RÉGIE DE L'ÉNERGIE

ÉTABLISSEMENT D'UN MÉCANISME DE RÉGLEMENTATION
INCITATIVE ASSURANT LA RÉALISATION DE GAINS
D'EFFICIENCE PAR LE DISTRIBUTEUR D'ÉLECTRICITÉ
ET LE TRANSPORTEUR D'ÉLECTRICITÉ

DOSSIER : R-3897-2014

RÉGISSEURS : **Mme DIANE JEAN, présidente**
Me LISE DUQUETTE
M. BERNARD HOULE

AUDIENCE DU 27 MAI 2015

VOLUME 1

CLAUDE MORIN et ROSA FANIZZI
Sténographes officiels

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Me HÉLÈNE SICARD
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L'AN DEUX MILLE QUINZE (2015), ce vingt-septième (27e) jour du mois de mai :

PRÉLIMINAIRES

LA GREFFIÈRE :

Protocole d'ouverture. Audience du vingt-sept (27) mai deux mille quinze (2015), dossier R-3897-2014. Établissement d'un mécanisme de réglementation incitative assurant la réalisation de gains d'efficience par le distributeur d'électricité et le transporteur d'électricité.

Les régisseurs désignés dans ce dossier sont madame Diane Jean, présidente de la formation, de même que maître Lise Duquette et monsieur Bernard Houle.

Les procureurs de la Régie sont maître Louis Legault et maître Jean-François Ouimette.

La mise en cause est Hydro-Québec Distribution et Transport, représentée par maître Éric Fraser et maître Yves Fréchette.

Les intervenants sont :

Association des redistributeurs d'électricité du Québec, représentée par maître Sophie Lapierre;

Association hôtellerie Québec et Association des restaurateurs du Québec, représentées par maître

Steve Cadrin;
Association québécoise des consommateurs industriels d’électricité et Conseil de l’industrie forestière du Québec, représentées par maître André Turmel;
Énergie Brookfield Marketing S.E.C., représentée par maître Paule Hamelin;
Fédération canadienne de l'entreprise indépendante, représentée par maître André Turmel;
Option consommateurs, représentée par maître Éric David;
Regroupement national des conseils régionaux de l'environnement du Québec, représenté par maître Catherine Fortier-Pesant;
Stratégies énergétiques et Association québécoise de lutte contre la pollution atmosphérique, représentées par maître Dominique Neuman;
Union des consommateurs, représentée par maître Hélène Sicard;
Union des municipalités du Québec, représentée par maître Raphaël Lescop.
Y a-t-il d'autres personnes dans la salle qui désirent présenter une demande ou faire des représentations au sujet de ce dossier? Je demanderais aux parties de bien s'identifier à

chacune de leurs interventions pour les fins de l'enregistrement. Aussi auriez-vous l'obligeance de vous assurer que votre cellulaire est fermé durant la tenue de l'audience. Merci.

LA PRÉSIDENTE :

Bonjour et bienvenue à tous. J’aimerais débuter cette audience par un rappel du cadre légal particulier du dossier et de son contexte. D’abord, l’article 48.1 de la Loi sur la Régie de l’énergie stipule que la Régie établit un mécanisme de réglementation incitative assurant la réalisation de gains d’efficience par le distributeur d’électricité et le transporteur d’électricité.

Ce mécanisme doit poursuivre les objectifs suivants : Premièrement, l’amélioration continue de la performance et de la qualité de service; deuxièmement, une réduction des coûts profitables à la fois aux consommateurs et selon le cas au Distributeur ou au Transporteur; troisièmement, l’allégement du processus par lequel sont fixés ou modifiés les tarifs du transporteur d’électricité et les tarifs du distributeur d’électricité applicables à un consommateur ou à une catégorie de consommateurs.

Par ailleurs, l’article 20 du chapitre VIII des lois deux mille quinze (2015), sanctionné le vingt et un (21) avril deux mille quinze (2015), précise qu'à compter du premier (1er) janvier deux mille quatorze (2014) jusqu'au début de l'année tarifaire suivant le retour à l'équilibre budgétaire, le mécanisme de réglementation incitative établi conformément à l'article 48.1 de la Loi ne peut s'appliquer.

Pour l'application de l'article 20, le retour à l'équilibre budgétaire a lieu lorsque les comptes publics présentés à l'Assemblée nationale, permettre de constater un solde budgétaire nul ou excédentaire conformément à la Loi sur l'équilibre budgétaire. À ce sujet, le budget deux mille quinze-seize (2015-2016) du gouvernement du Québec présenté le vingt-six (26) mars deux mille quinze (2015) prévoit le retour à l'équilibre budgétaire au cours de la présente année.

En vertu de la Loi sur l'administration financière, les comptes publics pour deux mille quinze-seize (2015-2016) seront déposés au plus tard le trente et un (31) décembre deux mille seize (2016), ainsi avec un retour à l'équilibre budgétaire en deux mille quinze-seize (2015-2016) pourrait s'appliquer dans le scénario le plus hâtif à compter des années tarifaires deux mille dix-sept (2017) d'Hydro-Québec comme transporteur et distributeur d'électricité débutant le premier (1er) janvier et le premier (1er) avril deux mille dix-sept (2017) respectivement.

Pour initier le présent dossier, la Régie a mandaté la firme Elenchus Research Associates afin d'effectuer une revue des mécanismes de réglementation incitative utilisés par d'autres régulateurs dans les domaines de la distribution et du transport d'électricité. Le rapport d'Elenchus a été rendu public le quatre (4) mars deux mille quinze (2015).

(9 h 10)

Ce matin, nous sommes réunis afin d'approfondir notre compréhension des informations présentées dans le rapport d'Elenchus. Voici comment nous allons fonctionner. Tout d'abord, monsieur Todd et madame Chaplin d'Elenchus feront une courte présentation. Les intervenants auront ensuite droit chacun à une période de trente (30) minutes pour leurs questions. Je vous demanderais de limiter les questions au contenu du rapport et de la présentation. Vous recevrez prochainement une lettre afin de préparer la rencontre préparatoire prévue le quinze (15) juin qui portera sur le processus à suivre pour le déroulement du présent dossier. Maître Legault va maintenant nous présenter les témoins.

Me LOUIS LEGAULT :

Merci Madame la Présidente, Monsieur, Madame les Régisseurs. Madame la Greffière, il serait peut-être temps d'assermenter les témoins.

PANEL ELENCHUS

L'an deux mille quinze (2015), ce vingt-septième (27e) jour du mois de mai, ont comparu :

CYNTHIA J. CHAPLIN, Regulatory Economist, Elenchus Research Associates Inc., place of business located at 34 King Street East, Suite 600, Toronto, Ontario;

JOHN D. TODD, President of Elenchus Research Associates Inc., place of business located at 34 King Street East, Suite 600, Toronto, Ontario;

LESQUELS, après avoir fait une affirmation solennelle, déposent et disent :

EXAMINED BY Me LOUIS LEGAULT :

Q. **[1]** I will ask you to speak closer to your mic, it seems that they're not hearing very well in the back. If it continues, there may be a technical problem, we'll have it solved but if not just speak closer to the mic. If it works, fine, we don't have to do anything else.

Mr. JOHN D. TODD:

A. It's probably just because we were standing up. Is it okay now?

Q. **[2]** Are you hearing better now? Okay, that's it. For your information, you both supplied us with a copy of your CV. In the case of Madam Chaplin, it was filed in the records under A-0010 and for Mr. Todd, it was filed in the records under A-0011 so that everybody knows but, at this point in time, I would ask each of you to, you know, give a summary of your background and what enables you to testify here today and, essentially, to be able to produce the report that was filed in the records. And whoever wants to start first.

Mr. JOHN D. TODD :

A. I'm John Todd, I am president of Elenchus Research Associates. The original company was established in nineteen eighty (1980). I have specialised in regulatory theory and practice since nineteen eighty (1980), it’s thirty-five (35) years. In fact, worked in the area for five years before that as a researcher for an organisation called the Ontario Economic Council. Through that time I have become focussed on energy regulation since about nineteen ninety (1990).

Through the nineteen nineties (1990s) I worked with a number of lawyers in this room for various interveners on gas files, electricity files and so on – it sort of feels a little bit like old home week here – but I also worked, since nineteen ninety (1990) quite extensively in British Columbia, Manitoba, Ontario as well as Quebec. I have appeared before regulators, all of the provincial energy regulators as well as the NEB and I’ve worked in telecommunications and in other regulated areas.

Over the course of that time, I’ve been involved in the development of PBR processes across Canada and, as a specialist in broad-base of regulatory matters, of course I’ve dealt with performance rates regulation, incentive regulation extensively in Ontario where it has been in place for over a decade now and I have done a certain amount of international monitoring.

With this undertaking, we brought the Elenchus team in and did a much more in-depth look at jurisdictions that I'm less familiar with as part of the report.

Ms. CYNTHIA J. CHAPLIN:

A. Good morning. I'm Cynthia Chaplin, I'm an associate with Elenchus Research and I previously have ten (10) years of experience at the Ontario Energy Board where I was a board member, a vice chair and also the chair and CEO on an interim basis and, before that, I have had experience with the regulator in the U.K., with the natural gas regulator. I am an economist by training and my experience has been primarily in public service across Canada and in the U.K.

And really, today, I'm bringing to you my experience and my perspectives as a former regulator, also familiar with a variety of regimes through my reading, through the literature and through my experience. Thank you.

(9 h 15)

Q. **[3]** Now, Mr. Todd, could you describe to us how you got involved in these proceedings? And I am talking more about process here, how you got involved, and to describe the mandate that you obtained through that process.

Mr. JOHN D. TODD :

A. Yes, the Régie issued a request for proposal in mid-twenty fourteen (2014) and we prepared and submitted a... our proposal, Elenchus' proposal, in June of twenty fourteen (2014). And that proposal was accepted. It was a response specifically to the mandate as set out in the request for proposal and therefore, we became involved.

Q. **[4]** Perfect. And what were the objectives of that mandate, your understanding?

A. I actually went back and pulled out... there's a nice little quote in the request proposal which flowed through and was the main starting point for our proposal and, therefore, for our work. I think it's worth reading that one sentence:

> The general objective of the mandate is to identify and compare the principal parameters of PBRs that could be applied to the electric power distributor and electric power carrier, taking into account their characteristics in their respective markets.

That is the essence of the mandate.

Q. **[5]** Great. And now, to follow through, how did you go about fulfilling that mandate? And, again, I'm taking about process, protocol; how did you go about it?

A. Yes, to be clear that the mandate did not include specific recommendations. It was just a review of what is being done. Therefore, our first step was actually to do a high level broad-based review of PBR regimes around the world, identifying surveys that had previously been done in other jurisdictions or for other proceedings. And we came up with a long list, I suppose, of I think it was about a dozen or fifteen (15) PBR regimes that were of potential interest. And, from that, we trimmed it down in discussion with the Régie to make sure we met their requirements, by identifying three PBR regimes which were specifically looking at distribution and three that were set up for transmission companies, to make sure we were covering both transmission and distribution. Secondly, we wanted to cover different styles, if you want, of PBR. PBR is a very broad term instead of regulation. And so, we ended up with six jurisdictions to be looked at in detail, which are the ones covered in the report. The three distribution focussed jurisdictions were Ontario, Alberta and New York Public Services Commission, specifically Consolidated Edison. And the three transmission related regimes included Ofgem, the Australian regulator, which changed his names, so it's just called Australia, and Norway.

Q. **[6]** We've been talking about the report, that report...

A. Yes.

Q. **[7]** ... was filed in the record. It is entitled: Performance Based Regulation: A Review of Design Options, as background for the review of PBR for Hydro-Québec Distribution in transmission divisions. Now, for your benefit, this report has been filed to the record as exhibit A-3 for the English version, and a French translation was prepared and filed under exhibit A-5. Were you directly involved in the preparation of this report and who else worked on it? I mean, the ususal question is: was it prepared under your direct supervision?

A. I was the lead for the project. Ms. Chaplin was a reviewer and had a lot of input. They say, her experience as a regulator is very different from mine, from being in front of the regulator. So, we tried to put those two perspectives together. We did have three Elenchus researchers in addition, who essentially did the search and read the extensive material. You'll see in the appendices to the report, for each jurisdiction, there is essentially a reading list and some additional mechanics and details, which we viewed as being far too... far more detailed than you needed for this review but it was... they went through that to prepare a road map, shall we say, for anybody who wants to explore any of these six jurisdictions further.

Q. **[8]** Thank you. I understand you have prepared a PowerPoint. It will not be projected but you prepared a set of slides for this morning's presentation. I'm sure there are copies available for everybody in the room. It is called: Performance Based Regulation: A Review of Design Options. And we will file the document, Madame la Greffière, under A-0012.

A-0012 : Performance Based Regulation: A Review of Design Options

A. And that PowerPoint presentation which is being circulated, the intention of that, it is what I call I sign post presentation. So, it is really to steer the topic... the topics as you walk through. It is not details of our comments. Those will be on the transcript. Perhaps I'll pause until people actually have copies.

(9 h 22)

Q. **[9]** Well, we'll make our copies. But for the time being...

A. Okay.

Q. **[10]** ... they're all gone so I guess we should proceed. So I leave it to you, if you want to make a presentation of your work, thanks.

Mr. JOHN D. TODD:

The intention of this brief introduction is not to walk you through the report. Everybody has that and can read it at their leisure, good assistance in sleeping if you have any difficulties there.

What we're trying to do is identify the key themes, and say: here's the nub of what our observations are of the other jurisdictions. So on slide 2, we've identified six key themes, which run through the report.

The first states: all regulated regimes

have incentives, often implicit. That was the concern with traditional cost of service regulation. Cost passthrough provides incentives for excess in spending, and it can discourage innovation. The reason is that given the cost uncertainties, and when a regulated utility goes into a year, the cost, the amount that was spent is never known for sure; there's some uncertainty there. So it is optimal, from a company's perspective, to budget high, to make sure that the budget that is approved and the rates are sufficient to cover the costs, given the uncertainty.

But you want to maintain the credibility that you actually needed that money. So there's also often an incentive to spend it or to lose it, as the phrase often goes. So it's really just a safety thing that is an incentive. Shareholder owned utilities also have a strong incentive for profit; the profit they earn comes from the return on equity.

That means that in the literature, it's clearly identified that there is an incentive to overinvest in capital. The regulators, as we go through all jurisdictions, the regulators introduce

PBR because they identified those concerns. A good example was Norway, which is one jurisdiction which did a lot of empirical work, and their researches in the background papers leading to the introduction of PBR estimated that there was twenty-five percent (25 %) excess costs built into their system. Therefore, they wanted an incentive that would push in the other direction.

In addition, another concern that the regulators frequently have is that traditional regulation stifles innovation. Innovation itself is risky, and regulatory processes can treat risk asymmetrically; that means that if you innovate and you save some money, that saving goes to the customers. If you innovate and it's actually turns out to be unproductive, the shareholder may have to bear those costs. In that kind of environment, it's an incentive not to be innovative, not to experiment, not to try to save, not even try to save money.

The second point is performance based regulation is essentially an enhancement of traditional cost of service. We're not talking about something that is radically different. In fact, many regimes, many jurisdictions had multi-year cost of service, which is now defined as being a form of PBR. We see that in Consolidated Edison, for example. You've used it here. A multi-year cost of service can essentially set rates for a multi-year period, perhaps without any inflation adjustments or anything, just rates are fixed for a period. And that means, if the company is able to reduce its costs, it will be able to retain those savings, as long as it knows that the regime will continue for several years.

So, really, all of the regimes we looked at were some form of multi-year cost of service. A cost of service is a re-basing, a normal cost of service review that happens in some form, typically, every three to five years. Companies have an incentive, because they gain or lose when there are variances relative to the allowed rates or the allowed costs. So to some extent, PBR is essentially a mechanism of making long periods between re-basing sustainable.

