pour acquis
19 que ce n'est pas la totalité de la preuve d'Option
20 consommateurs qui va être en huis clos, mais
21 uniquement cette partie évidemment de la preuve qui
22 est frappée par les ordonnances de confidentialité?

23 LE PRÉSIDENT :

24 Absolument. C'était ça qui... Ce sera public pour
25 l'autre partie, ce sera au moment prévu qui était

1 mercredi. C'est bien ça?

2 Me ÉRIC McDEVITT DAVID :

3 D'accord. Ça fait que ma suggestion...

4 LE PRÉSIDENT :

5 C'est ça, c'est en deux parties, il y a une partie
6 huis clos qui concerne l'élément huis clos qui a
7 été discuté et que vous avez dans votre mémoire. Et
8 votre expert, monsieur Higgin, lui s'est sur autre
9 chose, et c'est la traduction qui est importante.

10 Me ÉRIC McDEVITT DAVID :

11 Oui, exact.

12 LE PRÉSIDENT :

13 Et d'ailleurs, on veut... ça se peut que monsieur
14 Higgin ne sera pas du huis clos, j'imagine?

15 Me ÉRIC McDEVITT DAVID :

16 Non.

17 LE PRÉSIDENT :

18 Va-t-il être du huis clos?

19 Me ÉRIC McDEVITT DAVID :

20 C'est-à-dire il va être sur le panel d'Option
21 consommateurs, mais il n'y a pas de preuve à
22 administrer qui est confidentielle pour monsieur
23 Higgin.

24 LE PRÉSIDENT :

25 Est-ce qu'il y aura des besoins de traduction?

1 Me ÉRIC McDEVITT DAVID :

2 Pour monsieur Higgin? Oui.

3 LE PRÉSIDENT :

4 Dans la partie qui est... qu'on appellera plus
5 confidentielle.

6 Me ÉRIC McDEVITT DAVID :

7 C'est-à-dire oui, il aura besoin pour tout le panel
8 d'Option consommateurs de service de traduction
9 pour que monsieur Higgin puisse suivre les
10 questions et les débats.

11 LE PRÉSIDENT :

12 Parfait. Est-ce que, Maître Fréchette, vous êtes...

13 Me ÉRIC McDEVITT DAVID :

14 J'avais juste une dernière question. Est-ce que la
15 Régie a une préférence au niveau de l'ordre?
16 Autrement dit, est-ce que vous préférez que je
17 commence avec la partie publique de la preuve pour
18 terminer avec le huis clos ou l'inverse, ou vous
19 n'avez pas de préférence?

20 LE PRÉSIDENT :

21 Bien, là, à moins de me tromper, mais je me ferai
22 corriger, ça commencerait avec la preuve de
23 traduction publique. Et le huis clos serait le
24 lendemain, le mercredi.

25

1 Me ÉRIC McDEVITT DAVID :

2 Parfait.

3 LE PRÉSIDENT :

4 On ouvrirait avec le huis clos, parce que c'est
5 plus difficile. Il faut avoir des... que le
6 greffier prépare le huis clos.

7 Me ÉRIC McDEVITT DAVID :

8 O.K. Parfait.

9 LE PRÉSIDENT :

10 Ça vous va?

11 Me ÉRIC McDEVITT DAVID :

12 C'est excellent.

13 LE PRÉSIDENT :

14 Puis, Maître Fréchette, comme vous avez la
15 responsabilité de la traduction, la question de la
16 confidentialité pour les traducteurs lorsqu'ils
17 sont en... si c'est en huis clos, est-ce que vous
18 avez des...

19 Me YVES FRÉCHETTE :

20 Bien, je n'aurai pas de difficulté à mettre quelque
21 chose en place si c'était le cas. Je parlerai avec
22 madame Schultz et son équipe. Je suis convaincu,
23 elle m'écoute actuellement, qu'ils vont être
24 d'accord de souscrire à un engagement de
25 confidentialité simple sur les débats qu'ils auront

1 le plaisir de traduire.

2 LE PRÉSIDENT :

3 Parfait. On compte sur vous pour nous en aviser
4 avant cette portion à huis clos.

5 Me YVES FRÉCHETTE :

6 C'est bien. C'est noté. Si j'oublie, je compte sur
7 vous.

8 LE PRÉSIDENT :

9 On y a pensé, c'est déjà ça. On est rendu, je
10 pense, à la FCEI pour le contre-interrogatoire de
11 monsieur Ros.

12 Me ANDRÉ TURMEL :

13 Oui. Alors, bonjour, Monsieur le Président, bonjour
14 aux membres de la Régie. Bonjour à tous. Alors,
15 après les échanges de ce matin et début d'après-
16 midi, la FCEI n'aura pas de questions pour le
17 docteur Ros.

18 LE PRÉSIDENT :

19 Merci, Maître Turmel. OC, Option consommateurs,
20 Maître David.

21 Me ÉRIC McDEVITT DAVID :

22 Oui.

23 Dr. AGUSTIN J. ROS :

24 This is doctor Ros. Can everybody ear me?
25

1 LE PRÉSIDENT :

2 Yes.

3 Dr. AGUSTIN J. ROS :

4 I just want to say my translation service is now
5 working.

6 Me YVES FRÉCHETTE :

7 Mister McDevitt David is the most fluent lawyer
8 I've ever eared so you will be able to... you will
9 be so happy to discuss with somebody without any
10 accent.

11 Me ÉRIC McDEVITT DAVID :

12 I have no merit in this, it's thank to my mother.

13 CONTRE-INTERROGÉS PAR Me ÉRIC McDEVITT DAVID :

14 Monsieur le Greffier, juste pour sauver un petit
15 peu de temps, je vais vous nommer immédiatement les
16 pièces auxquelles je vais référer pendant le
17 contre-interrogatoire. Vous pouvez préparer les
18 pièces suivantes, et ce n'est pas nécessairement
19 dans un ordre spécifique, mais il y a la B-0060, la
20 B-0109, la B-0049, B-0012 et B-0094.

21 LE GREFFIER :

22 Merci beaucoup. C'est noté.

23 Me ÉRIC McDEVITT DAVID :

24 D'accord.

25 Q. [192] So, good afternoon, Mister Ros.

1 R. Good afternoon. Can you hear me?

2 Q. **[193]** Yes, I can hear you, I was just adjusting my
3 camera so that I can see you better. So, I have a
4 few questions. Essentially I'm going to cover three
5 topics, I have a few preliminary questions, but
6 it's really three topics I'd like to cover with
7 you.

8 The first topic is Sample and Data Cost...
9 and Cost Data, sorry. Second would be Input
10 Assumptions and Methodology, and the final will
11 your recommendations to the board.

12 So... so, among my preliminary questions I
13 noticed in slide number 6, providing a list of
14 North American Productivity studies. I just want to
15 make sure that I understood properly. Essentially,
16 this is your first productivity study?

17 R. No, that's not true.

18 Q. **[194]** Okay. So, you've done other productivity
19 studies?

20 R. Yes.

21 Q. **[195]** And have you done any in Canada?

22 R. I did one for the Alberta Utilities Commission in
23 2012.

24 Q. **[196]** Okay. And is that the only one that you've
25 done in Canada?

1 R. That's... Well, this one and the one in the Alberta
2 Utilities Commission, that would be two.

3 Q. **[197]** Two of them. Okay. And how many have you done
4 in the U.S.?

5 R. So, on my C.V. I have listed six other productivity
6 studies that are under my name.

7 Q. **[198]** Okay. And that's in your CV that is with your
8 initial report I guess?

9 R. Correct.

10 Q. **[199]** Excellent. Then I'd like to know how many
11 benchmarking studies have you authored?

12 R. This will be my first cost... econometric cost
13 benchmarking study in a stretch factor analysis.

14 Q. **[200]** Okay. I noticed when I consulted your initial
15 report that there were four authors listed, and I
16 just was curious to know, the second author is
17 Walter Graf, what was his role in... in this
18 report?

19 R. Walter was senior associate at Brattle, so he
20 worked closely with me in the analysis, that was
21 his role.

22 Q. **[201]** Overall?

23 R. Yes. He worked... At Brattle we have principles
24 working and with a team of team members, usually we
25 have a senior associate and we have research

1 analysts, and he was a senior associate working on
2 the project.

3 Q. **[202]** Okay. I noticed that in your response to
4 PEG's commentary, which was filed at the very end
5 of November, Mister Graf is not listed as an
6 author, could you explain why that is?

7 R. Yes. Actually Dr. Graf, left Brattle by the middle
8 of the year, he's working at PJM, the chief
9 economist at PJM, which is the ISO in United
10 States.

11 Q. **[203]** Okay. There's another person that listed in
12 both documents, Sai Shetty, I don't know if I'm
13 pronouncing it well. How many productivity studies
14 has Mister Shetty participated in?

15 R. This will be his first. He's recently out of
16 graduate school, so he's been working for a couple
17 of years now.

18 Q. **[204]** Okay. And I presume it's his first
19 benchmarking study as well?

20 R. Yes, although he's got lots of econometric
21 experience.

22 Q. **[205]** Okay. So, I'd like to go into the... the
23 first of the three big topics that I announced, and
24 I apologize in advance if there's some repetition.
25 You may have already covered some of my questions,

1 but it's a complicated topic especially for non
2 economist like myself and some of the board
3 members, so I think it's sometimes useful to have a
4 little bit of repetition in this kind of a
5 situation.

6 So, first can you please confirm the number
7 of companies that you used in your sample?

8 R. We used seventy-four (74).

9 Q. **[206]** And they're all U.S. companies?

10 R. Correct. They are all U.S. companies.

11 Q. **[207]** Okay. And did Brattle compiled the sample
12 directly from the FERC data or did it purchase the
13 data from another data supplier?

14 R. We subscribe, so that means we purchased, we
15 subscribed to Standard & Poor's services which
16 includes the... the database, the FERC database.

17 Q. **[208]** Okay. Now, how did Brattle determined which
18 companies to include in the sample, what were the
19 selection criteria?