(9 h 26)

In the US we see a lot of mechanisms that are trying to do the same thing that they call "alternate regulation" and there was a paper produced by EEI that I believe was circulated earlier in the process, certainly cited in our report, and so there are many, many different variations which aren’t PBR but are different ways of trying to get to the same goals.

Third, the appropriate PBR regime depends on the context. One of the goals that we had when we started our work was to identify something that could be termed as "best practices". In fact, we came to the conclusion there are no best practices. There’s no rule book for saying "Here’s the right way to do PBR." it all depends on the context. Every jurisdiction needs something a bit different and that’s why in the review you’ll see they’re different and that’s why in Québec you cannot adopt somebody else’s regime. You have to take the principles and determine what is appropriate here.

No regime is perfect. Some of the regimes we looked at have gone through many different generations. They are still evolving and they will continue to evolve. There is no end point to a definition so our observation, one of our observations is don’t expect that you can design a PBR regime that will be the system in place forevermore. You’ll be designing a starting point that will evolve.

Not surprisingly, the evolution tends to increase complexity. It’s like tax legislation. You start simple, you find loopholes, you find concerns with it, you start plugging those loopholes, it gets more and more complicated. PBR will continue to evolve in the future, it’s the last point on that slide, perfection remains illusive. The context keeps changing. So, in part, it’s evolving because you’re identifying concerns that you’re addressing, in part, the context may change and therefore what is appropriate to do will change.

I’ll turn for the next couple of slides over to Cynthia.

Ms. CYNTHIA J. CHAPLIN:

A. Thank you. On the next slide, we’ve highlighted the main points with respect to the concept of the context and we think that this is an important place to start any exploration of PBR and it’s linked to this idea of trying to set some objectives in advance or very early in the process. And setting those objectives are often related to what may have triggered the development for the PBR so, obviously here in Québec, the legislative change is an important trigger.

But there may be other considerations as well: public concerns about costs, there may be other government policy that is related, other policy changes, there may be issues around the structure of the industry. So understanding what is triggering this desire to move to PBR is an important part of setting the objectives and the other important part, it is the overall context in which the companies are operating and within which the regulatory framework is being set. And we've just highlighted what we think are the main considerations here on the slide.

So it is issues like what is the current regulatory framework? How different is it from a PBR type regime? What's that history, what's that regulatory history within Québec? That's an important consideration. What the utility's current performance is? Are there concerns about either costs or quality or pace of change so what are the issues that have been arising in hearings that maybe you want to look at and investigate in the context of PBR.

Industry structure is an important consideration as well. For example, are there companies to which Hydro-Québec Transmission and Distribution can be compared and if not in Québec, then elsewhere in Canada or internationally. And what is the other structure, what are the other structural elements?

Data. Data is a very important consideration and this, for example, was an issue in Ontario when developing PBR. There was a lot of data but it wasn't always very robust and didn't necessarily have a lot of credibility so trying to work with the data you have but recognising potentially its limitations and therefore an issue where you may need to make changes as you go forward but being honest and taking account of what information you do have.

Policy. So I mentioned this before, are there other government policy initiatives or strategies or policies in place that may have a contributing impact or be something that needs to be taken into account.

(9 h 30)

Stakeholder perspectives. This is very important and I think it's one of the trends that we noticed, that we've observed ourselves and I've also noticed in doing the research for this project, is a growing interest in customer engagement and stakeholder engagement in terms of shaping PBR and shaping the expectations of performance for utilities. It's also important to think about trends in the sector. Mr. Todd will talk a little bit more about this in terms of thinking about what's coming in the future in terms of technological change that will affect the companies and customers. And then I think it's also, we think it's important to think about both short term and long term goals, particularly if you are initiating a PBR, it's important to try to set some longer term objectives but recognising that the context may change, elements may change and also having some short term goals.

And I guess some examples, just another example of how different contexts could lead to different outcomes, in Ontario, which in many respects is, well, it's just one entity but the way natural gas is regulated in the way electricity is regulated, is reasonably similar now but developed along different paths and one of the reasons was on the natural gas side, there were three rate regulated distributors and on the electricity side, there were, well, initially around eighty (80) let's say.

So a very different context, it lead to

some different mechanisms and different design features. But as Mr. Todd has said and I've said as well, the other characteristic that we've observed is this evolution, that PBR follows a trajectory of evolution and the points, some of our main points around that are on the next slide and my observation as a regulator would be that seeing PBR as an evolution as opposed to developing a perfect elegant solution that is an abrupt change really wouldn't be in keeping with standard regulatory principles which emphasise characteristics like stability and predictability and incremental change as being a way to help all parties manage risk and reduce risk trying to achieve good outcomes without abrupt change.

So this evolutionary approach is also one that is sustainable in the sense that you hope that if there are errors or course correction changes, they can be made without losing the broader goal of trying to introduce some positive incentives. And so it may also be helpful to think about introducing PBR as a, well, in English it's known as "change management" so it's whenever an organisation or an institution is going through a significant change, whether this would be the regulator or the utility or the stakeholders that it's done gradually and as transparently as possible.

So that involves characteristics or factors such as setting the objectives and actually establishing a transition process in advance so that parties see where things are headed. Very important to monitor the results so it's not a matter of setting a framework in place and then not returning to it for a number of years. It's important to monitor what's going on and to see whether or not circumstances are turning out as expected or not. It's important also to think about, as the time goes by, are there other changes that are happening in the industry or in the context of the overall framework.

I think it's also important to remain committed though the objectives because there will often be, we've seen in all of the jurisdictions we've looked at and, certainly in my experience, challenges will arise, changes will happen, unexpected events will happen so it is often challenging to maintain a kind of a commitment to the longer term objective but that's an important characteristic. And we've certainly observed the benefits of taking an evolutionary type approach and the benefits that a number of the jurisdictions we've looked at in terms of building stakeholder and utility acceptance – this is something that we have observed. I've observed it directly, we've observed it in the jurisdictions we've looked at as stakeholders and utilities gained greater familiarity with the design features, gained greater experience examining the analytical tools that people become more comfortable with it and therefore have greater confidence in it and that's a significant benefit.

(9 h 37)

Also the overall technical expertise increases. I certainly saw this in my time in the U.K. and observing where they are now, you know, what initially would have been a room full of binders with numbers that maybe a few people looked at, have now the tools have become much more sophisticated. There's much broader investigation, much broader range of stakeholders into the actual analytical details. And that's a... I think that's a benefit. And also, the quality of that data improves. And... and by taking an evolutionary approach which almost all the jurisdictions we looked at has done, whether it's Ofgem with their RIIO approach or the Alberta Commission or the... or in Australia, and certainly in Ontario, that as challenges have arisen and as issues arise by taking an evolutionary approach, it allows for corrections or adjustments or modifications to be made, or enhancements, but still maintaining a path towards the longer term objectives that have been set for the programme.

But this evolution also does... it is linked to this natural... it seems to be a natural tendency towards greater complexity. As people become more familiar with the design features and more familiar with the analytics, there's a desire to make it perhaps more elegant but that generally means more complicated. So, Mr. Todd will talk about that feature.

Mr. JOHN D. TODD:

Yes, in slide 5 is the guide post for the Complexity: Finding the Balance. Complexity is part of the normal evolution of PBR. We have not looked at all PBR regimes. We've looked at the ones that, on the initial cut appeared to be, I think, most successful, most interesting. There are certainly other regimes that we did not study which were implemented and then abandoned, those that were perhaps less successful. So, you'll hear us talking about the six in fairly positive terms as PBR, but that only came as the result of a lot of work. And part of that work was work over time with the system as they made it work better.

And, so, all of these regimes have evolved over time. And part of that evolution was adding complexity. The ones introduced most recently, for example, Alberta was a relative late comer. It was introduced as a more complex regime because it had learnt from others.

The types of complexity is that there can be add-ons where they see that the simple incentive of saying "We're using a price-cap or a revenue cap," CPI-X structure which is the most common, drives people to cut costs. But if cutting costs means that they are not investing out of the capital in certain areas, then special mechanisms are brought into play to motivate appropriate capital spending. For example, there may be separate adders for things related to reliability of service or to safety. They don't want an incentive to cut capital spending that will not produce revenue but will produce safety. So, there are special mechanisms there.

Mechanisms such as the efficiency carry-over that we see in several jurisdictions. The efficiency carry-over is response to the observation that the incentive comes from the saving... when the company reduces its costs, it gains through the balance of the term until re-basing. So, if it is able to cut costs in year one of a five-year term, it can benefit for five years. If it does the same thing in year 5, it only benefits half a year, part of that year, the year at most. So, some jurisdictions introduced what they call deficiency carryover, which says, "We will identify the savings related to specific productivity initiatives and we will allow you to retain the benefit for five years, whichever year in the term you are doing." So, there's a carryover beyond the end of the term, so the company continues to benefit from the savings it implements. That is specifically designed to maintain the incentive, the drive to find cost reductions throughout the term and not have it declined over the term of the PBR.

So, there is add-ons. There's also trade offs. Earnings sharing is seen as a trade off.

You've had some experience with earnings sharing. The basic view amongst regulators is that with earnings sharing, the company... the benefit to the company is less when there is earnings sharing than when there's no earnings sharing. Clearly. If you save a hundred... if you save a hundred dollars ($100), the company gets a hundred dollars ($100) when there's no earnings sharing. When the company saves a hundred dollars ($100), they only get fifty dollars ($50) when there is earnings sharing, if it's fifty - fifty (50-50). But earnings sharing is part of a trade off. It is a way to split the benefit between the customer and the company.

A different way is to set a stretch productivity target. So, it essentially says, "We're going to give a fixed amount of savings to the customers and the company will essentially suffer a loss if it doesn't achieve at least that minimum saving." Once it gets beyond that stretched target of productivity, then, it gets to save, keep a hundred percent (100 %). That incentive is stronger; every dollar you save, you keep. The customer share comes from setting a target up front. So many regulators such as Ontario chose not to implement earnings sharing, for electricity at least, because it said that will give a stronger incentive for the company to increase its productivity, but will have stretched targets to make sure customers benefit from the regime.

(9 h 44)

The possibilities for complexity are endless. You will see, you go through the report, you'll see many, many different kinds of complexity have been added. Complexity, obviously, is not good. But so you introduce complexity where you need it, but only where needed.

More advanced analytics; Ms. Chaplin has referred to the importance of good data. Norway is probably the ultimate example of a very econometrically based methodology that is focussed on determining appropriate costs. Ontario has followed that example, with increasingly sophisticated analytics around total factor of productivity, to identify how productive companies are. Good analytics require good data. You can't jump into a intensive analytic exercise, unless you're starting with good data. That's one of the contextual aspects. How good is your data? What do you have to work with? Can you produce good analytic results? Therefore, can you actually rely on the analytics to measure productivity of your regulated company well?

Part of the evolution is integrating with other regulatory objectives, so regulators have, many that we've look at and beyond, have gone beyond just cost cutting. New York, one of the drivers, was actually not cost cutting, he was service issues. Performance based regulation when I first started, going back thirty (30), forty (40) years, was more around the telephone companies, where it was around connexion times. It was all, it was service issues. So performance based regulation can be related to any aspect of performance; service, safety, as well as cost cutting.

So some of the systems have become more complicated, because there's spinoff effects. As I mentioned earlier, if you are cutting costs, that can harm customer service, that can harm safety. Therefore, you get into other objectives, and therefore, you have service quality indicators, and you start requiring performance related to those, in order to ensure that your cost cutting measures are not actually harming customers.

It's our observation in the jurisdiction we live in, but also in the ones we've studied. The policy environment is becoming more complex. Regulators have expanded roles. When I started in the regulation game in nineteen-ninety (1990), energy regulators set rates. They set rates based on costs. They were not concerned about things like emissions, they were not concerned about climate change, they were not concerned with low income issues, at least in Canada, they were in the U.S., they were not concerned with other environmental issues. Those demand side management, if not part of the game. All of these things have been introduced, and there's probably more coming down the pipe, in terms of government policies that will have an impact on regulated businesses. Those have to be built into the PBR regime. That adds complexity.

Lastly, on this slide, the business of electricity is becoming more complex. The technological changes, non utility alternatives, are all driving this. Part of it is internal. When competition came to telecommunications, one of the changes that took place was the economic life of the assets became shorter than the physical life. There is the view that electricity, parts of the electricity industry, are becoming competitive, not just the conventional generation context, but because of the ability, the potential ability to go off-grid, because of declining cost of solar and wind, because of the potential huge innovations in storage. If we look out ten (10) or twenty (20) years, and utility assets have an expected life of sixty (60) years; if those assets become threatened by competitive alternatives, then, a lot of our traditional economic, or regulatory economics goes out the window. And we will need PBR regimes, or we'll need regulatory systems that can accommodate the changes in the business environment that our regulated companies operate in.

(9 h 50)

We see that in Ofgem, U.K., they've brought in some very strong concepts around climate change issues. Australia, U.K. and Ontario are all bringing in much stronger customer focus so part of the technology or things such as customers – we've got a lot of gray hair in this room but I know my kids have different expectations: they want fast, immediate information, they want control. They will be looking at regulated utilities very differently than I do. Just for me, I want to flip the switch and the light goes on. A new generation that is technologically savvy and is on the Internet, they want to know their usage, they want to be able to run a smart home. They want different things and the industry will have to respond to that. That adds complexity and that, around consumer expectations.

I'll add a little bit more to that as we move to the next slide which is the future: more change is coming. As I mentioned, government policy, technology around generation networks and information, customer preferences. Google is becoming an energy company. Google is a potential competitor. With all of the regulatory utilities, you look at around the world. The speed of change is being accelerated. We're used to things not changing very quickly in this industry. So the risk is that the monopoly is not secure hence traditional regulatory compact may not be assured, of cost recovery.

How will PBR regimes deal with that? The regimes I've mentioned that are perhaps leading edge moving to outcomes-based, part of that outcomes-based is a focus on the customer. It's a focus on understanding what the customer wants. So in those regimes, they've moved away from simple

CPI-X formulas to expecting the company to come in with long term business plans. They review those business plans. Those business plans become the performance targets against which they're measured.

This is sort of the newest flavour, if you want, of PBR as yet – it's untested – I don't think there's evidence out there. We certainly couldn't find evidence that says "Here's the right way to do it." or "Here's the key to success." This, leading jurisdictions are experimenting with this, they're demanding that companies come in with evidence about what their customers want and that means having actual customer contact, not simple surveys but more extensive research on what customers want. They're looking for utilities to be innovative and the PBR regime is designed to allow the flexibility so companies can adapt, respond to customers and move into a modern age. It is very hard to do that with traditional cost of service regulation.

But PBR can either impede or allow companies to embrace the changes. It depends on the design. So the first step is what are the objectives? If that's an objective, you need the design that helps achieve those objectives. Flexibility in terms of the operations of the company, flexibility in terms of what they're delivering to customers, flexibility around websites, around access to information, you know, building information, usage information, real time information. If that's important, that has to be recognised.

Just as a side comment, because I did a lot of work in the telecom area, with these kinds of changes, the system becomes more expensive. A world in which customers are not all seen as being the same but it's recognised as in selling clothes or food or anything else that customers are diverse, if you want the customers to be responsive, sorry, if you want the utilities to be responsive to customers, that doesn't mean defining a customer as one thing that you deliver to them. It means recognising that customers are segmented. There are customers that want a high quality service and are willing to pay for it. There are other customers that all they care about is a cheap price. Some customers want information, others don't. To meet the needs of diverse customers would be more expensive than forcing everybody to accept one model. That creates trade-offs which moves us to the last slide, the recap: it's a delicate balance.

(9 h 56)

What you're challenging, what you're facing when you approach a PBR regime is balancing the various trade-offs. Flexibility versus predictability. You've heard comments from Ms. Chaplin and myself, predictability in regulation is very important. Within a PBR regime, you define, you set up the PBR regime, usually for a five year term, before you say you're going to touch it. But of course, the more predictable it is, it may mean the less flexible it is. So you're bouncing off the flexibility of the regime against the predictability of it.

Does the regime encourage innovation around services? Well, innovation involves risk so you're looking at another trade-off. What do you want in terms of the balance of innovation and risk? Some regulators are concerned that if they give too much room for innovation and essentially guarantee the company that they will recover their costs, you can get innovation that is taking on excessive risk because the customer bears it and the company can go ahead and do whatever they want and, in fact, face no risk unlike a normal competitive market.

Protecting customers versus a service

provider. How strong is the focus on protecting the customer versus protecting the utility? Some regimes, as you look at the way the PBR is designed, give a lot of protection to the company, sometimes at a cost to customers. Other regimes are much more focussed on the customer, creating risk for the utility. PBR may mean that you rewrite the regulatory compact between the regulator, the customer and the utility.

Operational cost versus services. I mentioned sometimes improving service, being more flexible means costs will go up. Part of your mandate is to try to keep costs and rates down. What’s the trade-off between service and cost? And hopefully any increases in costs as you have more service can be offset with productivity gains.

Do you want your utility, do you want your jurisdiction to be a technology change leader or a technology change follower? Some jurisdictions are prepared to lead. Ofgem has a pool of money it has made available to companies that want to have an innovation project, they can actually get a subsidy to bring in innovations which are experiments and, if they’re successful, then they can be adopted more widely. Other jurisdictions choose to say "We

want to keep our cost down, we will innovate with new things that have been proven elsewhere."
They're different strategies.

So that is the closing of our comments which says we can't tell you where to go. Examples elsewhere can't tell you where to go. They give you an idea though of the issues that you are going to have to face.

LA PRÉSIDENTE :
Merci beaucoup pour cette présentation éclairante.
Thank you very much.

Me LOUIS LEGAULT:
Q. **[11]** Mr. Todd, before the interveners and utility attorneys proceed with their examination, since filing your report – and your report is dated January – have you been made aware of any significant change in the literature or industry practices that would modify the contents of your report?
A. With all the comments on evolution, evolution continues and since six months the most significant potential change we're actually waiting for and that is the New York PSC for Consolidated Edison, that section of the report would probably have to be rewritten next month when the process that

they're engaged in comes up with its final report.

We talked about some of the proposals and the direction it may be headed but that jurisdiction could change significantly later this year so I'd flag to people, in the time period of your process, people may want to keep an eye on that and watch for that report next year. Other than that, there haven't been changes that would affect the observations that we have made.

(10 h 00)

Q. **[12]** Thank you very much. Madame la Présidente, avant de rendre les témoins disponibles aux intervenants et à Hydro-Québec, peut-être un petit commentaire. J'ai compris ce matin que maître Turmel était aussi ici pour l'AQCIE. Il n'y avait pas eu de mots de maître Sarault qu'il se faisait remplacer. Et quand on a planifié la journée, il y a une demi-heure qui manque, là. Alors, je voulais juste aviser tout le monde que, je sais que le temps est compressé, chaque intervenant a une demi-heure, mais si maître Turmel a l'intention de prendre une demi-heure pour l'AQCIE, bien, il y a une demi-heure qui manque. Alors, il va falloir tous se serrer la ceinture pour passer à travers la journée. On avait, au départ, prévu peut-être deux jours. On l'a ramené à une journée. L'objectif étant de tout finir aujourd'hui si possible. Je demanderais à tout le monde de mettre un peu d'eau dans son vin pour accommoder l'AQCIE si possible.

Me ANDRÉ TURMEL :

Bonjour, Madame la Présidente; bonjour aux régisseurs. André Turmel pour la FCEI, mais ce matin pour l'AQCIE. Évidemment, j'ai été informé hier... on m'a demandé hier de prendre la relève de maître Sarault. Et je croyais que la Régie en avait été informée. Alors je m'en excuse, soit pour l'AQCIE ou pour quiconque.

Alors, déjà les questions que m'avait fait parvenir l'AQCIE, j'avais demandé de faire preuve d'austérité dans le nombre de questions. Nous avons réduit. Mais l'AQCIE a quand même des questions qui sont, je pense, très pertinentes, parce que, à la fois la FCEI a préparé ses questions avec monsieur Paul Centorella, notre expert, et à la fois, je sais que l'AQCIE les a préparées avec monsieur Lowry. Alors donc, il y a des questions pertinentes. On essaiera d'être à l'intérieur et on va se fondre aux instructions de la Régie. Si on va selon l'ordre alphabétique, vous pensez on peut aller à la fin.

LA PRÉSIDENTE :

Je propose qu'on entende vos questions de l'AQCIE-CIFQ à la fin. Et puis en effet que chacun tente de respecter l'horaire le plus possible. Et on vous entendra comme prévu pour les questions de la FCEI plus tôt ce matin, mais seulement en fin de journée pour l'AQCIE.

Me ANDRÉ TURMEL :

D'accord. Merci.

LA PRÉSIDENTE :

Merci.

Me HÉLÈNE SICARD :

Je vous demanderais de réfléchir. En fait, je vais vous faire une demande, puis je vais vous demander de ne pas me répondre tout de suite, mais peut-être d'y penser. Trente (30) minutes, c'est très court. Les gens ont préparé des questions, je présume, comme un peu tout le monde, ils ont leurs questions écrites préparées avec des analystes.

Est-ce que la Régie considérerait possible qu'on dépose demain ou après-demain quelques questions par écrit additionnelles adressées aux témoins que la Régie a sélectionnés, de façon à se permettre de limiter le temps d'audience et à être certain qu'on ne déborde pas, mais que les questionnements que nous avons puissent tous être répondus. Je ne vous demande pas une réponse tout de suite, mais je vous demanderais vraiment d'y réfléchir. Je pense que ce serait... Je vous suggère que ce serait sans doute utile si la Régie le permettait. Merci.

LA PRÉSIDENTE :

Merci. Je vous reviens après la pause et nos deux premiers intervenants. Alors, nous serions prêts maintenant à recevoir maître Cadrin, l'AHQ-ARQ.

(10 h 05)

EXAMINED BY Me STEVE CADRIN:

Q. **[13]** Bonjour, Maître Steve Cadrin pour l'AHQ-ARQ. Hello to the panel, Mr. Todd, Ms. Chaplin. I'll ask my questions in English. And please bear with me if my English is not quite good, sometimes. So, first questions are on the CV of Mr. Todd. On your resume, page 20, under "Private sector companies", we see that one of your clients is Hydro-Québec. First, can you tell us which division of HQ are you referring to, either of your own implication of that of Elenchus.

Mr. JOHN D. TODD:

A. The client was Hydro-Québec Energy marketing with respect to their involvement in ISO... Independent

System Offer processes in Ontario. So, it was with respect to Ontario electricity operations. And that was my involvement.

Q. **[14]** What about Elenchus? Are there any other clients, HQ clients, Elenchus was involved in that you know of?

A. Not that I know of. I don’t think so.

Q. **[15]** Also, in your resume, on page 7, it indicates that you have appeared before the Régie de l’énergie; does this list include all of your participation for Elenchus or yours only?

A. My resume would be my appearances. There were other appearances by members of Elenchus and I would note that in... shortly after two thousand (2000), the company was split and so, the separate company, Econalysis, would have continued to provide support to certain interveners after I stopped participating in that role.

Q. **[16]** So, you’re saying that from two thousand (2000) on, Elenchus has not been involved in any Régie file, as far as you know of, outside of...

A. No. Since the split, which I think was two thousand and in any Régie files as far as you know of?

(10 h 08)

A. No, since the split, which I think was two thousand

and three (2003)...
Q. **[17]** Okay.
A. ... Elenchus has not been involved in any Régie files.
Q. **[18]** And can you tell us a bit more about which clients were you representing in the appearances that you had in front of the Régie?
A. A customer group, it was, it went through a few client coalition changes but, essentially, Option Consommateurs.
Q. **[19]** If we look at HQ, or we are talking about Transmission-Distribution in this case, before we start thinking about this PBR process and what you know about HQ right now, what would you say would be the main challenges or issues for HQ in a PBR regime, establishing a PBR regime in, I could say like the "Top 10 List" but that would be too much like David Letterman but at least give us the main challenges.
A. It was outside of our scope of our mandate to look at Hydro-Québec the Québec situation therefore, frankly, we have not turned our mind to that issue. We have identified issues generally that, in our view, could form a starting checklist to determine what the parties here think are relevant for HQ.

But we have not done that trimming down of the list.

Q. **[20]** Now going to the report itself, if we may, we have both versions – one is in French, one is in English – so sometimes the pages are different, but not sometimes, all the time. So maybe page 1 is good but going from there it’s not very good. So page 11, I’ll do the questions in English so page 11 for you and for everybody else who wants to read it in French it’s page 13. So it’s lines 5 to 7 and page 13 in French, it’s 12 to 15. So I’ll read those lines for everybody, so for your reference:

> They often maintain excess standby capacity, reserve margins and high standards of reliability and...

And I’m sorry about that word before I...

> ... uninterruptibility of service, which require increased capital investment.

Can you give examples of ways by which this is done by public utility companies in the sectors of electricity distribution and transmission?

A. Okay. That is quoting Dr. Kahn from his book in or a restatement of from his book which is nineteen seventy-seventy-one (1970-71) but the standby capacity is essentially, and reserve margins are essentially any utility has to maintain reserves for plant outages – we're talking generation utilities now.

So when you're talking standby capacity and reserve margins, that's really a generation issue, not a transmission or distribution issue and there is, for as long as I've been involved, there's been debate about what the appropriate reserve margins are. It's a trade-off between cost and the assurance that you'll not have brownouts due to outages of plants. Plus an alternative to having standby capacity or reserve margins is to have increased interconnection ties so you can import power and diversify in other ways. I think what Kahn was pointing out is that it would be an incentive to, for a generation company, to maintain higher capacity rather than use interconnected ties to increase imports.

Moving to the second part of higher standards of reliability and uninterruptibility of service, because a utility's profit – we're talking a shareholder owned company or a Crown corporation acting like a shareholder company where it's focussed on earning profit – that profit is earned on return, on equity, on capital investments and therefore it would actually have an incentive to have very high reliability standards, very high standards for non-interruption of service and therefore high capital investment to earn high profit. And as a trade-off, the higher the quality, the higher the standards, the more expensive the system is.

(10 h 12)

They have an incentive to push for the most reliable system possible. And what he was pointing out is that may not actually be what the customers want. That's sort of what he, Kahn, in writing this, what he was pointing out. And what Kahn has said is generally accepted in the literature.

Q. **[21]** Is there any difference to say... to your answer in a regulated environment? Or it's basically the same principle.

A. The same principle. It's a matter of what the regulated utility is the incentive, and it's a matter of what they can get the regulator to accept.

Q. **[22]** We're moving on to page 11... page 11, page 2, I'm sorry. Page 2, lines 24 to 26 in English, in French page 3, lines 3 to 4. And I'll read it out for you.

> [...] costs associated with extraordinary and unanticipated events that are outside the control of the utility

we're talking about the Z factors?

A. Yes.

Q. **[23]** Almost anything can be qualified as unanticipated. Are there any jurisdictions that determine these extraordinary or... and unanticipated events better than others? I'm sorry about the word, again.

A. Yes, there's usually an effort to define those quite carefully. Typically, there's a dollar threshold. So, it has to be a big enough cost to be potentially harmful to the company, if it is not recognized. And, secondly, it's got to be well outside the normal course of business. A typical example is a major ice storm. In addition, there are, certainly in some cases... I can think of some Ontario cases where what is recognized number 1 is very carefully defined in advance. Because unanticipated, like an ice storm is something which you don't anticipate but you know is a risk.

Q. **[24]** Yes.

A. Or, you know, hurricanes and so on, earthquakes. Those types of things can be defined. And, on a case by case basis, typically, you... approval is required. And of the ones that I am familiar with, they're more typically denied than accepted. So, it can be a rigorous standard to actually get a Z factor cost allowed.

Q. **[25]** So, we're talking about more, like, really extraordinary events like ice storms, although we all know that it can happen.

A. Exactly.

Q. **[26]** Many things can happen in life; this is really extraordinary. What would you say about a more severe winter or more... a colder winter than normally anticipated but...

Q. **[27]** The intention here is... it's recognized that rates are set in a way that the company could be jeopardized, financial position could be jeopardized through absolute non-recognition of extraordinary events. So, it's better than an off-ramp. It's better than exiting the whole PBR system to recognize something that would otherwise basically drive the return equity so low that the company would be in trouble.

Q. **[28]** Okay. How can the utility be given an incentive to deal the extraordinary events at the best cost? What would be your thoughts on that?

Ms. CYNTHIA J. CHAPLIN:

A. Well, I can speak from my experience in Ontario where the incentive is to have a Z factor approved always requires a separate application. And in... so, in that instance, the evidence would be required to justify how the event and the costs meet the criteria that have been established. So, as with any other application, it would then be challenged and tested, including the costs. So, and I would certainly say from the Ontario perspective, even with all of our utilities, it’s really just a handful of Z fator cases... generally come forward. And they’ve almost always been related to a storm damage or tornado damage. So, they’re often linked to very specific physical events. And the companies know that, in order to receive approval to recover those costs, they have to be very rigorous in how they track those costs, so that they will be able to present them. But they would... they are challenged and tested.

Q. **[29]** All the time? So, every single case is a Z factor case, as you say, and then we check if the criteria are met?

A. Right. So, Z factor cases, certainly in Ontario are unusual. There are not many of them. They always require a separate application. And there’s a set of criteria that the applicants know they have to meet and the stakeholders are involved in testing and challenging them.

Q. **[30]** Okay. Page 4 of the report, lines 24 through 25, in French it’s page 5, lines 16 to 17, for Ofgem, we’re talking about Ofgem in the U.K.

> There is also an Information Quality Incentive (IQI) which rewards companies for submitting accurate expenditure forecasts.

How’s this done?

(10 h 18)

Mr. JOHN D. TODD :

A. The details are contained in the documents that we cite in the appendix. And I feel like I'm in a final exam. It's not fresh in my mind. Work was done long ago. But basically, what it is is there is a review done each year. There's an allowed revenue. And there is, under the new regime, there are standards, in terms of the quality of information. I made reference earlier to, if you're going to rely on data, the data has to be quality data. So there's an evaluation made of the information submitted. And if it's clean, as I understand, if it's clean data and the regulator can reward the company for doing that.

In essence, it's saying good quality data costs money. And so, the incentive in effect to earn that incentive; the company's probably spending money, just like...

Q. **[31]** To recover costs.

A. Yes. There's costs to checking their data and making sure that what they're putting into the regulator is good quality data, and the regulator can rely on it, and that is recognized as efforts involved; and therefore, there's reward given. I would almost say it's a recognition of the cost of quality data.

Q. **[32]** Okay. Are there other jurisdictions other than Ofgem, doing this?

A. I'm not aware of any others -are you Cynthia- that have an explicit mechanism. And this one is quite new. Certainly, there's a widespread concern about the quality of the data, and regulators have other tools, besides specific rewards, to put pressure on companies to provide good data. Certainly, I think I've seen some Ontario decisions, where the company, there were consequences of providing poor filings, filings containing poor data, i.e. the numbers may not have been accepted. So there's a consequence in poor data, which is another way of putting it.

Q. **[33]** Okay. So more indirect way to get it done. Okay. On page 35 now, or 43 in French, you mention :

> ... the Total Factor Productivity ("TFP") approach. TFP is a statistical method that measures productivity by determining the extent to which the increased production, or output, of a firm can be attributed to increases in input factors (i.e., capital and labour).

So page A-27 or A-29 and A-30 in French, also refers to two studies to evaluate the TFP for Alberta without references. Can you provide more details or references on the TFP approach?