20 R. So, our objective was to have as large a sample as
21 possible, we believe that that's... I believe that
22 that's good for productivity just because of how
23 (inaudible) the productivity can be. So, the
24 objective is to have as many company as possible,
25 so we looked at the FERC database and we saw how

1 many total companies are in the FERC database, we
2 got about a hundred and something. And then we said
3 if there are complete data for each of the
4 companies, we're going to include it, so whether
5 it's a small company or a large company, our
6 criteria was to have whether the data were
7 complete, if there were data missing significant
8 like in some instances we had ten years of missing
9 peak data, then we would not use it. In some
10 instances we made some minor interpolations, but if
11 you look at our Appendix number 1 to our direct
12 report, it has all the companies we began with,
13 which is over a hundred companies and it indicates
14 did we include the company or did we not include
15 the company. And if we decided not to include the
16 company, we had a reason in the right column for
17 why we excluded the company.

18 Q. **[209]** Okay. So, the selection criteria was whether
19 or not the data is complete, is that the only
20 selection criteria? Or am I understand that all of
21 the right column here all selection criteria?

22 R. No. The selection criteria has many companies that
23 provide transmission service as possible under the
24 FERC database.

25 Q. **[210]** Okay. In terms of what was excluded, it's

1 really just those companies that did not have
2 complete data?

3 R. Complete data, correct, yes.

4 Q. **[211]** That's the only exclusion criteria that you
5 used?

6 R. Correct, yes.

7 Q. **[212]** Okay. Now, how many of the seventy-four (74)
8 companies included in your sample are large
9 according to your definition of large, and at the
10 same time I'd like to know what your definition of
11 large is.

12 R. Well, I really don't have a definition of large,
13 it's somewhat of a subjective measure.

14 Q. **[213]** Yes. Okay. And in a subjective way are you
15 able to give us a ballpark percentage or number of
16 how many of these seventy-four (74) companies you
17 would consider to be in a large category, in a
18 medium category, in a small category, or you're not
19 going to go there?

20 R. I didn't do that analysis, so I'd like to refer to
21 large company at times, you can rank the, you know,
22 you can rank the top 5, those are the largest, you
23 can rank the top 15, it is somewhat subjective what
24 you say is large...

25 Q. **[214]** Yes.

1 R. ... and falling after that.

2 Q. **[215]** I grant you. Did Brattle quality check the
3 data?

4 R. Well...

5 Q. **[216]** And if so, how is this done?

6 R. Yes. I mean the quality check we do is... is we use
7 the purchase database that we got from Standard &
8 Poor's, so that's a database that is used commonly
9 in the United States for analysis, not just for
10 productivity bur for all sort of analysis. And we
11 downloaded the data and if there were any anomalies
12 we noted that down in our analysis and it's
13 reflected in our Annex 1, where we saw some
14 anomalous data.

15 Q. **[217]** So Annex ! Is the key document here. Okay.
16 I'd like to refer you to one of the... one of the
17 answers that you provided to the Régie information
18 request, so I don't think it's necessary for you to
19 pull out the paper, I think it's quicker when the
20 clerk puts it on the screen.

21 R. Okay.

22 Me ÉRIC McDEVITT DAVID :

23 So, Monsieur le Greffier, B-0049. Je suis à la page
24 36... 36 de la numérotation du document et non pas
25 du PDF. Voilà, le tableau.

1 Q. **[218]** Okay. So, I just wanted to refer you to the
2 figure number 2, and then at the very next page, if
3 the clerk could just go a little bit lower, there's
4 another figure, number 3. So, I have a couple of
5 questions on these two figures. So, go back to
6 figure number 2, maybe. Okay.

7 So, can you confirm that Brattle did a
8 sensitivity analysis in response to the Régie's
9 question and that it appears that the impact of
10 leaving out small companies is small depending on
11 partial or total factor productivity?

12 R. I can confirm that we did this sensitivity in
13 response to the Régie's question, I can confirm
14 that. And the results are there, it, you know, for
15 O&M productivity it does change if you use the top
16 5 companies compared to our base case and the same
17 thing for the top 10 and the same thing for the top
18 15. As you remove the companies your productivity
19 results will also change.

20 Q. **[219]** Okay. So, maybe I'd like to break down my
21 question first with respect to productivity
22 results. Is it the case that the impact is small if
23 you leave out, that appears that the impact of
24 leaving out small companies is small?

25 R. Well, again it's, you know, my definition of small

1 or your definition of small it is somewhat a
2 subjective thing.

3 Q. **[220]** Yes.

4 R. Let's take the productivity... let's take the O&M
5 productivity here. Our base case is -3.38 and when
6 we throw out 69 companies and we're left with 5,
7 productivity becomes more negative by about, what,
8 like 30 basis points. I would say that's a modest
9 change to partial productivity when we leave out a
10 lot of those... those companies.

11 Q. **[221]** Small... smaller ones, yes.

12 R. Yes.

13 Q. **[222]** Okay. And would the same be true with
14 respect to the benchmarking results if there is
15 little impact taking out the small companies?

16 R. Well, they don't change our, in the example here,
17 the figure is, if you go down a little bit, is it
18 Figure 3 or table?

19 Q. **[223]** Figure 3, I believe.

20 R. Yes. If the person can just move down a little bit.

21 Me ÉRIC McDEVITT DAVID :

22 Monsieur le greffier, si c'est possible de
23 descendre? Merci.

24 R. Figure 3. It shows that our results change modestly
25 but when we use the, if we talk about the Ontario

1 Energy Board criteria, it doesn't change the
2 conclusions.

3 Q. **[224]** Okay, but the question was: with respect to
4 the impact of leaving out small companies, both, if
5 I understand correctly your answer, both respective
6 productivity and benchmarking, it has a relatively
7 small OR modest impact like you say.

8 R. Yes. If we can go back up to the first table. Yes,
9 this sensitivity analysis shows, I would tend to
10 agree with the modest, the use of the word modest
11 in there. There is, I'm looking at the TFP for the
12 top 10 compared to the full sample which, you know,
13 it's what is that, that's almost 40 basis points,
14 so that's... that's not necessarily modest.

15 Q. **[225]** Okay. I'd like to turn out to the sample
16 costs that were used by Brattle, that were
17 obviously based on the seventy-four (74) U.S.
18 companies that were retained. We'd like to better
19 understand how Brattle determined which costs from
20 the FERC accounts to include or exclude in order to
21 be comparable to the cost profile of Hydro-Québec
22 Transport?

23 R. Right. So, we... we included all the FERC O&M
24 transmission expenses because our mandate was to
25 calculate a North American industry productivity,

1 and my understanding is that the FERC O&M accounts
2 contain all the similar type of accounts that...
3 that HQT has.

4 Q. **[226]** Okay. And can you give... list the main
5 exclusions for us?

6 R. So, we did not exclude any transmission, operation
7 and maintenance accounts.

8 Q. **[227]** Okay. And which costs did you exclude?

9 R. I'm sorry, I'm just not following that question.

10 Q. **[228]** Alright. Alright. I'll come back to that
11 issue maybe later on. So, correct me if I'm wrong,
12 but I believe there's a disagreement between PEG
13 and Brattle regarding which costs FERC accounts to
14 include or exclude, so the two most important
15 disagreements, and obviously correct me if I'm
16 wrong, seem to concern transmission by others and
17 then secondly administrative and general costs. So,
18 did Brattle include these or exclude these?

19 R. So, I'll... Let me say a couple of things. The
20 biggest difference is not only transmission by
21 others, but it's also the miscellaneous expenses
22 and the account 561, so there's three accounts that
23 PEG excluded, that's a big difference. There's
24 another account that are, I call common costs,
25 which are administrative in general, expenses and

1 also general plan, those expenses we excluded and
2 we described the reason why we excluded common
3 costs in our study. The impact of exploding the
4 common costs in our study is very little when
5 you're looking at the partial O&M productivity.

6 Q. **[229]** Okay. So, what is the directional effect of
7 these exclusions on your results regarding the
8 productivity growth decline of the sample seventy-
9 four (74) utilities?

10 R. So, when we leave... when we leave out the... the
11 common costs, right, and then our base case is that
12 -3.38%, the one you see there in the table, that's
13 our base case, and that one does not include common
14 costs. When we add common costs to it, our figure
15 goes from -3.38 to I believe is -3.48.

16 Q. **[230]** Okay. So, that's with respect to common
17 costs?

18 R. Yes, that's direct to the impact leaving out common
19 costs as on the O&M productivity.

20 Q. **[231]** And what about the impact of leaving out
21 miscellaneous expenses and account 561?

22 R. So, when we leave out the three... well, we include
23 the three accounts, we don't... we don't leave them
24 out, I'm sorry. So, let me make sure I'm on the
25 same page. What's the question again? I'm sorry.

1 Q. **[232]** I just wanted to know the directional effect
2 of... of these... I'm trying to figure out the
3 directional effect of these disagreements about
4 which cost to include or exclude on your results.

5 R. Yes. Correct. And I think the focus is on the
6 partial factor of productivity, can we focus on
7 that because that's... that's the relative...

8 Q. **[233]** Yes.

9 R. Okay.

10 Q. **[234]** I agree.

11 R. Okay. So, I'll focus on that. When we... I'll put
12 it this way. And I had... I had this in my
13 presentation this morning. We asked PEG to rerun
14 its model including all three accounts, okay? And
15 it's... I can refer you to the page. It is slide
16 number 15.

17 Q. **[235]** Okay.

18 R. Okay. So this is the impact on PEG's model when it
19 includes all three accounts. It's base case
20 excluding it and then when it includes it this is
21 the impact.

22 Q. **[236]** Alright.

23 R. And we have a similar analysis in our reply where
24 we have... When we exclude the three accounts what
25 happens to our results and we have that in our

1 reply.

2 Q. **[237]** Okay. Thank you. I'd like to move on now to
3 the next big topic that I wanted to address which
4 was... - Monsieur le Greffier, vous pouvez enlever
5 la pièce en question - which was Input Assumptions
6 and Methodology that you used for your productivity
7 and benchmarking analysis.

8 First can you confirm that the same
9 seventy-four (74) companies, the sample, and that
10 the same input costs were used for both the
11 productivity study and the benchmarking analysis?

12 R. Yes. We used the same seventy-four (74) companies
13 and we used the same data. So the same cost data.

14 Q. **[238]** Okay. In your February twenty twenty-one
15 (2021) report, your main report, there are many
16 input assumptions. I wish to focus on two of these
17 assumptions regarding which Brattle and PEG
18 disagree.

19 So the first one is the capital benchmark
20 year and I refer you to your report - c'est B-0012
21 Monsieur le Greffier - or you probably have it
22 handy. It's 4-34.