A. Yes. We could provide more. It is a major field of study, econometric method. There are companies that specialize in doing them. A specific economics group does the TFPs studies for Ontario. Cynthia may want to comment on that. Conceptually, the concept, it's quite simple. The reality is extremely complicated. And there probably is a textbook on it somewhere. But I suppose some of the filings may be the most relevant thing for you to consider, and we can certainly give some sights there. Yes. So you're just looking for some references.

Q. **[34]** Yes. But we didn't talk about undertakings and things like that, but we'd expect that would be an undertaking, because you can not answer today, most probably, and talking in the general sense for the TFP so, as an undertaking, if it's possible to give us more details or references on the TFP approach.

A. Yes. The simplest thing is there, for Alberta, which I think that reference was talking about. For Alberta...

Q. **[35]** Yes.

A. ... there were TFP studies filed.

Q. **[36]** Yes.

A. Those studies would include a description of the methodology. Similarly, in Ontario, a specific economics group, as I mentioned, does an updated productivity study, TFP study annually. Certainly, they include discussion of methodology. Those discussions are not something you can take away and

replicate the work in a different jurisdiction.
Q. **[37]** I understand.
A. Okay. It's, here, it's explaining how they did it, talking about some of the data, but it's a particular statistical methodology that they're experts in. But I'll, we can give you some references.
Q. **[38]** So some references on the filings, or...
A. Yes.
Q. **[39]** ... you were talking about Ontario...
A. Yes.
Q. **[40]** ... the jurisdictions we talked about here.
A. Yes.
Q. **[41]** So maybe it's more interesting to read them and to understand how it fits in the regime...
A. Yes.
Q. **[42]** ... in those regimes. If you have general information or references...
A. Yes.
Q. **[43]** ... we can also look at that, but the implication is more interesting...
A. Yes.
Q. **[44]** ... for us.
A. It's basically an oversight that we didn't have the cite for that, because I know that we... my staff

had looked Alberta, they did look at that, and we have those cites in the office.

(10 h 24)

Me LOUIS LEGAULT :

Madame la Présidente, juste pour être clair, it is my understanding that the undertaking is to supply more references relating to the TFP approach? Is that the gist of it?

Me STEVE CADRIN:

Yes.

Me LOUIS LEGAULT:

Okay. Or references...

Me STEVE CADRIN:

Q. **[45]** Plain. Is there no references... I think it's probably an oversight in the document because you were referring to Alberta, a TFP in Alberta. Most probably, there were finds or there were documents that were on your mind at the time.

A. Yes, I think cited the cases but didn't cite the particular document within the case.

LA PRÉSIDENTE :

Je comprends que nous recevrons des références additionnelles mais l'audience d'aujourd'hui ne devrait pas servir à augmenter ou à élargir le mandat. Alors, je voudrais qu'on en reste à l'étude et à des questions sur le document et le mandat reçu, autant que possible.

Me STEVE CADRIN :

Est-ce qu'il y a une préoccupation par rapport à cet...

LA PRÉSIDENTE :

Non, pas...

Me STEVE CADRIN :

C'est juste que c'est général pour la suite, c'est ça?

LA PRÉSIDENTE :

C'est ça.

Me STEVE CADRIN :

O.K.

LA PRÉSIDENTE :

Je ne voudrais pas que la... l'audience d'aujourd'hui...

Me STEVE CADRIN :

Non, c'est correct.

LA PRÉSIDENTE :

... serve à étendre le mandat actuel.

Me STEVE CADRIN :

Non, non. Quand il y aura des demandes de cette nature-là, ce sera pour des éléments, visiblement, où il y avait une référence mais qu'on n'a pas la référence...

LA PRÉSIDENTE :

D'accord.

Me STEVE CADRIN :

... dans le document.

LA PRÉSIDENTE :

Merci.

Me STEVE CADRIN :

Q. **[46]** Oui, bien je vais le résumer encore, il est résumé par plein de gens, mais moi-même, je vais le résumer maintenant. Alors, je vais poser la question, tout simplement, comme elle était posée, elle était large : so, can you provide more details or references on the TFP approach? So, undertaking 1.

E-1 Supply more references relating to the TFP approach.

A. And I ref... I've written down as references for TFP methodology in the cases that we have cited.

Q. **[47]** You provide whatever references you think are more relevant on the... La bonne nouvelle, c'est que j'ai tourné quelques pages de questions.

Alors, benchmarking on a level playing

field would be my next line of questions. And we are talking about page 72 in English, 84 in French. You mention benchmarking for transmission in models and studies such as ECOM+ and e3grid. Question: in Québec, we have been told many times that the transmission system is unique because, notably, you have to ignore the climate and of the high voltage and length of the lines, and consequently, that any benchmarking can be difficult and misleading. Is it of your opinion that tools such as ECOM+ and e3grid can be used to benchmark different types of systems on a level playing field?

A. I will comment. Cynthia may want to... Ms. Chaplin may want to add something to my comments but... You... when you benchmark, you never have perfect comparables. But benchmarking is, nevertheless, useful. Part of the benchmarking exercise is to use a sample where you can extract from the data. And that’s what some of the TFP studies are designed to do in different items. What you’re trying to do is identify the differences in cost related to differences in characteristics. Simple example; if you’re comparing a number of jurisdictions, some of which have cold climates, some of which warm climates, you can probably identify... you can statistically identify what cost differences are attributable to those factors. You'll never... number 1, you'll never identify every difference across the sample. Number 2, you'll never perfectly identify what... the quantity that's attributable to those differences. But you come up with useful indicators. Part of what you see with the changes, the evolution in Norway, is what they've tried to do, is expand the number of comparators so they can tease out that kind of data.

So, initially, it was just Norway comparing with Sweden, two companies. They couldn't... with two.... with one comparator, you couldn't identify what's the cost associated with specific differences. That's why they have gone to other methodologies. The challenge for Norway has been: where do we find other regulators, other companies, who are prepared to collaborate with us and develop data that is consistent across a lot of companies? And that's why it has taken time and a lot of inter-regulatory negotiations to come up with a larger sample so that they could do better benchmarking studies. Sample size... bottom line, sample size is important in benchmarking studies and many regulators – that's where Ms. Chaplin will want to comment – I have taken the view that some sort of benchmarking is better than nothing.

(10 h 29)

Ms. CYNTHIA J. CHAPLIN:

A. Yes, I would say that benchmarking is important and, as Mr. Todd said, it’s not perfect. It is quite common, I think, for any regulated entity which is first facing benchmarking to claim that it is unique and, in some respect, each company is unique but...

Q. **[48]** Yes.

A. ... that’s... Yes.

Q. **[49]** That’s a given?

A. Yes. So that’s not a reason not to continue to pursue it. But, as Mr. Todd says, it does take time and speaking from the experience in Ontario, it is benefited by having stakeholders involved in trying to develop the tools, trying to bring everybody along and certainly my observation is that even very large utilities who may claim that benchmarking is not relevant, often if you look deeply into their own organisations, they are doing forms of benchmarking themselves. Perhaps not on a corporate-wide basis but certainly everybody, to some extent, wants to compare themselves to others.

If your managers aren't expecting it, your board of directors may be expecting it so this ability to compare your performance to either demonstrate that it's strong or to help identify where improvements could be made is a pervasive – not just in regulated entities but everywhere. So...

Mr. JOHN D. TODD:

A. And I can't resist the opportunity for a corporate plug because a few years ago Elenchus did conduct a study with First Quartile Consulting for CAMPUT, the association of Canadian regulators on benchmarking for regulatory purposes so the definitive comments, of course, are contained in that report.

Q. **[50]** I understand. We move on to something else – I'll read that – but page A77 or A86-87 in French, we're talking about in Norway about a special mechanism or compensation mechanism.

> In 2007, the NVE introduced a direct payment to customers due to very long outages, more than 12 hours, in order to motivate companies to repair an outage as quickly as possible. If the outage lasts for more than 12 hours, the company is obliged to directly

compensate the end users that are affected by the outage. The payment schedule is as follows:

So I'll let you read that but there are amounts of money that are provided there depending on the length of the outage. Do you know of any other jurisdictions that apply such a reimbursement system to its customers?

Ms. CYNTHIA J. CHAPLIN:

A. I believe the U.K. does as well. I cannot recall the details but that was certainly something that was even in place as long ago as when I was there as a staff person on the natural gas side. So this idea of not only having incentives for good performance but potentially penalties for poor performance. But Ontario does not, I'll give that as an example as well, but it's something that's, it's an issue that is repeatedly raised as being, if there are going to be positive incentives and opportunities to earn a greater than the allowed return, there should also be potentially penalties or disincentives for poor service quality.

Q. **[51]** Are there any drawbacks that you know of of this mechanism in Norway or, let's say, in the U.K.? Because you are more aware of what happens in...

A. The U.K.

Q. **[52]** ... the U.K.

A. Well, only drawbacks in the sense that they're often difficult to put into place because there end up being detailed arguments about how it would be measured, you know, what truly constitutes something, you know, when does the interruption start, when does it end, as an example. So there end up being many debates about exactly how it should be measured than debates about what is a reasonable standard. So it's one of those aspects that adds complexity, it has benefits along with it in terms of focussing attention on an issue that might be a particular concern but it does add complexity.

Mr. JOHN D. TODD:

A. On a practical side, the different jurisdictions or different utilities have different technologies around identifying outages and so there can be challenges in knowing who's affected by an outage and exactly when the outage is suffered and so on. It depends on the metering systems, where they're located and so on so it can get into practical challenges. In the telecommunications side, I believe the CRTC has introduced, there is a refund if your phone is out of service for a number of days. I think I recall receiving a refund for a few days without service but with the technology of the telephone system, essentially everybody is connected to a big computer so the information is readily available. That's not the case...

(10 h 34)

Q. **[53]** Same as smart meters or smart measurement...

R. Yes, now, again, there are some issues around smart metres. Some of them... they're not... all the smart metres aren't as smart as the name sounds. There can be gaps in the information being collected. And it doesn't necessarily relate to an outage. And, so, there's a cost to actually implementing a mechanisms such as this, of making sure that you identify the difference between a true outage and something which is a metering problem.

Q. **[54]** Thank you very much. That's all the questions we have. Thank you.

LA PRÉSIDENTE :

À ce moment-ci, nous allons prendre une pause de quinze (15) minutes et nous reviendrons avec EBM dans quinze (15) minutes, et la réponse à votre question, Maître Sicard.

SUSPENSION DE L'AUDIENCE

REPRISE DE L'AUDIENCE

____

LA PRÉSIDENTE :

Bonjour. Alors, pour le bénéfice de tous, je vais d'abord répondre à la question de maître Sicard sur la possibilité de questions écrites. Je vous rappellerais d'abord, et je vous demanderais de prioriser vos questions pour tenter de respecter notre agenda de la journée pour que tout le monde soit entendu; alors, vos trente (30) minutes. À titre exceptionnel, toutefois, la Régie recevra jusqu'à demain midi (12 h), les questions additionnelles écrites pour des références ou de courtes clarifications à l'intérieur du mandat, tel que décrit à la décision procédurale. Après examen, la Régie déterminera les questions à transmettre à Elenchus et diffusera les questions et les réponses sur le site. Alors, c'est ce que je vous offre. Et, Maître, nous serions prêts à vous entendre...

Maître Hamelin.

EXAMINED BY Me PAULE HAMELIN:

Q. **[55]** Bonjour. Paule Hamelin pour Énergie Brookfield Marketing. Bonjour, Madame la Présidente; Madame, Messieurs les Régisseurs. Bonjour aux membres du panel. Hi Mr. Todd and Ms. Chaplin. First of all, I would like to ask you certain methodology questions with respect to the report. You have chosen six specific jurisdictions that utilize PBR in the electricity sector and that... and were reviewed in your report. I understand form previous questions from maître Legault that you, first of all, verified the PBRs around the world. I understand... I understood from your testimony earlier that there were twelve (12) chosen. Can you just explain to me a little bit more the methodology that you have chosen? The comparison jurisdictions chosen? How you came about determining the PBRs, the list of the twelve (12), and then, the breakdown to six.

Mr. JOHN D. TODD:

A. The first criteria was, we wanted three that we look at distribution and three to look at transmission. And there are fewer... as I recall, there are fewer transmission on our list. So, essentially, most, if not all, that had PBR from transmission were included from our long list. And then, it was from our initial review, there’s certainly jurisdictions that have PBR but the first cut suggested, either they are very similar, kind of copycats, of one of the others, that would be considered to be the more leading, the more experienced jurisdiction. So, the second criteria was to say, how do we get diversity of, sort of, different kinds of experiences? There was... and we wanted... I think we made sure that there was at least one that was, you know, PBR for one company, since we're talking about... in Québec, it's Hydro-Québec, one company. And so, for example, Alberta, one of their regimes, is for a single company. Ontario is obviously not in that ballpark. Consolidated Edison is a single company. And many of the regulators of PBR are dealing with multiple companies. So, it was... I'm not sure if those are all the criteria but those are the main ones. And then, there's some judgement around which one... which suite of six will give us the most insight.

Q. **[56]** In terms of the objectives, am I to understand that, with respect to this report, it was not part of your study to specifically determine what would be the objectives for Québec to establish or implement a PBR?

A. That's correct.

(10 h 57)

Q. **[57]** Are there any... in terms of the objectives that you have studied for the six jurisdictions, are there different objectives for a PBR applicable to transmission providers and a PBR applicable to distributors? Different objectives that should be considered in implementing distinct PBRs?

A. Yes. An obvious example is with the latest evolution, customer focus is very important for distribution. That is essentially not an issue for transmission, although, you know, where there are many distributors, transmission, you know, maybe a relatively minor consideration, when you're talking about distributors being customers, as opposed to end-users. And there are other differences, which are a matter of relevance, having gone through the list.

Q. **[58]** Any other objectives that you would think of that are different?

Mr. JOHN D. TODD:

A. Some, things like simplicity. Most objectives would be generic.

Ms. CYNTHIA J. CHAPLIN:

A. Yes. I would think in many cases the objectives are quite high level. So they might well be applicable to both distribution and transmission, for example, incenting greater efficiency in cost reduction. So when they're at a high level, they will probably be applicable to both. It's when you're getting into the particular design elements or in perhaps some more specific objectives, that you might see a difference between transmission and distribution.

Mr. JOHN D. TODD:

A. Yes. Things like the capital trackers. So one of the differences we mentioned was that you more often have a price cap for distribution, and a revenue cap for transmission. Those are differences. If you have a revenue cap for transmission, you need more exceptions for capital additions. Lump your capital, that may just be an expansion, because of growth. So there are other differences, but that's more on the implementation level, not the high level principles.

Ms. CYNTHIA J. CHAPLIN:

A. And I guess, just to be very specific, in Ontario, on the electricity side, the renewed regulatory framework has been established, and then it has a set of objectives, and it's been targeted at distribution. But it was the expressed intent of the Ontario Energy Board to apply it also to transmission, but that there would be some sort of additional process to determine if there needed to be any modifications. So they haven't had that process yet. But certainly, their expressed intention is that the governing kind of principles would be as applicable to transmission as to distribution.

Q. **[59]** In terms of the implementation, can you explain a little bit more, to your knowledge, how the transition goes about, from cost of service to PBR, the initial transition?

Mr. JOHN D. TODD:

A. It has been different in different jurisdictions. In a couple of cases, Australia and the U.K., it was part of much broader, because there, there is a privatisation of the industry that went on. And so they're introducing a regulatory regime that was kind of first, like first regulation, but it was a whole new regime for a whole new industry, in terms of ownership structure.

And part of that was with privatization came a stronger lever around the incentive to earn a higher return. So that created an opportunity. In other jurisdictions, well, Ontario, it came in as results of the distributors coming under OEB regulation. And previously, there had been a former regulation that was overseen by the old Ontario

Hydro.

With Consolidated Edison, it was more: let's stretch things out. And it just went to having multi-year cost of service, which was, you know, the most basic level of fairly small innovation.

Alberta, which is relatively recent, looked at what was being done at other jurisdictions, and that was actually the first months of proposal for one company. And it was several years later that they brought in a generic methodology. So it was kind of like baby steps, moving forward. And I think that's fairly typical. And where they have come in, the initial regimes have tended... been very pure price cap or revenue cap regimes, sometimes fairly quickly adding on additional modifications.

Q. **[60]** Do you believe that PBRs used in other sectors such as the gas sector, for example, can be considered as a comparison, when considering implementing a PBR regime in the electricity sector, for instance?

Ms. CYNTHIA J. CHAPLIN:

A. Yes. I think we've said that. I think it's an example where this specific context of gas and electricity may well be different, so it may lead to different design features. But certainly, they can inform each other, and we see that, in looking at Ontario, where performance based regulation began first with the natural gas sector, and later came to electricity. But in some respects, the electricity framework is now sort of more advanced or more complex than the gas side.

(11 h 04)

Q. **[61]** You have considered three jurisdictions where PBR regimes that, and as you say, I'm quoting you "are specifically tailored to apply to the electricity transmitters". Can you explain what you mean by specifically tailored for the electricity transmitters?

Mr. JOHN D. TODD :

A. The simple answer is that the regulator has thought about what is appropriate for a transmitter and has designed a regime which either applied only to the transmitter or use a separate regime for the transmitter. It may be related to, and very similar to, but for example Ofgem started out with price-caps for both sides moved to revenue-caps for transmission because the cost structure, the cost evolution if you want, was different, and it made more sense to them as it has in other jurisdictions to use a revenue-cap for transmitters. So, it’s... that’s designed to reflect the characteristics, the cost characteristics if you want, of a transmitter, where other than major lumpy investments, costs don’t very much volume throughput.

Q. **[62]** Okay, and in the three examples or jurisdictions that you’ve studied, my understanding is that these jurisdictions have also adopted different PBR regimes for distribution and transmission. Am I... transmission operators. Am I correct?

A. That’s correct. And we didn’t restrict ourselves talking about the transmission side. So, in those sections that deal with the PBR for transmission, we’ve also given context by talking about the differences and the mechanisms for our distributors so that there is a comparison because I think that was an important insight to see the comparison of the two which we didn’t anticipate up front, but as we got into it we realized that was important.

Q. **[63]** I think you already touched on that in your previous answer but can you explain why in those three different jurisdictions, they have distinct PBRs for transmission and for distributors?

A. The simplest reason that I can see is because the cost structures are different. That... and what was observed, I think it's in the U.K., I believe, was that under a price-cap, there was an incentive to increase volume throughput. And this is at a time when the government and the regulators were pursuing conservation. And so that was working against the conservation objective because if you increase throughput on a price-cap regime, you increase your profits significantly. And they said, the cost weren't changing. They're just bumping up throughput. We don't want them bumping up throughput. Costs don't change, let's do revenue-cap.

Q. **[64]** And do you think that there are advantages in separating both transmission and distribution as far as implementing a PBR?

A. I've not thought about that question in the Québec context but for the jurisdictions we've covered, it seems like the natural and appropriate thing to do, to treat them differently.

Q. **[65]** To your knowledge, are there any other jurisdictions in Canada that have adopted a PBR applicable for transmitters only?

A. No. We did a little survey of Canadian jurisdictions and I think PBR is being used expensively in British-Columbia, British-Columbia Utilities Commission, but that is only distribution, because Westcoast is the transmitter. So, it's not regulated by the BCUC, because of the cross border connections. I'm trying to think... I... no, I don't think... there's not a lot of other examples of PBR.

Q. **[66]** Okay, and...

A. Certainly not of the transmitters and, of course, many other companies are integrated. So...

Q. **[67]** And...

A. ... we can't separate. They don't... do not have a structure that's is conducive to that. New Brunswick Power was... was recently put back together. But it was not subject to PBR when it was separate transmission and distribution companies.

Q. **[68]** And in the survey that you did for... around the world, PBR regimes are applicable to transmission providers only? Any other examples, or the three that you've chosen are the... are the ones?

(11 h 09)

A. It was last September that we did a memo on the long list. And I... my recollection is that there were no other, shall we say, distinct transmission options. There may be nine others that were regulating transmission.

Q. **[69]** Okay.

A. In our survey. We... the survey is not intended to be exhaustive, it was... even with that, we started at what I'd call leading jurisdictions.

Q. **[70]** And with respect to the survey, are there any other jurisdictions that have implemented distinct PBRs for transmission and for distributors?

A. I can't say. We didn't even look, in that initial survey, we didn't even look at it in that context, it was after that that we...

Q. **[71]** That you thought about...

A. We sort of thought we better make sure we cover both grounds.

Q. **[72]** To your knowledge, are there any other issues that should be considered in determining the establishment of two PBR regimes? One for transmission, you understand, one for transmission...

A. Yes.

Q. **[73]** ... and the other one for distribution.

A. Not that I can think of offhand. There may be, if I were to reread the report carefully, there might be something else that would pop into my head. I can't think of anything else.

Q. **[74]** In the three jurisdictions that you have studied, applying PBR regimes to transmission providers, are there any similarities with the Québec jurisdiction in those three jurisdictions that you've studied?

A. There are probably a lot of potential similarities or dissimilarities that would be apparent by looking at Québec closely, we didn't look at Québec closely. The one obvious issue would be... similar and different. Norway has one transmitter, many distributors so the transmitter level is similar, northern climate perhaps, but many distributors is obviously different. The U.K. and Australia are talking about multiples in both cases so I guess there would have to be said to be different.

Q. **[75]** Okay. With respect to the U.K. RIIO model, can you explain the difference you see between the, what you call the "output target" and the "input target"? I know that it's a quite general question but it was difficult for me to understand what is an output target compared to an input target.

A. Yes, we advocate output targets and have trouble defining them all the time too...

Q. **[76]** Okay.

A. ... so I understand your dilemma. Inputs are easy to measure, you're talking capital, labour, you know, costs, the costs that appear in the accounting statements. Outputs, the simplest notion is numbers of customers served, volume throughput, but then you get beyond that and outputs can be, you know, measures of service: an output can be customer satisfaction, that's in RIIO.

So it becomes a broader base of results of what are you producing as opposed to what goes into the production function and one of the challenges, in my view, of any sort of output-based regulation – and I think Cynthia is part of the board that has gone in that direction, you may want to comment on this – one of the challenges is, number 1, what is the right way to identify outputs because the list can be long and if you have too many performance objectives, your system can run into problems, you can't pursue too many objectives at once.

But also, how do you measure them? Many outputs that you would like to measure can be difficult to measure. So that's part of how a system has to evolve, a lot of thought has to go into it. There have to be course corrections because you’re really stepping back to it at the higher level: what are we trying to accomplish? We’re trying to create something which has results similar to a competitive market, where competition forces people to be efficient or they lose money. It also forces them to give customers what they want. Right? It also forces them to live by various types of regulations so an unregulated industry is actually regulated around things like safety and there’s many aspects, every industry is subject to regulation – just not economic regulation that we’re used to.

(11 h 14)

Part of what the economic regulator is doing is bringing some of these other forms or regulation in – that provides discipline equivalent to the competitive market. So the outputs are all the things that we, shall we say, value in a competitive market but we can’t cover everything. So my observation is that what happens in jurisdictions is that regulators include measures around the things that are of greatest concern to them.

And sometimes, there’s a history. That’s one of the references earlier in the presentation, is your starting point, is your context. What's the problem... what's the concern you're trying to address? Is it high rates? Well, rates can be an output. Is it customer service, in terms of reliability of the system? Well, that becomes your output. It is getting new customers connected? That becomes an output. So, output, in a sense, can be any of those types of things. So, I'm... it's a bit vague but...

Q. **[77]** No, I think, you...

A. ... it's the reality.

Q. **[78]** ... you've answered. Thank you.

Ms. CYNTHIA J. CHAPLIN:

A. And there is the example in the report, in the appendix, in the English version, it's A-19, which gives the set of performance, outputs, that the Ontario Energy Board is looking at.

Q. **[79]** Okay. We've talked... my colleague has talked about the bench marking and I want to go back to the Norway model. Just, maybe, for our reference, do you believe that the Norway PBR regime using an international bench marking to determine allowed revenue is something that could be replicable... that could be replicated in Québec?

Mr. JOHN D. TODD:

A. In concept, absolutely. I mean, it’s a generic concept. The challenge is that what NVE had to do was get cooperation from other European regulators. And they had the advantage of working within the European community. So, it was probably easier to obtain a group effort, get everybody, you know, coming into the system. Based on having done that review I’ve mentionned of benchmarking for regular purposes across Canada, we talked to companies, we talked to the regulators; it would be a huge challenge in Canada. And to get something working with the United States, everybody has their own view, but my personal view, is that could be a challenge. Would there be a possibility to opt-in into the European group? I don’t know, no idea.

Q. **[80]** Okay.

A. You have to explore the possibilities.

Q. **[81]** On the sharing mechanism, in Australia, you indicated in your report, and I’m quoting a portion of it at page 66, that the regime is:

> [...] somewhat unusual in seeking to realize an explicit sharing ratio of the benefits [...]

I just want to understand what you’re saying with respect to what is unusual. Is it in that context, the sharing mechanism? Or is it because of the stretch factor? I just want to better understand why you believe it's unusual.

A. Sorry, it's on page 66?

Q. **[82]** Yes, through line...

A. What line? I just want...

Q. **[83]** ... 19.

A. Alright. Yes, the unusual aspect was they... it's not a simple... it's not a simple thirty - seventy (30-70) sharing of earnings. And, yet, they set a target. So, they try to get their pieces to come together to produce a right split of the benefits. But that meant defining the benefits, which is different than earnings. I mean, earnings... I guess... I suppose, it's a bit similar to an earnings sharing mechanism, except the earnings sharing mechanism could still the stretch target. Okay? So that you may end up with a split of the benefits that is different than the earnings sharing percentage split. They've built in a more specific reference point to try to get a more explicit sharing as a kind of policy objective. This is the split they considered appropriate. And so, they... they put more thought into it, I guess,

to get... to get the end result, to be that seventy - thirty (70-30) split. Yes.
(11 h 20)
Q. **[84]** Are there any other jurisdictions where there’s a sharing of benefits mechanism that you have already looked into?
A. Well, the earnings sharing mechanisms are sharing... Every regime has what intends to be a sharing of benefits. Okay? Basically, the two common things are an earnings sharing mechanism which says earnings above a certain target level, which may include a stretch target; that earnings above certain levels will go to... will be split in a percentage that is defined.
The other way of sharing is that the stretched target itself says « there is a guaranteed but in fact limited customer benefit », so we're going to give to the customers a one percent (1 %) productivity gain, or two percent (2 %) productivity gain. Everything else goes to the company. That's the split as well, but not a percentage split.
Q. **[85]** Okay. You referred in your presentation to the customer preferences, and I would like to, at page 6, and I would like to link that with my following

question: to your knowledge, can a PBR mechanism for transmission apply differently, depending on the type of clients? And I'm thinking of point-to-point and native load. Since customer's preferences may be something to consider, is there any, to your knowledge, a PBR that has different applications for different types of clients?

A. There are a couple of regimes, like Ofgem, that relies on a business plan. And Ms. Chaplin may comment, I think Ontario was going more into: you’ve got to submit plans, so may be going kind of going down that route, but with the business plan, there's no reason you couldn't have different outcomes for different categories of customers. They would have to be proposed by the company and approved by the regulator. And that sort of links to the customer focus, which to me, part of the customer focus is recognizing distinct customer groups. I’ve thought about that more in the distribution context, but certainly, it could apply in the transmission context as well.

Ms. CYNTHIA J. CHAPLIN :

A. Yes. And I'd say that I think, particularly, the focus has been on the distribution sector, because there's been a realization with technology changes, and just general trends, I think, in society that customers, that maybe the distributors' understanding of their customers and their preferences is perhaps not as deep as it should be or as it could be now, whereas I think that a general feeling is that transmitters, because they have fewer customers, they have much closer, often a much closer relationships with their customers.

Therefore, they have, they're starting with a greater depth of knowledge. And also, the customers they're dealing with have greater expert, you know, they're more balanced in terms of expertise and knowledge, whereas distributors, it's a much different relationship.

Q. **[86]** Dernière question. Bon timing. You have referred to, and I think it was your words, a new trend, with respect to stakeholder engagement. Can you just describe that with examples, what you mean by that?

A. Yes. Stakeholder engagement, really everywhere that it's undertaken, and I can speak specifically to Ontario, can use a variety of different forms, both formal and informal. So certainly, hearings are a form of stakeholder engagement. But the Ontario Energy Board has also used consultations to develop regulatory policies. So these are less formal processes, and involves greater dialogue amongst the parties as a way to, to some extension, maybe try to build a bit of a consensus, but at least trying to narrow where the issues of disagreement are.

And that, I think, was also, I mean that was also used by Ofgem, when they were developing RIIO. So that already was a jurisdiction that doesn't use formal adjudicative hearings. But again, we're using conferences and using panels of experts to engage people in discussion, so that not only could the level of understanding and expertise was raised for everybody, and also as a way of trying to work towards resolving the issues, and setting design parameters.

Q. **[87]** Alors ça complète mes questions. Merci Madame la présidente.

LA PRÉSIDENTE :

Merci Maître Hamelin. Maintenant, nous entendrons maître Turmel pour la FCEI.

EXAMINED BY Me ANDRÉ TURMEL:

Q. **[88]** Bonjour Madame la présidente. Bonjour aux régisseurs. André Turmel pour la FCEI. Good morning to the panel. So we'll go directly to the gist of it. We'll work with the English version of the report, to page 1, the last sentence, and you say that:

> ... a regime that works well with a shareholder-owned utilities may be less effective if used to deregulate a Crown corporation.

End of the quote. So could you please explain a little bit upon this statement?

(11 h 25)

Mr. JOHN D. TODD:

A. Yes. A typical shareholder owned company is very focussed on its return on equity to shareholders. And therefore, the lever to get it to behave in the way you want it to behave, is fairly straightforward, you know; give it money that flows through to net income, and so, the mechanism to get a response is clear cut. As a generalization, this is not a comment on Hydro-Québec, as a generalization, Crown corporations, my observation is that there are two types.

One. There are Crown corporations out there that you look at them, and they behave exactly like a shareholder owned company. And there are others that are, have relatively little concern about their return on equity, and they're pursuing other objectives. It is harder to find the lever to get them to pursue things like cost cutting measures. Where, if they're not concerned about their impact on their return.

Q. **[89]** And I won't ask you, I don't think you've made any surveys of Hydro-Québec, per se, on that, right?

A. No.

Q. **[90]** Okay. On page 2 now, you say, and now, discussing and turning on to rate caps versus revenue caps, you do say that:

> Rate caps are generally used for distribution utilities in order to stabilize costs on a per unit basis since costs tend to increase with number of customers and/or volumetric throughput.

Could you please, on what basis did you conclude that distribution utility cost tends to increase with number of customers or volumetric throughput?

A. That was not based on our analysis that, again, our survey or regulators, we were drawing a distinction, we've given examples with transmission, that was the rationale provided. Now, it's important to recognize that every regime is a package of features. So with the revenue cap, part of that concept is: you tend to have some sustaining capital, ongoing maintenance, which is fairly constant. And then you have big lumpy investments. And those, in the revenue cap models, tend to be treated as outside measures and become adders to the rates. So it's, if you think of it, instead of being a smooth cost function with growth, it's a step function. So when we hit a step, we'll raise it. But it may be years before you hit the next step of cost going up.

Q. **[91]** But I do understand you did not conduct any specific studies on that?

A. No.

Q. **[92]** Right?

A. No. We're just...

Q. **[93]** Okay.

A. ... commenting, why... regulators' rationale.

Q. **[94]** Okay. Now, if we're moving up to page 13. I'm sorry. I'll keep this one for later on. We have some time. So we'll move to page 14, sorry. At page 14, you do refer in footnote 17, at the bottom of the page, a study performed by Professor Joskow.