23 R. Is this my Direct Report or my Reply Report?

24 Q. **[239]** Your Direct Report. Actually you don't really
25 need to refer to the text. I'm sorry. It's my own

1 notes but... Sometimes I get confused.

2 So the two that... There seems to be a lot
3 of disagreements between Brattle and PEG. The first
4 one is capital benchmark year. Can you explain this
5 notion and what Brattle's assumption is regarding
6 this?

7 R. Yes. So every productivity study needs what's
8 called the "benchmark year" which is a starting
9 point for the productivity study.

10 The reason is because if you look at the
11 years prior to the benchmark years you have many
12 different types of vintages of capital acquired at
13 different prices.

14 So you want to start your productivity
15 study with a starting point and you don't want that
16 capital benchmark year to be the first year of your
17 productivity results.

18 So for example our benchmark year begins in
19 nineteen eighty-eight (1988) but our productivity
20 study results begin in nineteen ninety-five (1995).
21 So there's a seven (7) year difference between our
22 benchmark and our productivity results.

23 So we don't start calculating productivity
24 growth until nineteen ninety-five (1995) even
25 though we have nineteen eighty-eight (1988) as the

1 benchmark.

2 And we do that to allow some type, some
3 amount of time to pass between the benchmark which
4 is an inexact measure and the first year of a
5 productivity study.

6 So we use nineteen eighty-eight (1988)
7 whereas the PEG model uses nineteen sixty-four
8 (1964) as the benchmark year.

9 Q. [240] Okay. The second assumption on which there's
10 disagreement is the treatment of capital. A debate
11 regarding using one hoss shay or geometric decay.
12 Can you explain to us in layman's terms or as much
13 as you can these two methods and why Brattle
14 prefers one hoss shay? A university lecture
15 obviously.

16 R. Sure and it is... I do describe that in the Direct
17 Report. A couple of pages.

18 Basically it's when you buy a piece of
19 capital it's gonna last you for many years and it's
20 gonna provide you services over many years and in
21 any given year you know you have to decide how much
22 service is being provided to produce that unit of
23 output.

24 The one hoss shay methodology assumes that
25 once you buy a piece of capital and let's say it

1 can produce ten (10) units of output that once you
2 buy that piece of capital it's gonna be providing
3 that ten (10) units of output until you remove that
4 capital from the company.

5 It's called the "one hoss shay" because
6 it's kind of similar to a chair.

7 So let's say you have a chair, you bought
8 it. It's technically a capital service. It's giving
9 you the same input, you're sitting on it from the
10 day one of the chair until you throw that chair
11 away.

12 So there's no loss in efficiency of how
13 efficient that chair is. It's providing you the
14 same service on day one as when you retire.

15 That's the one hoss shay approach and that
16 to us seems like a more reasonable approach for
17 things like a transmission service these type of
18 capital assets.

19 The geometric decay makes the assumption
20 that every year I'm gonna loose a little bit of the
21 efficiency and so I'm not gonna be providing you
22 with the same type of service in year two as I am
23 in year one.

24 So by the time I get to the end of the life
25 that capital that I purchased is providing you less

1 service in that particular year and that is kind of
2 a good summary of the two competing approaches.

3 Q. **[241]** Thank you. That's a good... It's a nice way
4 to explain it and that a non economist can
5 understand. And just to finish on this topic why do
6 you prefer the one hoss shay?

7 R. Well we think it's more consistent with what would
8 happen with these particular assets. Let's take a
9 transmission pole.

10 Transmission pole is providing a certain
11 functionality which is to keep the lines from
12 falling down and we believe that that's the same
13 functionality in year one as it is in year twenty
14 (20) and similar type of arguments for other type
15 of access involving transmission. So that's our
16 justification.

17 There is academic use of one hoss shay in
18 the literature. So it is... You know it is used in
19 productivity studies.

20 Q. **[242]** Okay but so leaving aside the debate between
21 the two experts I simply like to understand the
22 impact of these two assumptions on Brattle's US
23 sample productivity trend.

24 R. Okay.

25 Q. **[243]** So first question. Can you confirm that if an

1 earlier benchmark year is used the US sample
2 productivity trend would become less negative?

3 R. I can't confirm that.

4 Q. **[244]** You cannot Sir?

5 R. I cannot. No.

6 Q. **[245]** Okay. And can you confirm that if geometric
7 decay for capital was used instead of one hoss shay
8 the US sample productivity trend would become less
9 negative?

10 R. No. The exact opposite.

11 Q. **[246]** It would become more negative?

12 R. Yes. And we have a sensitivity in our direct report
13 showing when we used geometric decay our results
14 become much more negative.

15 Q. **[247]** Okay. Now the second... The next issue I want
16 to address is the benchmarking study. First a very
17 general question. Are benchmarking studies common
18 in incentive regulation?

19 R. In my opinion no.

20 Q. **[248]** Do not? And can you explain to me in simple
21 terms what the objective and desire results of the
22 benchmarking studies is?

23 R. Yes. It assists in the setting of the stretch
24 factor. The stretch factor is this idea or notion
25 that when you move from cost of service to an MRI

1 where you have an X-Factor you are going to have an
2 increase in efficiency and the stretch factor is
3 meant to capture that change in moving from one
4 regime to the other.

5 So that's what a stretch factor, or my
6 opinion, what the stretch factor is meant to do.
7 And the cost benchmarking is a way of getting at
8 what that stretch factor should be based upon the
9 differences in the cost efficiency of the firms in
10 your sample of companies.

11 Q. **[249]** Okay. Why do benchmarking studies... Why does
12 it use recent cost data as opposed to long-term
13 trends?

14 R. Well we... I mean and I'm not sure I understand
15 that question. We're using... Both PEG and us use a
16 long sample of data to estimate our econometric
17 cost models.

18 Q. **[250]** With respect to the benchmarking study?

19 R. Yes.

20 Q. **[251]** Okay. And which years or period did you
21 use...

22 R. Well our...

23 Q. **[252]** ... to answer that?

24 R. Yes. I mean so our study, our... For cost
25 benchmarking keep in mind that here we need to

1 bring into account HQT's cost. So in the
2 productivity study we don't have... HQT is not a
3 sample in the productivity study.

4 When we do the cost benchmarking we need to
5 bring in HQT because the objective is how do HQT's
6 cost compare to the benchmark? And HQT data were
7 not available until the beginning of two thousand
8 one (2001).

9 So our cost benchmarking data goes from two
10 thousand one until two thousand nineteen (2001-
11 2019) and we estimate our model during that period.

12 Q. **[253]** Okay. Thank you. Monsieur le Greffier, vous
13 pouvez enlever le document de l'écran. Alright. I
14 wanna turn to your direct report. Rather your slide
15 of this morning. Slide 27.

16 R. Yes.

17 Q. **[254]** Where you list recent Electricity Stretch
18 Factors. So the question is can you confirm that
19 some of these companies listed here are not similar
20 to HQT? For example the Ontario distributors?

21 R. Well, yes, I mean HQT is a very unique company. So
22 that's a fair statement.

23 Q. **[255]** Okay. Can you confirm that there is
24 disagreement between Brattle and PEG on a number of
25 methodology issues related to the benchmarking

1 studies and what are the primary points of
2 disagreement?

3 R. Yes. I can confirm that. I would say the primary
4 disagreement is in the econometric estimator that
5 we use in predicting HQT's cost.

6 So we both have econometric models. I use
7 one type of approach called the "fixed effects
8 methodology".

9 PEG uses a pooled OLS methodology and that
10 is the main driver of the differences in my opinion
11 between the two cost benchmarking results.

12 Q. **[256]** Okay. And can you describe in simple terms
13 once again the specifications of the Brattle model
14 as it relates to the difference between using fixed
15 effects and the random effects panel estimators and
16 ordinary least squares residuals as apply to a
17 benchmarking study?

18 And secondly how this effects the relative
19 scores of Brattle and PEG?

20 R. Yes. So the main difference is we look at the fact
21 or we believe it a fact that every company in our
22 sample, seventy-four (74), seventy-five (75)
23 companies, have certain features that are very
24 difficult to measure, that are unique and that
25 affect cost over time.

1 that you see here summarizes the Brattle and PEG
2 benchmark scores.

3 R. Well let me just... I can talk on the Brattle. Just
4 give me one minute.

5 Me YVES FRÉCHETTE :

6 Just to be sure Mister Ros it's HQT-10 DOC 5.1
7 page 17. It's regarding the response number 7.

8 R. Response number 7.

9 Q. **[258]** HQT-10 DOC 5.1. Sorry, Mister David, it's
10 just to...

11 R. Oh yes. This is total cost. Yes. I can confirm.
12 That's correct. Yes.

13 Me ÉRIC McDEVITT DAVID :

14 Q. **[259]** Okay. Excellent. And can you explain in
15 simple terms what the Brattle and PEG scores
16 indicate regarding the cost performance of Hydro-
17 Quebec Transport compared to the US sample and how
18 this relates to the X-Factor?

19 R. What I can tell you so my results are showing that
20 HQT's actual costs were over the entire period of
21 two thousand one to two thousand nineteen (2001-
22 2019) were one twenty-seven percent (127%) below
23 our models predicted costs and if you look at the
24 US sample the mean what we found was minus two
25 point three percent below (-2.3%) below our model's

1 prediction.

2 PEG's sixty-seven percent (67%) is saying
3 HQT's actual cost were sixty-seven percent (67%)
4 above its model's prediction.

5 Now as I mentioned earlier this morning
6 taking these cost benchmarking results and finding
7 a stretch factor there's no magic formula for that.
8 It requires some judgement and now the Ontario
9 Energy Board has a specific methodology that would
10 take these results and translate them into a
11 stretch factor.

12 Q. [260] Which you, I think, went over this morning?

13 R. Correct. Yes.

14 Q. [261] Okay. And leaving aside the issue of which
15 expert is correct can you explain why the two
16 experts' scores are so different and how the
17 regulator is supposed to make sense of this?

18 R. Well they are very different as I mentioned because
19 of the assumptions we are making in the econometric
20 modelling. That is unfortunate. It is a reality of
21 sometimes econometrics.

22 You know, I worked for the Chairman of the
23 Illinois Commerce Commission when I began my career
24 and it is a challenge to weigh different evidence
25 and to rendering opinion but it does require going

1 through the evidence, our data responses and
2 explanation that we both give and you know kind of
3 reaching a judgement of what makes more sense in
4 this particular case.