A. Correct.

Q. **[95]** Okay?
A. Yes. Joskow.
Q. **[96]** And you mention in footnote 17 that Professor Joskow discussed of some questions:

> His discussion of these questions provides interesting insights into the challenges to be addressed. The paper concludes with a Discussion section that set out ten interesting observations for discussion at the conference.

Of course, when you do say that, we have to go there and pick the study, so... And if you allow me, I just want to put it in the docket, and I may have one or two questions. Are you familiar with the study?
A. I read it. Yes.
Q. **[97]** Okay. Okay. It just... I think it's for you to complete. Alors Madame la présidente, simplement, donc, c'est une pièece, on va la qualifier CFCEI-0034, et c'est l'étude du professeur Joskow en référence à la note de bas de page 17 de l'étude de Elenchus.

CFCEI-0034: Joskow, Paul L. (2006) "Incentive

Regulation in Theory and Practice: Electricity Distribution and Transmission Networks" MIT, prepared for the National Bureau of Economic Research Conference on Economic Regulation, September 9-10, 2005

Q. **[98]** Do you have that study, Sir?
A. I actually have that study in my binder with the report. It's obviously a major one in my mind.
Q. **[99]** Okay. So I would ask you to go to page...
A. 51?
(11 h 30)
Q. **[100]** You're right. You're faster than me. In fact, there are ten observations, and I would ask you to go to the fifth (5th), page 53. So I just want you to comment on three observations. Number 1 is the fifth one where, and I'm going to quote at page 53, item number 5, he says that,

Incentive regulation theory implies that the adverse selection and moral hazard problems resulting from the regulators' information disadvantages are best handled by offering firms a menu of cost-contingent incentive

> contracts. More frequent use of menus of incentive contracts in this way could improve incentive regulation in practice.

So what do you think of this statement? Do you agree with that in general from your own experience?

A. It’s an option that is interesting. I ran into it a couple of decades ago in the telecom sector where they had offered trade-offs between, I think it was the efficiency target and the potential earning of return so you’ve taken a more aggressive target, you would have more potential upside and for exactly the reason that Joskow puts out there, I was actually an advocate of it in the telecommunication side that we don’t know what a good target is and very high targets were set for telecom companies when we first had price cap regulations and there were a number of different companies, part of that is we’ve got many different companies so companies kind of categorise themselves as either having a lot of potential for productivity gains or lower and you create an incentive for them to take a higher target. So, in that context, I would certainly agree but that’s a multicompany being regulated context.

Q. **[101]** Okay. Thank you. So now moving up to the seventh observation, down page 53 where Mr. Joskow's observation addresses the integration of information on the value of loss of or undersupplied energy. Does Elenchus have a view as to how information on the value of uninterrupted service should be incorporated in a PBR mechanism? And this is at the bottom of the paragraph, sorry, because it's a long one.

A. Yes. No, we've not thought through that issue.

Q. **[102]** And finally, moving on to the eighth, number 8 observation, third line, Mr. Joskow seems to suggest that a multipart sliding scale structure – and we understand that that means an earnings sharing mechanism – would have superior efficiency properties compared to deadbands or hard caps and floors on profit realisation. What do you think of that? Do you agree with this assertion?

A. Yes. What I've seen the most commonly was the British Columbia Utilities Commission, for their regimes, they had deadbands and, prior to sharing, so that the concept was to create a strong incentive for small gains and the way the regulator viewed it there, as I understood it, was that when you get into large variances, you're getting into fortuitous situations therefore outside the deadband is when sharing came into play and they said once you're getting up there, it's probably fortuitous and it's appropriate to you sharing and you're not going to provide a disincentive to pursuing those gains.

Q. **[103]** Okay.

A. And part of that related back to his concept of the regulator who doesn't really know what's possible, they didn't want to give them a target and have them being able to outperform it by ten percent (10%). And I know the BCUC was very concerned about its image, if the company was earning a twenty percent (20%) return on equity.

Q. **[104]** Okay. Thanks. So I would put aside that study for the moment. I may come back with having one last question but at the end, in some minutes from now but now turning to page 25, the first line, you say that... I'm sorry, page 1. Well, you do list at page 24,

> The OEB also identified six factors it would consider in reviewing the PBR plans.

And the last one that appears at page 25 is "the clarity of the Board’s expectations for the plan." How would you, and I know you are experienced consultants both of you and you may have dealt with a government intervention as a public policy while regulating, I would say, so how would you, we’ll say, the sword of Damocles over the head of the regulators, the sword being the government. From a policy standpoint, how does that interfere or play with that PBR mechanism that is being adopted? Does that... can it affect the credibility of the mechanism? So, how... are there any observations you would make with that?

(11 h 35)

Ms. CYNTHIA J. CHAPLIN:

A. Well, certainly speaking from the Ontario perspective, PBR was introduced at a time of significant policy change within Ontario. And Ontario’s electricity policy has gone through quite a few changes, so that the possibility of major policy change is a fact of life for all regulators. Sometimes, it’s expected, and sometimes, it’s unexpected. So, I thing that that’s... the fact that the policy framework may change is always a consideration. I... in my experience, regulators deal with that by being as transparent as possible, about how they go about determining the objectives, and monitoring how the companies are responding to incentives if incentives have been put in place. So, I think that's... and having the open and evidence based processes. So...

Q. **[105]** Well, Okay.

A. ... I think that's...

Q. **[106]** And my second question to that is: we all know that it may happen and that's a fact.

A. Right.

Q. **[107]** But are there any PBR types... or types of PBR mechanisms that are, maybe, well, seem less exposed to this regulatory risk, let's say, more immune from...

A. Well, I think that that's where a process of gradualism or evolutionary change, rather than doing something dramatic right from the start. It can be one technique for allowing everyone to grow comfortable with a new type of regime, including a political... the political side.

Q. **[108]** Okay. Mr... on your side, if you have any comments?

Mr. JOHN D. TODD:

A. No, I agree. It's part of the reality of regulation. And, I mean, an example mentioned in the paper in Ontario, PBR initially came in, there was a vision, and then the government introduced a rate freeze, which affected the PBR regime. Move on to the next... next iteration. But that’s, you know, that was... the OEB coped with that.

Q. **[109]** Okay. Thank you. Now, if you just bear with me, and take back the Joskow study for... and going back to the fifth principle... So, my colleague here just refreshed me that Mr. Todd, you just mentioned in reference to the discussion we had... the short discussion we had on item 5, you said that, of course, that principle, as a good option, you mentioned, could be appropriate in the context where there multi companies... multi utilities. Would you agree, or what do you think in the context of Hydro-Québec where we have, in fact, one transmission or one distribution division? Would that apply with the same comment that you made?

A. I’m not familiar with one in that context, and haven’t thought it through. So, I guess I would refrain from responding. I mean, there’s no regime that can’t consider it. But where... the ones I’m familiar with have been used where there are... it was the way of sorting out the different companies to have different objectives. The concept, the way

Joskow puts it is, it’s because of the adverse selection that you don’t know where it sits on the scale of potential productivity. So, in theory, it could apply to a single company. But I haven’t thought it through in the context... in that specific context.

Q. **[110]** Okay. Thank you. Moving on now to page 34, where you do discuss the process for the European PBR framework and, of course, with respect to the Ontario experience that you know well, you wrote that:

> Ontario’s experience suggests that best PBR practices are most appropriately defined in terms of the process used to design the regime, not in terms of particular design features.

So, from your experience, what are the best practices for the process used to design a PBR Regime? You referred this morning about... there are no best practices per se, but with respect now to process, if there are best practices; are there?

A. Ms. Chaplin may want to start answering that, while I look... I think we summarize that somewhere in the report, where we talked about... I mean, you know, we mentioned first... first, you start with setting your objectives clearly. I think we actually said about four different things. Do you recall where that was? End of the introduction?

Q. **[111]** Yes, but from your own experience. I just want to hear from... a discussion, I mean, the best...

A. Oh!

Q. **[112]** ... from the process standpoint.

(11 h 42)

A. Yes. And that’s what I say. I’m sure we mention in the report, I’m just sort of going by memory then. You start by setting your objectives. Then, you want to look at the companies you're regulating, so then you look into different areas of context that Ms. Chaplin, her initial comments, was pointing out, things like what's the structure of the industry, what's the structure of the company, what are the challenges you're facing. So we talk about what are your performance objectives. Well, if there are specific problems that are of concern, you want to identify those. That sort of feeds back to the objectives. And then, you start drilling down to looking at what mechanics are necessary or most appropriate to adopt.

(11 h 43)

Ms. CYNTHIA J. CHAPLIN :

A. And I think, in terms of developing, maybe particularly in developing an initial PBR plan, it's a bit of a give and take, in terms of going at a pace and developing it at a pace that the stakeholders, you know, are comfortable with, but not allowing the development to sort of languish in terms of... I mean, you can always get better information. You can always do another study. So, sometimes, that desire for perfection can, sometimes, get in the way of actually making forward progress. So, I think it’s... often, the best practices are acknowledgement that there may be a better way to do it in the future but this is an adequate, an appropriate way to do it now. And we see... you see that in all of the major jurisdictions where we describe how the frameworks have evolved, Ontario is one example, that, for example, in benchmarking, in the early phases, the data was not great but there was an expressed intention then. So, this is something that is going to be worked on. We’re going to, you know... this is the direction we’re going to move. There’s going to be total cost benchmarking. So, in other words, it’s setting out for people, giving everybody involved lots of notice of about what the focus is going to be, so that people are informed. So, it’s that combination of persist... being persistent but also going at a pace that’s manageable, given the constraints of the context and the data that are involved.

Q. **[113]** Okay. Thank you.

Mr. JOHN D. TODD:

A. Yes, just with... I just sort of point out that pages 23 and following, it’s not put exactly that way but it starts with a list of objectives for regulators to consider that was drawn from a publication of the regulatory assistance project and identifies some other potential objectives and some factors. So, that’s kind of where our observations on, let’s call it the best practices of process...

Q. **[114]** Okay.

A. ... that would be the best summary in the document.

Q. **[115]** Thank you. We’re now moving to another continent, now to Norway, so, at page 70 of your study, about Norway. At page 70, you do refer at footnote 74, I mean, we love footnotes, but anyway. So, we... and it refers to a study conducted from

the Norwegian regulator by the Foundation for Research in Economics and Business, which estimated that twenty-five percent (25%) of industry costs in Norway resulted from inefficiency. That's very... So, are you aware or do you have any information, what would the primary sources of the industry costs inefficiency identified in that study? Yes... Yes, exactly...
A. You would have to go back...
Q. **[116]** ... at page 70, from line 6 to 10...
A. Oh! No, I see the cite, but I'm saying the... Sorry, the report by the Foundation...
Q. **[117]** Yes.
A. ... my recollection is it provided some detail on where... or some discussion of it, but that's going from memory. But that... they...
Q. **[118]** No, no...
A. I don't recall.
Q. **[119]** Okay. You don't recall but, of course, it's always interesting to find out where the inefficiencies are, so is it possible to get the study of that... peut-être qu'on va le demander par écrit, Madame la Présidente, si c'est possible. O.K. Thank you.
A. I think that that is in the appendices. We have our

reading list. All of those are links.

Q. **[120]** And we'll ask tomorrow in writing if you could provide, maybe, for example, this study, if available. Well...

A. Yes, I think it's a live link. I think it's a live link to the study.

Q. **[121]** There's a live link for...

A. Yes. Yes.

Q. **[122]** Parfait. Parfait. Merci. Thank you. Il m'en reste combien? Les échéances, hein? Il m'en reste combien, Madame la Présidente?

LA PRÉSIDENTE :

Cinq minutes.

(11 h 47)

Me ANDRÉ TURMEL :

Q. **[123]** Cinq minutes? O.K. Going at page 77, of course, we are still within the Norwegian approach. And that report notes that the Norwegian model, on page 77, its reliance on benchmarking and you say, is not necessarily replicable in other jurisdictions. Of course, we've heard that, that it may be, or maybe not. And I do understand what you said on that. And just going back, and you may be limited to that answer but the challenge of benchmarking, you have referenced to that this morning, can you please describe the feasability of... and challenges related to benchmarking, let's say, HQT against utilities outside Québec? I understand you may not know HQT per se but facing... HQT facing, let's say, the world, are there any challenges that come to mind to you?

A. I will answer that question in the context of I had a former person on my staff for about eight years who was a huge fan of the Norway benchmarking system. His expertise was econometric studies in benchmarking. One of the things that I heard from him was, number 1, the level of data collection by the regulator and the level of internal, shall we say, scientific expertise was huge. It was almost like having a university econometrics department in-house and they ran the study, they were in control, it was not farmed out to consultants, it was not a company's consultant, something like that, therefore they did not go through hearings with competing consulting reports with different sets of numbers, the regulator simply went out, collected the data, ran the numbers and produced the results and that was it.

That kind of control is hard to imagine in any jurisdiction that I work in as a consultant and one of the challenges in benchmarking is you've got to get the data right and you've got to go with the set of numbers – Ontario uses a specific economics group - huge complaints about it from my clients and Cynthia at the board and everybody said "Fine, it's the best thing you've got, if you don't like it do something better." So it's tough to do and you just make the determination to do it and you have something done and if that's the way you want to go, you almost have to tough it out.

Q. **[124]** And... Sorry.

Ms. CYNTHIA J. CHAPLIN:

A. Oh! Just a minute. Just recently in Ontario, Hydro One Transmission they are not under a PBR but they have a two year cost of service and they had a negotiated settlement with their stakeholders and, as part of that settlement, they have agreed to undertake transmission cost benchmarking and they are going to be doing that in consultation with their stakeholders in terms of setting the process.

So I would imagine that things like drafting the RFP, perhaps reviewing criteria, trying to set the scope and stage for that study is going to be the responsibility of the transmitter but to be done in consultation with the

stakeholders so that will be an interesting
activity that will be going on at much the same
time as you are looking at these issues.
Q. **[125]** That is interesting and that similar process,
that’s done, that’s finished, right?
A. That was a settlement to set Hydro One
Transmission’s rates for the next two years and one
component was, during that time and before they
come for their next application, they will be
commissioning a transmission study, a cost
benchmarking study.
Q. **[126]** And we would be able to, if we look at the
OEB website, we would be able to find a decision
acknowledging this kind of information? Or is
that...
A. Yes.
Q. **[127]** Okay, perfect.
A. Yes.
Q. **[128]** Dernière question, très courte, Madame la
Présidente, très, très courte si vous me permettez.
À la page 13, page 13, très courte citation, at the
bottom of page 13, you do quote again, I think,
professor Joskow and at the bottom of the
paragraph, he does say that, he questions the, how
do we say that, the "take service quality

attributes into account, and to deter gaming". Let’s talk about gaming for one second. With respect to gaming, from your experience, what are the best ways to make sure that no such, well, no such gaming or reduction in expenses and rebasing are being used in that process.

Mr. JOHN D. TODD:

A. You have to make sure you have a devilish mind in designing a regime.

Q. **[129]** Okay. Point taken.

A. Whenever you design, you say "Okay, there’s the old saying, you know, tell me the rules and I’ll tell you how to beat it." So you have to approach the designer of the regime and say "Okay, what could I do? How would I make the best of this regime and does it leave some loopholes?" and try to anticipate them as best you can to avoid opportunities for gaming and, secondly, that’s where the evolution comes in that you have to live with some gaming if you’ve missed it because of the certainty of the system and you tolerate it until the next review and then you plug the loophole.

Q. **[130]** Merci.

A. And then they come up with a new one.

Q. **[131]** Merci, thank you.

LA PRÉSIDENTE :

Alors, à ce moment-ci nous allons prendre une pause pour le lunch, nous serons de retour à une heure (13 h 00).