5 Especially you know our opinion is HQT
6 gives... It's a very different for cost
7 benchmarking purposes, it's a very different kind
8 of company operating in a different country,
9 different regulations, in different organisational
10 structure.

11 And so to us there are a lot of things in
12 there that are affecting HQT's cost that are
13 outside it's management control and so I would
14 think looking at kind of the reasonableness of the
15 results, is it reasonable to expect that new
16 management can come into HQT and reduce cost so
17 dramatically as implied by the PEG model.

18 Q. **[262]** Okay. And I'd like to conclude by just
19 looking at your overall recommendations.

20 I understood from your Direct Report and
21 from the slides of this morning that your
22 recommending to the Board an X-Factor of minus
23 three point three eight percent (-3.38%) and an
24 S-Factor ranging from zero point one percent to
25 zero point three percent (0.1% - 0.3%). Can you

1 confirm this?

2 R. Yes. I can confirm that.

3 Q. **[263]** Okay. And you also confirm that with an
4 inflation factor at two point two percent (2.2%)
5 the MRI rate cap index would result in an increase
6 in the HQT twenty twenty-two (2022) OMNA revenue
7 requirements of five point forty-eight percent
8 (5.48%).

9 R. I haven't confirmed that inflation factor but I
10 take it as a given and that would be the result.
11 Yes.

12 Q. **[264]** Okay. So it would result in an increase of
13 five point forty-eight percent (5.48%) over twenty
14 twenty-one (2021)?

15 R. Yes. And again, as I mentioned, I've not looked at
16 what the specific inflation factor is but your math
17 is correct. It is the inflation factor minus three
18 point three eight (-3.38%)

19 Q. **[265]** Okay. And can you please confirm that this
20 represents an increase of about fifty-one point six
21 million dollars (\$51.6MM) over twenty twenty-one
22 (2021) not including the growth factor nor the
23 input of capital on the revenue requirement?

24 R. Again let me... Two things. Let me just say... I
25 have not done these calculations myself.

1 So my mandate was to recommend an X-Factor
2 based on North American transmission productivity
3 and provide that to the company.

4 But the second point I wanted to add is the
5 minus three point three eight (-3.38%) it would be
6 the inflation factor minus three point three eight
7 (-3.38%). So I just wanna make sure I didn't
8 misspeak on that.

9 **Q. [266]** Okay. Thanks. And my last question relates to
10 Brattle's use on a future HQT MRI that would
11 include some capital in the revenues index formula
12 and I wanted to refer you to B-0109. If the clerk
13 can put it on the screen? And I'm on page 20.

14 These are your answers to Option
15 Consommateurs' second round of IRs. So I can just
16 read you what interests me.

17 **R.** Okay.

18 **Q. [267]** So question 8a) is:

19 Please provide/reiterate Brattle's
20 views on a HQT comprehensive MRI,
21 including capital and if this should
22 be implemented in twenty twenty-two
23 (2022) or later.

24 And then we can read your answer:

25 See Table 20 in our Direct Report

1 where we presented the costs and
2 benefit discussion of including
3 capital in an MRI. We understand that
4 including capital in an MRI plan for
5 twenty twenty-two (2022) is not
6 contemplated and is not an option but
7 could be for any potential future MRIs
8 and would require a fuller analysis.

9 Can you please confirm this is still your view
10 regarding a future MRI including capital?

11 R. Yes. That's still my views.

12 Q. **[268]** Okay. Thank you. I have no further questions
13 and I thank you for your answers.

14 R. Thank you.

15 LE PRÉSIDENT :

16 Merci, Maître David. Maître Neuman RTIÉÉ.

17 Me YVES FRÉCHETTE :

18 It's a long day... It's a long day, Mister
19 President, everybody on the panel is off and
20 running for another period of questions or you need
21 a small recess? So, it's Mister Ros who is doing
22 the big job here.

23 Q. **[269]** So, you're fine to go on, Mister Ros, or do
24 you need a five minute recess?

25 R. No, I'm good.

1 Q. [270] Okay.

2 LE PRÉSIDENT :

3 We're good too.

4 Me DOMINIQUE NEUMAN :

5 The question is: does Mister Fréchette wants a
6 five minute recess?

7 Me YVES FRÉCHETTE :

8 Oh, well, I'm always at the disposal or mercy of
9 Mister President, I'm sorry. Before it was Mrs
10 Duquette, now it's Mister Roy. So, if Mister Roy,
11 would you wish to take a five minutes, there's no
12 problem for us, it's...

13 LE PRÉSIDENT :

14 Pas pour nous, mais soyez assuré si vous en avez de
15 besoin, on peut arrêter cinq minutes, il n'y a pas
16 de problème.

17 Me YVES FRÉCHETTE :

18 Moi, je vais regarder les témoins, là, s'il y en a
19 un qui me fait un clin d'oeil. O.K. Peut-être
20 laisser maître Neuman... Bien, c'est parce que se
21 faire couper son interrogatoire ce n'est pas
22 agréable, là. Si vous avez besoin d'une pause...
23 Maître Neuman, est-ce que vous en avez pour une
24 dizaine, une quinzaine, vingtaine?

25

1 Me DOMINIQUE NEUMAN :

2 Plus que ça, il faudrait que je revois, mais
3 j'ai... j'ai beaucoup de questions.

4 Me YVES FRÉCHETTE :

5 Bon, peut-être un petit cinq minutes, Monsieur le
6 Président, si vous permettez, là. On vient de
7 perdre une minute.

8 LE PRÉSIDENT:

9 Oui. Donc, quatorze heures trente ou vingt-cinq?
10 Quatorze heures vingt-cinq (14 h 25), oui.

11 Me YVES FRÉCHETTE :

12 A small recess, Mister Ros, just five minutes.

13 R. Okay.

14 LE PRÉSIDENT :

15 Quatorze heures vingt-cinq (14 h 25), c'est
16 correct?

17 Me YVES FRÉCHETTE :

18 Oui, c'est parfait, Monsieur le Président, cinq
19 minutes.

20 LE PRÉSIDENT:

21 Merci.

22 SUSPENSION DE L'AUDIENCE

23

24 REPRISE DE L'AUDIENCE

25

1 LE PRÉSIDENT :

2 Alors nous sommes de retour, Maître Fréchette.

3 Me YVES FRÉCHETTE :

4 Alors oui, Mister Ros is ready, Mister Vézina is
5 coming in, Mister Verret, they're all getting
6 ready, so.

7 LE PRÉSIDENT:

8 Maître Neuman.

9 Me DOMINIQUE NEUMAN :

10 Oui. Bonjour.

11 LE PRÉSIDENT :

12 Maître Neuman, êtes-vous en mesure de nous donner
13 un... un preview de combien de temps, là, vous
14 anticipez?

15 Me DOMINIQUE NEUMAN :

16 Approximativement quarante-cinq (45) minutes, comme
17 je l'avais indiqué dans... dans l'avis de
18 planification de l'audience.

19 LE PRÉSIDENT:

20 Parfait.

21 CONTRE-INTERROGÉS PAR Me DOMINIQUE NEUMAN :

22 Q. **[271]** So, good afternoon, Mister Ros.

23 R. Good afternoon.

24 Q. **[272]** Good afternoon, Mister President and Madame
25 la Régisseure. So, Dominique Neuman, for RTIÉE.

1 Mister Ros, first of all I will continue on an
2 aspect that you... you answered to my previous
3 colleague from Option Consommateurs. So, you
4 mentioned that the data was provided to Brattle by
5 Standard & Poor's who that... and it compiled, if I
6 understand correctly, the data which is contained
7 in the form submitted by each company to FERC. Is
8 that correct?

9 R. That is correct, yes.

10 Q. **[273]** Your company, Brattle, has not specifically
11 verified the data contained on these FERC forms. Is
12 that correct? You based yourself on the... the
13 compilation of the data that was provided by
14 Standard & Poor's.

15 R. That's correct, we used a Standard & Poor's
16 database.

17 Q. **[274]** There were... there were a few anomalies
18 mentioned earlier by my colleague from AHQ-ARQ and
19 on which you took an undertaking, and I will review
20 with you some other anomalies. But before going
21 into that, I'd like to ask you, is it... has it
22 come to your attention that the data, in other
23 circumstances, that the data provided to... to you
24 and to other... to other research companies by
25 Standard & Poor's might be incorrect, that there

1 might flaws in that compilation made by Standard...
2 Standard & Poor's of the FERC data, or that there
3 might be errors in the FERC files deposited by the
4 companies themselves? Generally, have you... has it
5 come to your attention that there might be a
6 problem that goes beyond the specific anomalies
7 that... that we'll be going through in this file?

8 R. No. It just not come to my attention that you can
9 not trust the FERC data for regulatory purposes or
10 for the purposes that we're using here on
11 productivity.

12 As I mentioned in my report, no database is
13 perfect, perfection can not be a requirement for
14 doing these type of studies or even for doing, you
15 know, FERC formula rates. There's always likely to
16 be some data issues in native database.

17 In this particular example we have seventy-
18 four (74) companies over twenty-five (25) years,
19 many different accounts, those are thousands and
20 thousands and thousands of data points. Are there
21 likely to be one or two of percentages that could
22 be errors or noise? Perhaps. But the issue is what
23 impact that has on the overall productivity
24 results. And that is one of the reasons why we like
25 to have more companies rather than less. Having

1 more companies minimizes any type of issues with
2 respect to somebody, you know, entering in a number
3 that was off by, you know, a factor of one or two
4 or three types. So, that... so, that's... I just
5 want to kind of give that preface to... to that in
6 terms of the FERC.

7 But no, it has not come to my attention,
8 the FERC is the gold standard of U.S. regulatory
9 accounting, and it has not come to my attention
10 that there are systematic problems with the FERC.
11 The FERC periodically reviews its FERC accounting,
12 issues notices, so that would be my response to
13 that.

14 Q. [275] And my question was not only about FERC...
15 the FERC's forms, but also about Standard & Poor's
16 and I know it's a very reputable company, that...
17 has it come to your attention or that there might
18 be... there might have be or there might be
19 problems in the... the assembling of the data that
20 is provided by Standard & Poor's?