SUSPENSION DE L'AUDIENCE

REPRISE DE L'AUDIENCE

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(13 h 00)

LA PRÉSIDENTE :

Bonjour à tous. Alors la parole est à vous Maître David.

EXAMINED BY Me ÉRIC DAVID:

Q. **[132]** Oui. Bonjour Madame la Présidente, Madame la Régisseure, Monsieur le Régisseur. Éric David pour Option Consommateurs. So Mr. Todd and Ms. Chaplin, I have a few questions. So Éric David for Option Consommateurs, I represent the interests of residential consumers in Québec before the Energy Board. I'm going to address three themes in my line of questions to you. I'd rather announce it now so you know what's coming. The first is I think we need perhaps to just clarify what exactly we mean when we use the term performance-based regulation, what's a PBR? I think that's the starting point.

The second theme I want to address is the process by which objectives are determined because I also think that in the instauration of a PBR, the first step is to set the objectives: that will be the Board’s main task.

The third and final theme that I want to look at with both of you is the regulatory process and if whether or not you have recommendations to make on that level to the Board.

So in respect to the first theme, what do we mean when we use the term PBR, section 48.1 of the law, as you know, calls for the establishment of a performance-based regulation. On page 7 of your report, at the very bottom, you explained that the term performance-based regulation is not used consistently in the literature or by regulators internationally and on page 8, the next page, the first paragraph before the first title, the last sentence, you explain that,

> This report reviews regulatory frameworks which are known by each of these labels since all variations are used by regulators to achieve objectives that are closely related to the objectives identified in section 48.1 of the Law.

So the first framework that I wanted to look at with you and ask you a few questions is the one regarding Con Edison in New York and I refer you to page 43 of your report. You explain essentially that Con Edison is under a multi-year cost of service and that this form of cost of service qualifies as a PBR, is this correct?

Mr. JOHN D. TODD:

A. Yes.

Q. **[133]** My next question is how does Con Edison's multi-year cost of service differ from a traditional cost of service? What are the additional characteristics?

A. If you go back to your first reference earlier on we're using PBR and incentive regulation, IR, somewhat interchangeably. The reality given with your question, you're setting up a theme there, I'm with you completely: PBRs whatever you define it to be, there is no, you know, in the literature, in the usage, there is no definition that creates a box that says "This is PBR, anything outside of it is not." And, in fact, in different regimes, we tried to, for simplicity, keep the terminology the same but, you know, the U.K. term RIIO is they don't call it, you don't say this is... They don't call it PBR, they call it RIIO, right?

So, where we're coming from is what are they trying to accomplish? BPR, certainly in Canada, if we look at the use of PBR across Canada, that is used in, for regimes where regulators are trying to achieve, I would say, cost reductions and other things, cost reductions at the core, other things vary and using incentives to get there.

(13 h 05)

So, from that perspective, the Con Edison methodology is a form which in the States would be more termed "alternative regulation" and they are setting rates which will be in place for a number of years.

Instead of taking a single test year, and then adjusting across base by formula, they're actually looking at the multi-year period, looking at costs in multiple years, and coming up with rates that will be in place for several years. It's a different way of setting rates for multi-year period, which creates an opportunity, same as the other regimes, creates an opportunity that, relative to the reference rates, you can reduce your costs, and keep the benefits. Then, there is a rebasing, a new rate setting, which is intended to reflect in rates, the cost savings that have been achieved over time. And, in theory, what you should be doing is ratcheting down rates after each cycle when you do a rebasing.

So, at that high conceptual level, it's a way of setting multi-year rates. It's just using multi-year costs instead of one-year costs in the formula, and then allowing the company to earn a higher return by pursuing productivity gains over that period.

Q. **[134]** Okay.

Ms. CYNTHIA J. CHAPLIN:

A. And just... I would add another important component of the Con Edison framework, is this quite explicit set of service objectives which the rate plan is linked to, so that those measurable outcomes or measurable performance standards is another important hallmark of performance based regulation.

Q. **[135]** So, would I be correct to summarize that the difference between the multi-year cost of service that we see in Con Edison, and the traditional cost of service, are the fact that the multi-year one, is obviously over several years? And secondly, the point that you just raised, Ms. Chaplin, that there are... I don't want to misquote you but specific

additional objectives that are set.
A. Well, there are... there are the established service objectives which refer to in our report.
Q. **[136]** Okay. Would it be an exaggeration to say that anything that is not a traditional cost of service, is a PBR?
Mr. JOHN D. TODD:
A. I would be reluctant to adopt an open-ended thing without knowing what's included in that but to a large extent, not quite. There's a survey that we refer to of alternative regulation in the States. We've got a table that goes through literally everything that they define as alternative regulation. There are definitely alternative regulation mechanisms that I would not consider to be the normal way we talk about PBR. But arguably, those are just variance in cost of service, so they would fit in the cost of service category. So, yes, you could sort of, broadly speaking, maybe it's cost of service and PBR are just two very broad categories.
Q. **[137]** Okay.
A. Now, the real question though, given your starting point, is: is that what was intended by the legislation? I'm not a lawyer so I'm not going to

comment on that. But I'm saying, in this case, it's whatever the legislator intended in what it wrote. And we're not going to try to interpret that. That's the Régie's job.

Q. **[138]** Okay. But you would agree with me that it's not really clear what the legislator intended when he adopted... when it adopted section 48.1.

A. That's a legal opinion. So, I can't comment on that.

Q. **[139]** Okay. What would be the advantages, in summary, of a multi-year cost of service, compared to a traditional cost of service? In summary, what's the main advantage?

A. There are... there's more to the Con Ed example than pure multi-year but starting with that core, it... potentially, you have low regulatory costs because you have one major hearing every few years instead of annual hearings. Potentially, you have incentives for cost reductions but there's other features in the design that get that to it because there is an opportunity for gains to be made and retained by the company. Those gains then become evident and get... the company is expected to stay at lower costs and therefore rates can be lower in the future, plus various bells and whistles can add

additional benefits to it.
(13 h 10)
Q. **[140]** Okay. And the next question is - sorry, I have a bit of a throat thing - what are the advantages of a multi-year cost of service over a more sophisticated form of PBR like Ontario’s fourth generation PBR or like the PBR existing in the U.K.? If any.
A. So you're saying in the tradeoffs, what are the things that would speak to multi-year?
Q. **[141]** Well, I take the example of Hydro One. Hydro One has chosen to be under a multi-year cost of service, even though the fourth generation is available to it. And it's the largest distributor in Ontario. If I'm not mistaken, Hydro One Transmission as well shows to be under a multi-year cost of service, and not under a fourth generation PBR. So I'm wondering what would drive the two biggest utilities in Ontario to reject this sophisticated form of PBR?
A. Let's go back to the renewed regulatory framework for electricity that was developed. It gave companies three options. So really, what are the three options. So one option was to have fourth generation IR, which was very similar to what had

preexisted, extended by one year and so on. The option of multi-year which would specifically permit it, was targeted, as I understand it, to utilities who are saying: we do not have smoothly increasing costs; in particular, we have some very huge capital challenges facing us.

And therefore, the fourth generation IR or what had preexisted does not work for us, because we really have to give you our future plan, and we can not live with the correct rates in the first year, and have rates that are essentially held constant, very small increases for the next three to four years. We need bigger annual increases than that, because of our capital drivers.

So the Board has said: okay; if because of your individual circumstances, you do not fit into our cost of service model, let's do multi-year, where you can give us your costs for those years. And the way I interpreted it, other people can interpret it differently, you'd take that and do a little bit like the Con Edison model, and smooth your rates, so that over the period of time, you can end up with, in present value terms, your revenue requirement of a five year period, with modest rate increases.

Frankly, I think that would be a great way to deal with rate shock, if what you need was a ten percent (10 %) increase the first year, than one percent (1 %) every year after that; why not replace that with three percent (3 %) a year?

So there are, multi-year gives you more options, shall we say, rather than one sudden increase followed by formulaic increases. Now, I suspect Ms. Chaplin may have some insight there that I'm missing.

Ms. CYNTHIA J. CHAPLIN:

A. Well, just to clarify. Hydro One Transmission did not have as an option the custom IR or multi-year IR. It's still under a form of cost of service. It's a two-year cost of service. They've been under that form of regulation for quite some time. The, what was new in their recent round of rate setting, was the fact that they were able to negociate a resolution with their stakeholders. So that's the transmission side of Hydro One.

On the distribution side of Hydro One, yes, it made an application under what the Ontario Energy Board called it Custom Incentive regulation, part of which involves five year forecasts. However, in it's decision, the Ontario Energy Board determined that Hydro One Distribution had not made its case, essentially. So what they've set for them is essentially a three year cost of service, and set in place expectations for activities that Hydro One Distribution, and various studies that will either commission or do themselves. In a sense, their application for a custom IR was perceived to be much like just a multi-year cost of service, and was not deemed to be sufficient for the purposes of setting five years.

But perhaps, maybe, I don't want to take into your time, but in some respects, the Ontario Energy Board's custom IR can, has many common characteristics for what a five year cost of service would look like as well. But what is expected in the renewed regulatory framework is much more explicit expectations around performance, so that's the scorecard, much more detailed analytics around benchmarking, productivity improvements, so still trying to delink cost from rates.

(13 h 16)

Q. **[142]** Could we see a multi-year cost of service as being a transitional phase towards a more sophisticated PBR?

A. Yes, I think that that is a development path that you see in other jurisdictions as well, sometimes going, even if it’s a gradual extension of the term so perhaps, starting with a three year cost of service and then lengthening the term and also starting to delink the rate changes from cost changes so therefore try to build in this concept of having an automatic change which is based on inflation and productivity rather than just cost plus.

Q. **[143]** Okay. Getting back to the Con Edison multi-year cost of service, would you say that Con Edison’s multi-year cost of service addresses the three objectives that are set out in section 48.1 of the Québec Law? Which I can repeat to you are service quality, cost reduction and streamlining of the regulatory process.

A. Well, I think that the components of the Con Edison plan goes someway towards addressing these types of issues but I think what the Régie or the people of Québec would want to ask themselves is what particular design features go far? Do they go far enough? Are they going to achieve what we are hoping to achieve and just by way of an example, in terms of cost reductions, you would want to ask yourself does a three year plan provide a company with enough opportunity to invest in productivity improvements that are going to yield real benefits both for the shareholders and for the customers. So it would be a matter, it's often a matter of degree. You know, is a three year plan going to take us as far in meeting those objectives as we would like.

Mr. JOHN D. TODD:

A. Can I just point out, of course the process we referred to of reforming the energy vision that has been done by the New York PSC is sort of asking those and many more questions.

Q. **[144]** Okay. So hopefully they're...

A. They will have their answers next month.

Q. **[145]** Okay, we'll be looking forward to that. Would it be fair to say that the term PBR can cover a spectrum of regulatory frameworks which go from a modified form of cost of service like we see in New York to a sophisticated form of PBR like we see in the U.K.?

A. Yes, we believe that's what the six examples in our report demonstrate.

Q. **[146]** Okay. Getting to the second theme, and I have to start moving along here, the objectives, section

48.1 as you know sets out three objectives but you explain in your report that boards frequently set additional objectives – that's on page 23 of your report. What would be, according to you, the most important objectives that are not covered by section 48.1? If you want to see the text of 48.1, it's obviously on page 7 of your report.

A. Yes, we've got the report. I think that brings us to the context comments. It says, if you're saying in the context of Hydro-Québec, we have not looked at the challenges there. And our comments, they've tried to say when you're setting your objectives, the potential list, as pages 23 and 24 show, is very long and I'd argue you can't have that many objectives and expect to succeed in achieving them so you have to whittle it down to a manageable set of objectives that are appropriate or most appropriate in this particular jurisdiction. So I don't think we can... we can't comment in the context of Hydro-Québec at this point.

Q. **[147]** Okay. Well maybe let me ask a more specific question then. Would you agree that energy efficiency is, for example, an important objective?

A. In talking to regulators across the country, I think their view is it depends on their legislative structure. Some regulators are of the view that that is outside of the scope of their jurisdiction so I think that's a legal question. There could be other ways of addressing it besides through the regular mechanism.

Q. **[148]** Okay. I think you've already touched upon this subject during a previous examination but I just want to make sure I cover this issue thoroughly but would you agree that objectives should be different for distribution and for transmission? And if so, can you give some examples of which objectives would be different?

(13 h 21)

A. Largely they would be the same although with different companies, again, the priorities, the potential objective list is almost the same. I think the one example we said was different was perhaps the relationship with the customers or the customer focus because of inherent differences in the number of customers, but on that, conceptually, they are largely the same, although in a particular jurisdiction such as this, what is important, in addressing a PBR for this particular transmission company, this particular distributor, may be different because the issues and problems are different. Although with common ownership, you'd expect the issues would be very similar.

Q. **[149]** Okay. With respect to the objective of streamlining, you state on page 27 of your report that PBRs do not automatically lead to this. If you want to take time to look at what you say... So, line 19 and 20. No, sorry. Well, I don't want to waste time, but I believe you say it on page 27.

A. Yes, we do. I mean, 19, 20, we say:

> [...] regulators often take specific steps to enhance the efficiency of the regulatory process.

and elsewhere, and I can't find it either. We certainly say, but it doesn't necessarily... PBR does not necessarily produce less regulatory cost or a streamline process. It's a different process.

Q. **[150]** Right.

A. So, when you talk about some of the data requirements on the analysis that is done, it's a very different process. And, in the context of many companies, like Ontario, you're probably saving. When you're talking about an individual company, a more data intensive process, you deal with different data but I certainly would not say you should expect to find a much more streamline process. It would be a different process which is potentially streamlined, depending on the sophistication of the parties and so on.

Q. **[151]** Okay. And you mention Alternative Dispute Resolution processes as one way of streamlining the regulatory process. Can you detail what other steps a regulator can take to streamline the regulatory process?

Ms. CYNTHIA J. CHAPLIN:

A. Well, there is the example in Ontario, on the electricity side, of using a consultation or a generic process to set initial principles and overarching principles to try and develop greater consistency for then applying a framework to the many distributors in Ontario. So that's an example of streamlining where you have a jurisdiction with many entities. In a jurisdiction with only a few entities, the other forms of streamlining are often developing some more informal processes that complement the... an oral hearing. So that might be a technical conference, or in this case, as the report specifically mentions, using Alternative Dispute Resolution. Another process is where technical experts are used, perhaps hearing them concurrently as a means of focussing the discussion and targeting the inquiry.

Mr. JOHN D. TODD:

A. Another example is using a formulaic approach to setting... adjusting ROE on a year-to-year basis because cost of capital evidence is very time consuming and expensive. So, many jurisdictions have gone to a formulaic approach with periodic reviews.

Q. **[152]** Okay.

A. That's not a PBR related item.

Q. **[153]** My third and final theme is related to regulatory process. And on page 39, you say that: Regulators

This is on, as of line 19,

> Regulators that undertake the transition from cost of service to a performance based regulation regime are now able to take advantage of the experience of the regulators that preceded them down the path to PBR. Doing so helps to avoid the pitfalls of some of the earlier designs. But taking steps to avoid those pitfalls can result in a complex regime.

So, my question is twofold, what are the good moves made by other regulators that the Régie should emulate? And, you see me coming, what are the pitfalls that the Régie needs to avoid?

A. I've referred to the Alberta regime as a relative late comer. And it came in with some features that were not typical of price-cap regimes that were brought in the early nineties (90's), in particular, more focus on performance measures, not focussing just on cost, but looking at other performance standards. Some of the methods, the BC method of keeping safety type investments outside. The Alberta thing is capital trackers. So, it's a similar kind of concept, saying there's certain kinds of expenditures which should be outside of the formula. And we've seen some of the individual regimes evolve in that way, where there's a few things that are taken out of the formula.