21 R. No, absolutely. And in fact let me just add
22 something. In the preliminary proceeding for this
23 case, before I actually got involved, I think right
24 at the time Brattle got involved, there was a
25 document from PEG providing commentary on how to do

1 these studies, and one specific recommendation from
2 PEG was that Brattle would be better off if we used
3 the S&P data directly rather than using the data
4 directly from FERC, because the S&P and the S&L
5 data source has long experience and history of
6 taking the FERC data, putting it into a common
7 database and inquiring within the FERC about
8 certain anomalies. So, by the time we've got in the
9 S&P and S&L data it's already been cleanse, it's
10 already been cleaned and while there could be some
11 remaining data issues, those are part and parcel of
12 doing it. So, that would be, you know, kind of
13 my... my quick comment on that.

14 Q. **[276]** Okay. And finally on this general line of
15 questions, do you have a... Is it a certainty that
16 the economic data which is provide... that you used
17 in the database is only the... the economic data on
18 the electric transmission part of these companies?
19 Because some companies also have activities in
20 distribution, and some companies also have
21 activities in gas, are you absolutely certain that
22 the data that you have only touch the trans... the
23 electric... the electric transmission part of these
24 companies?

25 R. Yes, absolutely. The data that we focused on was

1 the transmission portion, we did not include any of
2 the distribution portion of the data or the
3 generation portion of the data.

4 Q. [277] And you were properly able to separate...
5 separate the electric transmission data?

6 R. I don't have to do that, the FERC does that. Okay.
7 The FERC has specific generation accounts, its got
8 specific transmission accounts, the kind we talked
9 about this morning, about 30 transmission accounts,
10 and then it has specific distribution accounts. So,
11 the FERC already does that, and as I mentioned
12 they've been doing this for 70 years.

13 Q. [278] So, I would ask monsieur le greffier if she
14 could project our Exhibit C-RTIEÉ-0026, which is
15 compendium of some of the data that is... that is
16 already provided in different pages of the proof
17 and some graphs and tables that we made out of
18 these data. So, that... and those data are mostly
19 coming from... from your report.

20 Me YVES FRÉCHETTE :

21 Is it a new document that you filed today or
22 something like that?

23 Me DOMINIQUE NEUMAN :

24 It's a document that was filed this morning around
25 8:30.

1 Me YVES FRÉCHETTE :

2 I'm sorry, I didn't have the chance to take a look
3 at it.

4 Q. **[279]** Mister Ros, can you send it to me?

5 Me DOMINIQUE NEUMAN :

6 Well, it's on...

7 Me YVES FRÉCHETTE :

8 Q. **[280]** Mister Ros, have you had the chance to look
9 at the document, the new document, that Mister
10 Neuman filed this morning?

11 R. I have not, no.

12 Me YVES FRÉCHETTE:

13 So, you'll have to project it, Mister Neuman,
14 because we didn't have the chance...

15 Me DOMINIQUE NEUMAN :

16 Yes. Yes. That's what I'm asking... that's what I'm
17 asking.

18 Me YVES FRÉCHETTE :

19 We didn't notice that you filed.

20 LE GREFFIER:

21 Is it this one?

22 Me DOMINIQUE NEUMAN :

23 Just a second. Yes. Yes, excerpt for the proof.

24 Me YVES FRÉCHETTE :

25 If you... So, since it's a new document, you won't

1 be angry at me, Mister Neuman, if we take the time
2 to really look at it when you ask a question just
3 to be sure that we understand and we answer right?

4 Me DOMINIQUE NEUMAN :

5 Absolutely. It's simply a question of instead of
6 going back and forth in many documents, many pages
7 of the document. It's summarized and also if we...
8 if we can move to... to the first page where is the
9 first graph.

10 LE PRÉSIDENT :

11 Est-ce que vous souhaitez, Maître Fréchette, est-ce
12 que vous vouliez prendre quelques minutes pour en
13 prendre connaissance ou vous allez attendre les
14 questions?

15 Me YVES FRÉCHETTE :

16 It's a document... it's a document that was filed
17 this morning, it's difficult for us to... to take
18 it into account in the heat of the moment to
19 remember, Mister Chairman, that we were in the
20 action all day long, so I trust Mister Neuman that
21 it's not in order to confuse the witnesses and in
22 order to speed up the process, so if I feel, Mister
23 Chairman, that we are not able to... to follow it
24 or Mister Ros has some difficulty, we will.. we
25 will give you a sign, we will send you a sign or

1 something.

2 Me DOMINIQUE NEUMAN :

3 Yes, yes. The idea is to make things easier,
4 because if I recall a few minutes ago, AHQ-ARQ had
5 verbally express that it had made a certain
6 calculation on two figures in... that were already
7 provided, which provided certain ratio, and an
8 undertaking was taken based on that verbal
9 calculation, and we, as you can see in the
10 following pages, we have done the same thing, but
11 instead of doing it verbally we put it in writing,
12 so that's more easily available.

13 Me YVES FRÉCHETTE :

14 If you don't mind, Mister Neuman, let's... let's go
15 on and if we have some difficulties then maybe
16 we'll ask for a recess or tomorrow you can finish,
17 because I'm quite sure that Mister Ros will to...
18 to be with us tomorrow also, so let's move on and
19 if you're okay with that, Mister Chairman, we'll...
20 we'll continue on and if there is some difficulties
21 and we are not at ease with the... we are not at
22 ease with the process and we need a little time, we
23 will just...

24 LE PRÉSIDENT:

25 Just go on and if ever you need to raise a flag

1 raise it.

2 Me YVES FRÉCHETTE:

3 Thank you.

4 Me DOMINIQUE NEUMAN:

5 Q. [281] So, Mister Ros, in the graph that we've made,
6 and it's a graph where we have both... where we
7 have two... two types of information that you have
8 provided us, which is the peak, the peak demand in
9 megawatt, the capacity in megawatt, and the length
10 of lines... well, we've placed it in kilometre, but
11 for the purpose of the graph it will show the same
12 if it was in... in miles.

13 So, what we see is that Hydro-Québec and
14 barely a few companies, maybe five, maybe ten if we
15 can... if we go a little bit further... further
16 than that curve, are really atypical from the
17 rest... from the rest of the companies of your
18 sample. And I know you've... you've made... you've
19 provided a sensitivity analysis which was discussed
20 a few minutes ago with my colleague from Option
21 Consommateurs, but do you think it would've have
22 been sounder from the start to choose to take only
23 the largest companies and I oppose that to your...
24 the wish that you've expressed from the beginning
25 to take as many, a number as large as possible of

1 companies. Would it not have been your purpose,
2 your initial purpose, to select those companies
3 that resemble the most Hydro-Québec both for the
4 purpose of the X and the S-Factor instead of making
5 it a goal to... to use the data from as many
6 companies as possible?

7 R. No. I reiterate my... my opinion about using as
8 many companies as possible to get transmission,
9 North American transmission productivity estimate
10 number. As I mentioned, we want more companies just
11 because productivity can be volatile, as I
12 mentioned and I showed in the results of when we
13 did the smaller sample for responding to the Régie,
14 that the volatility surrounding TFP was much more
15 volatile.

16 And also with respect to productivity,
17 we're interested more in the growth, not the
18 absolute level and productivity growth between a
19 small company and a very large company may not be
20 all that... that different in theory per se, there
21 still might be some economies of scale that are
22 occurring. But in the productivity study, since
23 we're interested more in the productivity growth
24 and not the level, it's another reason for having a
25 large variety of companies. When it comes to the

1 cost benchmarking, it's for this specific reason
2 that we use a methodology, an econometric model
3 that tries to control for the fact that HQT is so
4 different from our other companies.

5 Q. **[282]** If you would've taken a limited number of
6 very large companies, both in megawatt, in terms of
7 megawatts and in terms of length of lines, would it
8 have reduced your need to use a specific
9 methodology, the methodology that you call
10 fixed-effects, to... to normalize the data, to
11 control the data to avoid HQT being penalized for
12 its distinctive features?

13 R. No. No, it would not, because even if I compare HQT
14 to the top 10 U.S. firms it's still different,
15 still significantly different in ways, so I
16 would've continue to use the same approach.

17 Q. **[283]** Do you think it would have been appropriate
18 for... for your company to use that methodology
19 called fixed-effects also for the purpose of
20 determining the X-Factor?

21 R. Another completely separate issues to separate...
22 separate things. Fixed-effects has nothing to do
23 with the productivity study.

24 Q. **[284]** Either for the... for the purpose of the...
25 the X-Factor or for the purpose of the benchmarking

1 used for the determination of the S-Factor, did you
2 have any way of taking... taking into account as a
3 matter of fact subtracting from the data those
4 elements that for HQT subtract it from the
5 mechanism, which is the Y and Z-Factors. Was it
6 possible to isolate those Y and Z-Factors that
7 exist for HQT in order to subtract them from the
8 data you were comparing HQT to in both for the
9 purpose of the X and the S-Factor?

10 R. No. I don't think there's a way to do that.

11 Q. **[285]** Would it have... would... would it have been
12 possible if you had... you would have had a smaller
13 sample?

14 R. No. No. I mean it would not have been, no matter
15 what sample I had that would not have been
16 possible.

17 Q. **[286]** Is it possible in... in your methodology for
18 calculating either the X or the Y... the X or the
19 S-Factor to normalize the data in order to have an
20 equivalent quality of service, to take into account
21 the fact that some companies have an obligation to
22 serve, others have a lesser obligation or sometimes
23 not any obligation in that regard. Was there any
24 way that you... you would have been able to normalize
25 the data so that you would have an equivalency in

1 terms of quality of service?

2 R. Not... not that I'm aware of, it's certainly not
3 standard common practice in these productivity
4 studies, I have not read any academic articles on
5 how one would do that. It would have been
6 introducing an element into this analysis that
7 would've been extremely novel and extremely
8 controversial.

9 Q. **[287]** As you know, from my understanding you did
10 not include the Texas companies in your sample
11 unless I'm mistaken, and as you know there has been
12 some issues recently in Texas with ERCOT, namely
13 that maybe the company was very productive, had a
14 high productivity factor and maybe lower costs, but
15 it translated into a major dysfunction services in
16 the sense that the company was unable to deal with
17 certain... certain meteorological events that
18 happened. To what extent is the sample that you
19 have protected against such occurrences, the
20 occurrence being that we may have someone in that
21 seventy-four (74) companies, companies that are...
22 that appear to be very productive, that have lower
23 costs, but maybe are taking risks that others do
24 not take concerning the quality of their service?

25 R. So, one correction, I think I do have one Texas

1 company in there.

2 Q. **[288]** But it's not the one that had major failures
3 in the past... through the past year?

4 R. Well, we do not have... I don't know what it had in
5 the last year, we certainly don't have any of the
6 ERCOT companies because there's a unique feature
7 that Texas ERCOT companies are not regulated by the
8 FERC, so they don't have to report FERC
9 information. But... So, can you repeat your last
10 question again? I'm sorry.

11 Q. **[289]** Is your sample protected from having such
12 occurrences among the... the list of companies that
13 are out of that sample, companies that could have
14 the same flaws that have been... that have been
15 seen in Texas, namely high productivity, lower
16 cost, but something lacking in terms of the quality
17 of service that they're providing to the clients?
18 Because preparing for major meteorological events
19 is... takes both capital investments, but then
20 we're not talking about that, but also it may take
21 operation and maintenance costs that... that would
22 make the statistic jump with... Are you protect or
23 you do have no way of knowing if any of the
24 seventy-four (74) companies may have these flaws in
25 them?

1 R. So, I think I take issue with your definition of
2 flaws and the facts you're presenting about those
3 Texas utilities in a sense that I don't... I
4 haven't look specifically at those Texas utilities
5 and to see what is it that cause the... I think
6 you're referring to the ice storm of last year...

7 Q. **[290]** Yes.

8 R. ... and what caused that. So, I can say that we do
9 have very robust sample of companies that comprise
10 all geographic areas. I agree with your last point
11 about protect, investing in these potential natural
12 occurrences part of the study, Pacific Gas and
13 Electric is one, you know, hurricanes in Florida,
14 we include those companies, ice storm in Maine, we
15 include all that. So, I think the subsample is a
16 lot of companies that likely resemble whatever the
17 facts were for the Texas utilities that are part of
18 our sample.

19 Q. **[291]** There's a... we have found an article from
20 Dimitrios Giannakis that was several... several
21 weeks ago, we found that study published in 2005,
22 and there's an excerpt on that... that author that
23 we quoted on a few occasions. We quoted when we've
24 asked questions to PEG who answered those
25 questions. And it's not necessary to go to that...

1 that full document, but that author expressed the
2 idea that it's plausible and desirable to integrate
3 quality of service in benchmarking and incentive
4 regulation of electricity networks. Would you have
5 any... Are you in agreement with such a statement,
6 or in disagreement?

7 R. I think I'd be open to looking at that, considering
8 that, I'm not opposed to that as a categorical
9 statement.

10 Q. **[292]** And would that be compatible to the... with
11 the report that you're submitting, like it's...
12 would it... would it be possible to integrate that
13 in... in your analysis in your report?

14 R. Again, this is not common, it's not been done in
15 the past, I'm not sure the article you're referring
16 to, I don't know if he proposes a specific
17 methodology or it's more in general.

18 Q. **[293]** General, it's general.

19 R. In general.

20 Q. **[294]** Yes.

21 R. But, you know, a general methodology has to be
22 lended, and when you lend it for the first time
23 it's going to be controversial, there's no history
24 of how to do that. So, if that's something that the
25 Régie wants to explore in the future, certainly I'm

1 open to consideration.

2 Me DOMINIQUE NEUMAN :

3 Is it possible, Monsieur le Greffier, to go a bit
4 further in the document that is being projected? Is
5 it possible?

6 LE GREFFIER :

7 Que voulez-vous exactement?

8 Me DOMINIQUE NEUMAN :

9 Est-ce que c'est possible de changer de page?

10 LE GREFFIER :

11 Oui. Vers quelle page?

12 Me DOMINIQUE NEUMAN :

13 Bien, à la page suivante.

14 LE GREFFIER :

15 D'accord.

16 Me DOMINIQUE NEUMAN :

17 Puis, est-ce que c'est possible d'agrandir... O.K.

18 Oui, c'est ça.

19 LE GREFFIER :

20 Excusez, j'essaie d'agrandir un tout petit peu plus
21 pour voir.

22 Me DOMINIQUE NEUMAN :

23 Oui. Agrandir si c'est possible. Is it possible to
24 make it larger so that the whole... the whole table
25 will be projected, to make it smaller, not larger,

1 make it smaller so that it would... Yes.

2 Me YVES FRÉCHETTE :

3 I'm sorry, Mister Neuman, is these extracts or you
4 took... Did you choose between inside of the...
5 inside the tables that Brattle furnished or you
6 took it as it is?

7 Me DOMINIQUE NEUMAN :

8 To answer your question, I'm doing in a vented way
9 what was done verbally by HQT, which is as you can
10 see it's not the total list of seventy-four (74)
11 companies, it's an extract.

12 Me YVES FRÉCHETTE :

13 So, you extract... you extract some...

14 Me DOMINIQUE NEUMAN :

15 It's a selection, it's the ones that have the...
16 that have the... the lowest percentage at first,
17 and then there's a... there's a thicker line where
18 we did not reproduce the companies in between, and
19 then after it's the other companies that have the
20 higher percentage.

21 Me YVES FRÉCHETTE :

22 So, you took Brattle information in order to... to
23 do something else?

24 Me DOMINIQUE NEUMAN :

25 Yes.

1 Me YVES FRÉCHETTE :

2 Is that right?

3 Me DOMINIQUE NEUMAN :

4 Yes. It's the information that was provided by
5 Brattle in answer to our written question.

6 Me YVES FRÉCHETTE :

7 Mister... I won't object yet today to it, Mister
8 Neuman, because we wish to go on and I know you're
9 a good person, but if Mister Ros is uncomfortable
10 with the way you're presenting it or you need
11 sometime to take a good look at it, Mister Ros,
12 don't... don't hesitate to... to flag me and I'm
13 sure Mister Neuman will be happy for you to take
14 the time to take a look.

15 Me DOMINIQUE NEUMAN :

16 Absolutely, absolutely.

17 R. Okay.

18 Me YVES FRÉCHETTE :

19 Q. **[295]** It's clear, Mister Ros?

20 R. Yes, it's clear, yes. Thank you.

21 Me DOMINIQUE NEUMAN :

22 Q. **[296]** So... so, Mister Ros, we placed... we placed
23 among the seventy-four (74) companies that are
24 listed in your sample, we classified them... we
25 classified them based on the previous two last

1 columns, which is the load factor, the ratio
2 between the system peak and the total energy. So,
3 we start from a low figure of 1,64%, which was the
4 one mentioned to you few minutes ago by AHQ-ARQ on
5 Central Maine Power Company and that figure seems
6 implausible with factor.

7 Then we kept going on as the figures went
8 up and we comment and but it's up to you to tell us
9 if you agree with that comment or if you disagree
10 that certain figures... Certain percentages seem...
11 Either implausible or abnormally low.

12 And then in the second part of the table,
13 after the thick line, we have a percentage data
14 extremely high. Eighty percent (80%).

15 Then we see it goes until ninety-four
16 percent (94%) and there are other figures that we
17 don't see on the screen which even go until more
18 than one hundred percent (+100%) of load factor
19 which seem either abnormally high or technically
20 impossible if it's more than one hundred percent
21 (+100%).

22 So and the last one, if monsieur le
23 greffier can go a little further down in the table
24 so that you can see the last line. Yes. It ends
25 with the Ohio Valley Electric Corporation which has

1 one hundred and twenty-seven percent (127%) load
2 factor which seems impossible and that's the
3 company that was mentioned to you verbally by AHQ-
4 ARQ and so you have already taken an undertaking to
5 comment on both the first line, the Maine company
6 and the NEIINE and the last one on Ohio and but
7 would you have any comments on those other
8 seemingly anomalies but you'll tell us if you don't
9 think it's abnormal but I figure that it may seem
10 abnormal for these other companies that are listed
11 in this table.

12 R. Yes. It's hard to comment on when you are seeing
13 this for the first time. I will say you know a
14 couple of things. If you go up, in the way you are
15 calculating this it's just the annual total
16 megawatt hours divided by the peak demand.

17 Q. **[297]** It's based on the two first columns. Yes.

18 R. Yes. So you know this is probably best taken in the
19 data request, the definition of the load factor
20 average usage over a period divided by the peak.

21 So I know you're using the term "load
22 factor" in that column but I would definitely need
23 to pause and think about whether that really is a
24 load factor in the way I use "load factor".

25 Q. **[298]** Yes.

1 R. Leave it at that.

2 Q. **[299]** Even if it's not the load factor in your
3 definition...

4 R. Humhum.

5 Q. **[300]** ... would you think that the ratio between
6 column "A" and column "B" so that appears in the
7 third column, would you think that that ratio, no
8 matter how you call it, is abnormal?

9 R. So the total energy provided in a year divided by
10 the peak. That's what you're doing?

11 Q. **[301]** Just a second. Yes. The total energy by the
12 capacity. Yes.

13 R. By the capacity or by the peak?

14 Q. **[302]** By the peak. The peak capacity. Yes.

15 R. They are two different things.

16 Q. **[303]** I'm talking... I'm using the words that I've
17 used to describe column 1 which is the peak which
18 is what you have described as the peak. So I'm
19 using the...

20 Me YVES FRÉCHETTE :

21 Wait Mister Neuman. It would be preferable that you
22 send us the way you put on this graph. It seems to
23 be difficult. Are you okay in going on Mister Ros
24 or...

25

1 Me DOMINIQUE NEUMAN :

2 Well I'm using the same equation that was used
3 verbally by AHQ-ARQ which used the same percentages
4 for the last line and the first line. So I'm using
5 exactly the same ratio.

6 The same way that was calculated by AHQ-ARQ
7 for which you have taken an undertaking. And maybe
8 you'll want to take an undertaking to comment on
9 these other lines that are maybe about ten (10)
10 lines, ten (10) or twelve (12) lines. Maybe you
11 want to take an undertaking to comment these lines?

12 Me YVES FRÉCHETTE :

13 But what would it be Mister Neuman? It's to
14 explain? What is the question? What you are looking
15 for is...

16 Me DOMINIQUE NEUMAN :

17 Well what we're looking for is that it's mister...
18 Does Mister Ros feel that there's some
19 abnormalities in the figures that appear for these
20 about twelve (12) companies. Ten (10).

21 Me YVES FRÉCHETTE :

22 So the ten (10) powerline companies. The West End
23 Power Company, Niagara Mohawk, Public PG&E?

24 Me DOMINIQUE NEUMAN :

25 From Maine on the top. The Maine until Ohio.

1 Me YVES FRÉCHETTE :

2 From the top to bottom. So the whole chart. Is that
3 right Mister Neuman?

4 Me DOMINIQUE NEUMAN :

5 The whole chart for which an excerpt is found here.

6 Me YVES FRÉCHETTE :

7 Well...

8 Me DOMINIQUE NEUMAN :

9 It's not all the... I don't believe it's all the
10 companies. It's not all those companies that you...

11 LE PRÉSIDENT :

12 Monsieur Neuman on a beaucoup de difficulté à
13 comprendre ce que vous recherchez.

14 Me LISE DUQUETTE :

15 Maître Neuman si je peux me permettre?

16 Me DOMINIQUE NEUMAN :

17 Humhum?

18 Me LISE DUQUETTE :

19 Là ce que vous cherchez c'est de (inaudible) Power
20 jusqu'à Ohio Valley Electric Corporation. Vous
21 voulez que monsieur Ros vous dise si les chiffres
22 en pourcentage lui semblent une anomalie. C'est ça?

23 Me DOMINIQUE NEUMAN :

24 Yes. Well. I'll say it in English. First of all if
25 there are some...

1 Me LISE DUQUETTE :

2 Mais j'aimerais ça qu'on s'entende vous et moi...

3 Me DOMINIQUE NEUMAN :

4 Oui.

5 Me LISE DUQUETTE :

6 ... puis vous reposerez la question si on a bien
7 compris.

8 Me DOMINIQUE NEUMAN :

9 S'il croit que les chiffres dont il s'est servis
10 dans la base de données sont exacts et je fais
11 référence au fait qu'en réponse à l'AHQ-ARQ tout à
12 l'heure le témoin avait dit que peut-être il y
13 aurait une erreur dans le chiffre.

14 Me LISE DUQUETTE :

15 Oui, mais ça ça a été pris avec un engagement.

16 Me DOMINIQUE NEUMAN :

17 Oui.

18 Me LISE DUQUETTE :

19 Alors, monsieur Ros n'a pas de réponse encore à ça.

20 Me DOMINIQUE NEUMAN :

21 Exactement. Donc, c'est la même question non
22 seulement sur les deux compagnies, la première et
23 la dernière, sur lesquelles il y a déjà un
24 engagement, mais sur les autres compagnies qui sont
25 dans ce même tableau.

1 LE PRÉSIDENT :

2 Pour les fins de compréhension vous pourriez
3 l'écrire et nous revenir avec une question écrite.
4 Juste parce qu'il y a beaucoup de confusion. On va
5 passer du temps à rédiger en groupe une question?

6 Me DOMINIQUE NEUMAN :

7 Si je peux juste poser... I can formulate the
8 question right now. Right?

9 LE PRÉSIDENT :

10 Mais là vous avez parlé d'avoir un undertaking.
11 C'est ça?

12 Me DOMINIQUE NEUMAN :

13 Yes.

14 LE PRÉSIDENT :

15 Il faut juste l'écrire.

16 Me DOMINIQUE NEUMAN :

17 Q. **[304]** Yes. So Mister Ros do you think that there is
18 an anomaly in the ratio column or the third column
19 of this table and could that anomaly come from an
20 error in the data which is contained in the first
21 two columns?

22 Me YVES FRÉCHETTE :

23 Well I would say I've read it. Thank you Mister
24 Neuman. I'm really uncomfortable with it Mister
25 Chairman.

1 If there is an undertaking that has to be
2 taken by Brattle is to maybe have a second look at
3 what's on HQT-10 DOC 6.1 p. 12.

4 You see if he wants to look at these
5 figures another time just to be sure there's
6 something missing or there's a coma that is not at
7 the good place or something like that, but asking
8 Mister Ros to comment a document that was filed
9 this morning with a formula or something that they
10 calculate on their part well it's up to them to
11 make their demonstration, Mister Chairman. So I'm
12 not...

13 LE PRÉSIDENT :

14 Are you at ease with this...

15 Me YVES FRÉCHETTE :

16 I'm not at all at ease with this undertaking but if
17 it would of some interest to the interveners maybe
18 mister Ros could look at it again, at HQT-10 DOC
19 6.1. And it was the response and table at 1.1.14
20 page 10 and following.

21 So maybe it's a thing that we can do but
22 trying to comment on stuff that maybe we come up
23 with this morning well it's difficult Mister
24 Chairman and I don't think we're going somewhere.

25

1 LE PRÉSIDENT :

2 Yes. I'm taking time. That document was filed this
3 afternoon.

4 Me DOMINIQUE NEUMAN :

5 No. There's another document which was filed this
6 afternoon...

7 LE PRÉSIDENT :

8 Yes.

9 Me DOMINIQUE NEUMAN :

10 ... but what I'm talking about it's the document
11 that was filed around eight thirty (8:30) this
12 morning but...

13 LE PRÉSIDENT :

14 But there's no point of relevance here and I think
15 that we're spending a lot of time on something that
16 seems very much unclear.

17 I mean it's not too much to ask from you to
18 write it. I'm sure we will see) soon what is the
19 undertaking you wish and we will see if it's
20 relevant.

21 Me DOMINIQUE NEUMAN :

22 I'm just...

23 LE PRÉSIDENT :

24 Honestly I don't understand what's your saying.

25 Maître Duquette has just asked you the same

1 question. So we're not here just to discuss forever
2 about what.

3 M. JEAN-PIERRE LAFLAMME :

4 Maître is it possible for me to explain what is a
5 "load factor".

6 Me YVES FRÉCHETTE :

7 No. You are not a lawyer Mister Laflamme. It's not
8 the first time you raise your...

9 Me DOMINIQUE NEUMAN :

10 Mister Laflamme you cannot talk. You cannot talk
11 Mister Laflamme.

12 M. JEAN-PIERRE LAFLAMME :

13 Bien I can explain that.

14 Me DOMINIQUE NEUMAN :

15 Mister Laflamme you cannot talk please.

16 M. JEAN-PIERRE LAFLAMME :

17 O.K.

18 Me YVES FRÉCHETTE :

19 I'm sorry Mister Chairman. It's going to be a
20 circus here. Mister Laflamme...

21 Me DOMINIQUE NEUMAN :

22 Mister Chairman my question, I'll mention it, and
23 it's the same question, the same...

24 LE PRÉSIDENT :

25 Mister Newman I just asked you to write it because

1 we are confused and we are... We have been talking
2 about that for the last five to ten minutes (0:05 -
3 0:10).

4 Me DOMINIQUE NEUMAN :

5 Yes.

6 LE PRÉSIDENT :

7 It's enough.

8 Me DOMINIQUE NEUMAN :

9 Okay.

10 LE PRÉSIDENT :

11 You asked to verify a question and I think the best
12 would be writing it. Write it and we'll understand
13 what that means.

14 Me DOMINIQUE NEUMAN :

15 You want me to write it right now or after the end
16 of my...

17 LE PRÉSIDENT :

18 Bien, you should carry on your cross-examination
19 and you'll have time to write it afterwards.

20 Me DOMINIQUE NEUMAN :

21 Okay. And my goal is to obtain an undertaking
22 similar to the one that was taken by AHQ-ARQ on two
23 of the lines of that table.

24 Me YVES FRÉCHETTE :

25 If you permit, Mister Chairman, we'll take a look

1 at the document that was filed today which I didn't
2 have the chance to do. Mister Ros will have the
3 chance to see it if there's something that is filed
4 tonight.

5 LE PRÉSIDENT :

6 Okay.

7 Me YVES FRÉCHETTE :

8 So and you can count on our best efforts if
9 possible to give you the information Mister
10 Chairman in order for you to make a good decision.

11 LE PRÉSIDENT :

12 Yes.

13 Me YVES FRÉCHETTE :

14 But if we feel that it's of no value for this file
15 of course we will object to it but we need first of
16 all the formal question from mister Neuman and we
17 need also the way he calculates stuff. So in order
18 for mister Ros to understand it very clearly.

19 LE PRÉSIDENT :

20 You should proceed.

21 Me DOMINIQUE NEUMAN :

22 No problem. Is it possible to go to the next page
23 please?

24 LE GREFFIER :

25 Oui. Excusez-moi. Yes.

1 Q. **[305]** Also Mister Ros in an answer to our question
2 on page 1 you've indicated that you've used for
3 PG&E a length of transmission lines of thirty-six
4 thousand six hundred and fifty-nine miles
5 (36,659 mi.) and from what we've checked and we
6 didn't check for all the companies but from that
7 large company we've checked and the website of that
8 company mentions eighteen thousand four hundred and
9 sixty-six (18,466 mi.) of transmission lines.

10 Do you have any comments on that? Is it
11 possible there might be a mistake somewhere?

12 R. This is going straight from the first database. So
13 I don't know how those companies that you've found
14 if it's the exact same company or not.

15 And on certain miles I think they're
16 connected. What is interconnected transmission
17 lines, there could be a significant amount of in
18 state transmission lines.

19 So I'm not completely sure of what the
20 eighteen thousand means.

21 Q. **[306]** Is it possible that there was some clerical
22 error on the part of Brattle?

23 Me YVES FRÉCHETTE :

24 I will object to this question, Mister Chairman.

25 It's clear that mister Ros used FERC Form 1

1 documents from Standard and Poor's.

2 These are the information that was gathered
3 by FERC. It's long been used. So we know that
4 mister Ros I'm sure he's never review websites from
5 this company, a website from that company.

6 We use FERC Form 1 information Mister
7 Neuman. So I object to that question.

8 Me DOMINIQUE NEUMAN :

9 My confrere did not hear my question.

10 Me YVES FRÉCHETTE :

11 Yes.

12 Me DOMINIQUE NEUMAN :

13 My question was not about the subject of his
14 objection.

15 Q. **[307]** Is it possible that Brattle committed an
16 error in transcribing the figure which I've
17 received from Standard and Poor's and that Standard
18 and Poor's maybe had the capacity to do eighteen
19 thousand instead of thirty-six thousand?

20 Me YVES FRÉCHETTE :

21 Well this question is a good one but we've surely
22 not looked at website. So Mister Ros you understood
23 the question?

24 Me DOMINIQUE NEUMAN :

25 Q. **[308]** My question is not about the website. Is it

1 possible that Brattle, after having received the
2 figures by FERC, that Brattle may have made a
3 mistake in not transcribing the exact... The figure
4 that Standard and Poor's had given?

5 R. Again it's unlikely. It's not likely to take the
6 Standard and Poor's database and reenter it
7 somewhere. So unlikely. So we'd be happy to go back
8 to the original as in the database and confirm it.

9 Q. **[309]** Yes. Because it's a bit surprising.

10 LE PRÉSIDENT :

11 So it would be satisfactory if Mister Ros goes back
12 and just checks if the number in the S&P document
13 is the same?

14 Me DOMINIQUE NEUMAN :

15 Yes.

16 LE PRÉSIDENT :

17 That will be it?

18 Me DOMINIQUE NEUMAN :

19 Yes.

20 LE PRÉSIDENT :

21 Okay.

22 Me DOMINIQUE NEUMAN :

23 Is it...

24 Me YVES FRÉCHETTE :

25 Just make this verification Mister Ros just to

1 be... But I'm not sure what we're looking for

2 Mister Neuman. Anyway.

3 Me DOMINIQUE NEUMAN :

4 Verify with S&P data if the thirty-six thousand six
5 hundred and fifty-nine miles (36,659 mi.) is...

6 LE PRÉSIDENT :

7 That's it.

8 Me DOMINIQUE NEUMAN :

9 ... as in the information deposited by the
10 Brattle...

11 Dr. AUGUSTIN J. ROS:

12 That's the eighteen four six six...

13 Me DOMINIQUE NEUMAN :

14 No. Eighteen fourteen (1814) that's the figure that
15 we thought.

16 LE PRÉSIDENT :

17 The thirty-six six...

18 Me DOMINIQUE NEUMAN :

19 Yes. Thirty-six thousand (36,000).

20 LE PRÉSIDENT :

21 Six five nine that's the one. That's all we
22 checked.

23 Me YVES FRÉCHETTE :

24 Q. **[310]** Now you understand Mister Ros your...

25 R. Yes. I understand that, my assistant just checked

1 it out and it is the same one.

2 Q. **[311]** So you confirm that the data that you used in
3 your report are the Standard and Poor's

4 R. Yes. It's thirty-six thousand six hundred and
5 fifty-nine (36,659) is the correct one from
6 Standard and Poor's.

7 LE PRÉSIDENT :

8 That's it Mister Neuman?

9 Me DOMINIQUE NEUMAN :

10 Yes.

11 LE PRÉSIDENT :

12 Could we proceed?

13 Me DOMINIQUE NEUMAN :

14 On the rest of the items in this document I've
15 asked... I've already asked my questions in another
16 way. So that document is covered. Okay we've filed
17 another document but it will be used in our own
18 testimony. It will not be used for the questioning
19 of mister...

20 Mister Ros I would go to your presentation
21 of today.

22 R. Okay.

23 Q. **[312]** Okay. On page 8 you mentioned on page 8 of
24 your presentation today you mentioned that the X-
25 Factor tends to go to zero. We see in the middle

1 paragraph on page 8... Okay. It's the third item on
2 that page.

3 R. Yes.

4 Q. **[313]** It says that it tends to go to zero in the
5 long run.

6 R. That's not right.

7 Q. **[314]** That's not correct?

8 R. No.

9 Q. **[315]** Okay. So could you... That's what I read in
10 your text.

11 R. It says: "the X-Factor is derived from the
12 constraint observed in competitive markets industry
13 economic profits tend to zero in the long run."

14 Q. **[316]** Okay so that...

15 R. It doesn't say that the X-Factor goes to zero in
16 the long run.

17 Q. **[317]** Thank you. That clarifies it. On pages 13 and
18 14...

19 LE PRÉSIDENT :

20 Monsieur Neuman vous avez atteint vos quarante-cinq
21 minutes (45 min). Est-ce que vous en avez
22 longtemps?

23 Me DOMINIQUE NEUMAN :

24 J'en n'ai pas pour longtemps, mais une partie de
25 mes minutes ont être prises par maître Fréchette.

1 Les objections.

2 LE PRÉSIDENT :

3 Il y a des minutes qui ont été prises à essayer de
4 comprendre votre question.

5 Me YVES FRÉCHETTE :

6 Moi, je ne suis pas d'accord, Monsieur le
7 Président. On ne peut pas me reprocher quoi que ce
8 soit. Maître Neuman dépose les documents à tort et
9 à travers, en matinée et en après-midi...

10 LE PRÉSIDENT :

11 Oui, mais...

12 Me YVES FRÉCHETTE :

13 ... que je n'ai jamais vus qu'il aurait pu
14 m'envoyer la veille ou l'avant-veille. Je suis
15 désolé, mais chaque procureur est responsable de
16 gérer son contre-interrogatoire et son temps. Ce
17 n'est pas à moi à faire ça. Vous n'avez rien à me
18 reprocher, Maître Neuman.

19 Me DOMINIQUE NEUMAN :

20 O.K. Comme j'ai mentionné donc je suis aux pages 13
21 et 14.

22 R. Okay.

23 Q. **[318]** My question concerns account number 565 which
24 is the transmission of electricity by others and
25 there were some questions asked to you earlier

1 today on that. To put it simply is it a correct
2 understanding.

3 So when you pay a tariff to another
4 transmission company which provides you some
5 transmission service that other company if it's
6 regulated normally either has an incentive
7 mechanism of its own or is based on cost of service
8 loss/return on investment?

9 So when the subject company faces another
10 company it pays the cost. The O&M expense plus also
11 the capital cost which is the amount on its capital
12 cost plus the return investment of that other
13 company. Is that the correct understanding?

14 R. Generally yes. The other transmission provider has
15 regulated rates primarily based on cost of service.

16 Q. **[319]** Would it have been possible for you to
17 isolate within the dock number 565 of these various
18 companies the part which consists in O&M expenses
19 and not in amortization of capital and not return
20 on the investment of that other company. Would it
21 have been possible for you to isolate the data. To
22 take that data only into consideration?

23 R. Well two things on that. It would have been
24 possible to do in a practical sense but I don't
25 know why you would want to do that?

1 Q. **[320]** Well so that we don't need to take into
2 account operation and maintenance costs.

3 R. No. You have to take everything into account. As I
4 mentioned in the make or buy decision either you're
5 making it yourself which your incurring capital and
6 O&M expenses or you are buying it.

7 So when you're buying something it rewards
8 the owner for its cost of service. I would not try
9 to remove the capital portion of the FERC 565 O&M
10 account.

11 Q. **[321]** But do you agree with me that it had been not
12 bought but done by the subject company itself for
13 the purpose of the economics that you are taking
14 into account you would have taken into account only
15 the operation and maintenance cost?

16 R. No. I mean it's in the capital accounts. So when
17 the transmission provider provides its own
18 transmission service it's incurring expenses in two
19 accounts. It's incurring expenses in the capital
20 account and it's incurring expenses in the O&M.

21 You can't separate the two. The O&M
22 expenses are not independent. They are usually link
23 with the capital accounts.

24 Q. **[322]** Yes. I totally agree but since the mechanism
25 is a mechanism on O&M it would have been possible

1 to separate the O&M from the capital expenses.

2 R. No. Not to get a productivity number. No.

3 Q. **[323]** I'll go at page 16.

4 R. Okay.

5 Q. **[324]** When you speak that Maine is in close
6 proximity...

7 Me YVES FRÉCHETTE :

8 Just a second. Same page?

9 Me DOMINIQUE NEUMAN :

10 Q. **[325]** Yes. The last line. "Central Maine Power is
11 in close proximity...". Are you just talking about
12 the geographic proximity or are you stating that
13 there is a certain resemblance in the way the
14 company operates or...

15 R. I was meaning geographic proximity.

16 Q. **[326]** Okay. Let me see. I just want to check if
17 there's another question on page 17.

18 R. Yes.

19 Q. **[327]** No. So I thank you very much. I thank the
20 Régie. And thank you Mister Ros and this concludes
21 my questions.

22 R. Thank you.

23 LE PRÉSIDENT :

24 Merci. La Régie. Je ne le sais pas si maître
25 Legault... Vous pouvez toujours vérifier avec

1 monsieur Morin en premier s'il peut dépasser trois
2 heures trente (15 h 30)?

3 Me LOUIS LEGAULT :

4 Écoutez, Monsieur le Président...

5 LE PRÉSIDENT :

6 Oui. Je vous en prie.

7 Me LOUIS LEGAULT :

8 ... je vous suggère plutôt de commencer demain
9 matin. Je ne sais pas si la formation aura aussi
10 des questions.

11 Moi, j'en ai pour quinze à vingt minutes
12 (15 - 20 min) maximum. Si la formation a des
13 questions ce serait plus simple qu'on fasse le bloc
14 de la Régie ensemble. C'est ma proposition.

15 LE PRÉSIDENT :

16 Oui. Maître Fréchette est-ce que ça vous
17 conviendrait? Je pense que le docteur Ros est
18 fatigué un peu aussi.

19 Me YVES FRÉCHETTE :

20 Oui. Docteur Ros like me is up and kicking if I can
21 say. It' would be, it's an important and
22 interesting subject that we could go on and on but
23 mister Morin has worked a long day trying to figure
24 out our words in French and English and all of that
25 and I'm sure that mister Ros is available for

1 tomorrow morning.

2 I will ask mister Verret and Vézina. I
3 don't know but surely they will be surely up on the
4 stand for you everybody to be able to render this
5 testimony.

6 So if mister Legault has for fifteen to
7 twenty minutes (15 - 20 min) and maybe the
8 formation. So let say that at ten o'clock mister
9 Ros and the Panel of mister Vézina and Verret I can
10 assume that you will be free to...

11 LE PRÉSIDENT :

12 You said ten o'clock (10:00)?

13 Me YVES FRÉCHETTE :

14 Oui. Ten o'clock (10:00). I can assume that at ten
15 (10:00) they will be free.

16 LE PRÉSIDENT :

17 So we'll be back at nine o'clock tomorrow to carry
18 on the cross-examination of mister Ros by the Régie
19 and members of the Panel.

20 Me YVES FRÉCHETTE :

21 Thank you, Mister Chairman.

22 LE PRÉSIDENT :

23 Bonne fin de soirée.

24 AJOURNEMENT DE L'AUDIENCE

25 RIOPEL GAGNON LAROSE & ASSOCIÉS