(13 h 27)

The pitfall you're trying to avoid is... the basic price or revenue-cap mechanism is a clear message, cut costs. Cutting costs is not the same as cutting... or as improving value. Right? Value is output, you know, versus input; a ratio of output to input. And cutting costs can produce negative consequences for customers. So in a way that is appropriate for the jurisdiction, you want to create a mechanism that either requires the utility to maintain performance standards, which means you have to have measurements of those performance standards on things like reliability, it could be public safety which is what the Board looks at, the Ontario Energy Board looks at, and so on... maintain those performance standards, or make some decisions about the tradeoff between cost and the performance standards.

Some people argue that, in fact, we should set lower performance standards to allow cost to come down, because people actually think that the performance standards are too high right now. That's a decision that can be made to get that tradeoff right. Cutting cost doesn't necessarily get you there.

Q. **[154]** Alright. Okay. My last question. Ms. Chaplin, I think you said earlier in your testimony that the pace for bringing a PBR mustn't be too fast nor too slow. What would be, according to you, the ideal time frame to establish a new PBR?

Ms. CYNTHIA J. CHAPLIN:

A. Well that will be very specific to the entities involved in the framework. So I couldn't say what the perfect pace is. But I suppose, speaking sort of generically, the perfect pace is probably a little bit faster than what the regulated entity would like, and in its perfect world, but not so fast that you can't respond to unexpected developments, so you can't modify it and correct it, so that it is in fact durable, because that's what you want, for the public interest; it's something that's going to be durable and credible.

Q. **[155]** Alright. Thank you for your answers. Merci.

LA PRÉSIDENTE :

Merci Maître David. J'inviterais maintenant maître Fortier-Pesant pour le RNCREQ.

(13 h 29)

EXAMINED BY Me CATHERINE FORTIER-PESANT:

Q. **[156]** Alors bonjour, maître Catherine Fortier-Pesant pour le Regroupement national des conseils régionaux de l’environnement du Québec. Madame la Présidente, Monsieur et Madame les Régisseurs. Good afternoon Mr. Todd, Madam Chaplin. Our first questions concern the process of establishing a PBR. On page 15 of your report, lines 26-27 you mention that,

> More generally, as the Joskow paper cited above implies, the first step to

designing an effective PBR regime is
to clearly define its objectives.

You are familiar with section 48.1 of the Act respecting the Régie that has been discussed earlier and which you quoted on page 7 of your report as well. We understand you, we heard your answers to different interveners but we would like to know, in your view, are the objectives laid out there sufficiently detailed in order for the Régie to allow the design of a PBR regime in the current file or is a more specific definition required in order to proceed?

Mr. JOHN D. TODD:

A. Clearly the three subsections of 48.1 are at the heart of the objectives. As part of the process, the regulator always has to interpret in that specificity to legislation and also look at its broader mandate to say "This, the PBR regime is part of the regulatory regime. It is how you're setting rates for, you'll be setting rates for Hydro-Québec." That means it has to encompass all of the legislative requirements which may go beyond this particular piece of legislation.

Q. **[157]** Okay. Thank you very much. For our second question, again I will refer you to page 15. Go back then, lines 27-29 where you say,

> Having done that, it is necessary to understand clearly the behaviour, goals and shortcomings of the regulated utility and local industry so that the regulator can design a regime that is appropriate in the local circumstances.

How would you recommend that the Régie proceed to clearly understand the behaviour, goals and shortcomings of the regulated utilities for the purpose of the current file? You have any suggestions?

A. Well, first of all, you probably will not assume that Hydro-Québec will tell you its shortcomings but I think there are a lot of people in the room who will be happy to identify what they perceive as its shortcomings. So, that is a process issue that, when you look at other jurisdictions, the way they're developed, typically there's a stakeholder process and that stakeholder process has as a process objective doing exactly that. And that stakeholder process begins with objectives, right? So the parties would have their views and objectives, the Régie would decide. The parties would have their views on these goals and shortcomings, the Régie would endorse or accept some and perhaps reject others.

Q. **[158]** Okay. Thank you. Since we're talking about the notion of stakeholders here, in regions that you have studied, that you are familiar with, do stakeholders mean customers only or does it also include persons and entities that are affected by, for example, the transmission providers activities but are not necessarily only customers?

A. The stakeholders typically are more correctly defined as interested parties, whatever their interests may be.

Q. **[159]** Okay.

A. Which is what the Régie does all the time.

Q. **[160]** Thank you very much. I will now refer you to page 39 of your report, line 24. To page 40, sorry, line 3. You explain that,

> To manage the process of developing its PBR regime, the AUC first engaged in a consultative process to develop the principles and narrow the scope of the process that would design the actual PBR regime to be implemented.

Then,

> Based on this process, the Commission directed the utilities and interveners to limit their proposals to CPI-X based formulas.

Can you tell us how many distinct phases and decisions there were before the PBR was put into force or implemented in Alberta?

A. I don’t remember off hand but it was at least these two and the total process was, you know, subject to check – my favourite term – something like two and a half years. It’s a long time.

Q. **[161]** Thank you very much. If I’m not mistaken, you have mentioned earlier that some experiences with PBR that you reviewed were not necessarily successful and those are my terms, maybe they are not yours exactly, but we are taking you to, with regard to this, we are taking you to page 15, lines 13 to 16 where you say,

> Nevertheless, there appears to be broad acceptance that while incentive regulation, IR/PBR regimes have yet to be perfected, they can be superior to traditional COS regulation as a means of streamlining the regulatory process and better aligning the interests of

utilities with their customers.

You said here in this extract that PBR can be superior to COS regulation, you didn't say "is superior". Our question then is: is COS regulation better than unsuccessful PBR or are there any circumstances under which you would recommend remaining with COS?

(13 h 36)

A. COS may be better than a poorly designed PBR. The behaviour tells us a lot. In the jurisdictions where PBR has been introduced as early as nineteen ninety (1990). They still have... they've evolved the system quite a bit but they haven't abandoned and gone back to cost of service. To me, that says, those regulators feel it has been "in some sense successful." There are some jurisdictions which introduced PBR in a quick and simplistic way and later moved away from it. I forget which ones but in the earlier view there certainly were temporary PBR regimes. But often those were to deal with a particular issue. And, you know, they may have driven cost down, went back to cost of service. But I think no concept is ideal no matter how it's implemented. It has to be implemented well.

Q. **[162]** Okay. Perhaps in writing, we will ask you to provide us with some names of regimes where they... the boards got back to COS, as you just mentioned, so... but in writing. In the regions which you're familiar with, can you tell us how off-grid communities are treated under PBR regimes? Where you have networks that are autonomous.

Ms. CYNTHIA J. CHAPLIN:

A. In Ontario, Hydro One Remote serves off-grid communities and they have a separate... they are regulated separately from the rest of the distribution company. So... and at this point - I'm stretching my memory here but - I believe it's primarily... it's primarily a cost of service approach. Yes.

Q. **[163]** Okay. Thank you. Under PBR regimes, does a utility still need regulatory approval to modify rate structures? Or, is it free to do so within the rate and the revenue caps that may be applied?

A. Well, I think that can depend upon the framework. So, there are... I can't think of... Perhaps Mr. Todd will remember a specific example, but I do believe that there are some where there is some flexibility to modify rate designs. However, I believe it's probably more common that if they're going to be rate-design changes, that that would still require regulatory approval, because that's... those are very important issues which affect, you know, people quite directly and... in a sense are bringing... bring in... different considerations than the overall efficiency of the regulated entity.

Mr. JOHN D. TODD:

A. The greatest flexibility on rate design is where there is a business plan being submitted, such as in the current Ofgem approach.

Q. **[164]** Uh-huh.

A. And other... or where there's revenue caps and you operate within it. But, yes, I'd agree with Ms. Chaplin that there's a problem if you give full licence for any sort of rate-design changes. It could be disruptive to have rate-design changes that then get reversed at the end of the cycle, when you have another cost of service. So, that does need to be, shall we say, a vetting process of some sort.

Q. **[165]** Okay. Thank you very much. Now, I will refer you to page 34, lines 8 to 13 of your report, where you mention that:

> Key factors in the success achieved by the OEB

Ontario Energy Board,

> to date include:

and now specifically on lines 12 and 13, you say... you said,

> Evolving the regime systematically, so that complexity is added in stages as the stakeholders adapt to the increasingly complex system;

so, I heard Ms. Chaplin's explanations earlier, during the presentation, but our question here is: do you recommend that the Régie proceed this way as well? Do you think we should start with a simple PBR regime and then add complexity? Or do you think that we should take longer to determine or to... I mean, establish the framework of the PBR regime and then... that would address all details at the first time?

Ms. CYNTHIA J. CHAPLIN:

A. I think that's a question that the Régie has to ask itself and should take into account the positions and opinions and the evidence that it gathers in the process. I think what we wanted to highlight is it's something that would be helpful to explicitly turn your minds to and I don't know what the right answer would be.

Q. **[166]** Okay.
(13 h 42)
A. That’s something that would have to be examined. There are pros and cons. And it has to do with, as we described before, the context, sort of what is the quality of the data, what is the willingness and receptivity of the stakeholders and the company. So, it depends on a lot of factors.
Mr. JOHN D. TODD :
A. And sometimes there are factors that affect your speed, so... just to be clear in that reference, if there is... if data have to be collected for a period of time in order to have appropriate data to, say, do an analysis of productivity, you may have to bring in the system and have it step by step, because you wait until you have enough data to do the necessary analysis, to go to a phase that includes a total factor of productivity...
Q. **[167]** Okay.
R. ... project for example.
Q. **[168]** Thank you. Now, concerning the Ontario jurisdiction, page A-14 in appendix of your report, the second paragraph, where you say :

> The Board determined the value for the productivity factor for Price Cap IR

> to be zero. In the Board’s view this value “reflects a reasonable balance of the estimated productivity trend in the sector over the last 10 years and a value that is reasonable to project into the future as an on-going external industry benchmark which all distributors should be expected to achieve.”

Our question is now: is it common to have a zero value productivity factor, wouldn't that mean that the PBR regime was not expected to reduce cost? We would like clarification on that.

Ms. CYNTHIA J. CHAPLIN:

Q. **[169]** So this is the, for the total factor of productivity, and whereas in prior generations, it had been a positive number. The analytical studies that were done, there were a spectrum of use; some actually found a negative value. But the Ontario Energy Board decided that it would not be appropriate to have a negative value.

But in addition to this industry wide productivity factor, there's also the stretch factor that's applied. And that depends upon the relative level of efficiency of a company, and that varies from, as it shows below in the table, from zero to point six (0.6).

Mr. JOHN D. TODD:

A. May I point out that Ofgem did adopt a negative productivity factor. To understand that, it's important to recognize that if a company is spending capital to replace aged assets, the costs go up significantly, without any new revenue. So you can have drivers that in fact are negative productivity drivers, when you're talking about the embedded cost structure. And that's the circumstances of the utility at the time.

Q. **[170]** Okay. Thank you. Now we have a couple of questions with regards to incremental capital model that you mentioned for both, at least both descriptions of Ontario and Alberta regimes. On page A-15, A-16, sorry you are talking about the Ontario incremental capital model. You are saying :

> Under the ICM, distributors may apply during the term of their rate plan to recover costs associated with incremental capital requirements. The criteria of materiality, need and prudence were to be reviewed in detail for each application.

So given that capital expenditures are a normal part of a utility's business, I understand that these criteria, which are materiality, need and prudence, are used to determine whether a given investment is routine or exceptional. Since routine investments are already compensated within the generic PBR, isn't there a risk that if the Board gets it wrong, the utility will be compensated twice for a particular investment, both within the PBR and again through the ICM?

A. The key words in the question was : if the Board gets it wrong, but of course, the regulator never gets it wrong. So that's not a problem.

Q. **[171]** Maybe...

A. That's part of the process, is to review these. And clearly, what you're trying to avoid is exactly that problem.

Q. **[172]** Okay.

A. And they have been used, they have been successfully used very rarely in Ontario.

Q. **[173]** Okay. So to your knowledge, that problem never happened, never occurred in the past?

A. Much to the disappointment of my clients, that problem has not occurred.

Q. **[174]** Okay. Thank you. Now, concerning, I have a similar question concerning capital tracker mechanism of Alberta. On page 38, lines 13 to 15, you indicated that the capital tracker :

> is designed to accommodate recovery of the costs associated with critical infrastructure investments driven by external regulations of aging assets that the generic formula does not accommodate.

The question then is to be able to determine whether or not the replacement of an asset was accommodated in the generic formula as we saw.

On page A-29 in Appendix of your report, your set out the three criteria used to determine whether or not the capital tracking should apply. The first criterion that you mention there is :

> The project must be outside of the normal course of the company's ongoing operations.

How does the Board decide whether a given investment is outside the normal course or not?
(13 h 47)

A. These three points are essentially principles so that would be the, in the judgement of the regulator, it's outside the normal course which, you know, it's not sustaining capital, that would have to be interpreted on a case by case basis.

Q. **[175]** Okay. Thank you. To the best of your knowledge, in the U.S., has FERC studied or authorised the use of PBR regimes for transmission rates?

A. Yes. We did not review that in detail. There are, I'm not sure what they refer to as but there certainly are incentive mechanisms that are approved by FERC around efficiency and so on. I'm trying to remember now, there's a study that I reviewed recently, there's an old study but... So I'm going from memory, that might be a question that would require review of the FERC rules on transmission.

Q. **[176]** Okay. Thanks. Now on page 41 of the report, lines 11 to 13, you wrote,

> The determination of the X factor and the calculation of the TFP involved a highly technical and controversial debate in which consensus was not reached and for which there is no apparent right or wrong answer. In the PBR decision the AUC accepted NERA's TFP methodology and found that the

> proposed TFP estimate was a reasonable starting point for setting an X factor for Alberta utilities.

So our question is: in the situation you described here which are no consensus and no apparent right or wrong answer, it's not ideal. We want to know: is this type of situation common in PBR regimes, a disagreement of such an important element?

A. Okay. And I would note that the words you just read were not a direct quote but very close to being a direct quote from the AUC so it was their view, we're sort of saying "This is what they observed." and in making their decision, what they had on the record was different studies, very technical, producing very different results and they said that the methodologies... TFP is an attempt to estimate a number. No estimate is perfect. The different methodologies have merits and trade-offs.

So I think what they were saying was "We've got some different methods brought forward to us by parties who presumably liked particular methods because of the results." They're significantly different. We are unable to say one method is right and the other method is wrong and they went back to the NERA TFP methodology which I believe they contracted for and said "Given all the evidence in the record, that's good enough. It's balanced, it's reasonable, we'll use their numbers." It's not unlike cost of capital hearings where you end up with people, experts, providing different methodologies each of which has some legitimacy, different numbers and the regulator often take something in between the different extremes.

Q. **[177]** Okay. Perhaps I can ask you more precisely: is this situation more common under PBR regimes than with COS regimes?

A. No, it is common wherever you have technical studies that are being submitted by multiple parties where some people like a high number and some people like a low number. That's where you get it and you always will.

Q. **[178]** Okay. Thank you. Now our last question concerning the RIIO model in the United Kingdom. On page 58, lines 1 to 3, you are mentioning,

> The network companies are expected to incorporate environmental objectives into their applications. With external environmental views and regulations continuously evolving, the companies will be challenged in the design of

outputs on these objectives.
We would like to know: have the network companies incorporated environmental objectives yet into their rate applications in practice?
A. Sorry, in the U.K. you're talking?
Q. **[179]** Yes. Under the RIIO model.
A. Yes, one of the drivers is the whole issue of climate change in the U.K. for this model so not in exact details but yes, that's underpinning it.
Q. **[180]** Okay.
A. And a very strong component of it.
Q. **[181]** Okay. So that's one example. Do you have any other examples of the kind of objectives that are included?
A. For RIIO?
Q. **[182]** Yes. Under RIIO, yes. Or over any other jurisdiction perhaps?
A. I'm just flicking back to see if it's in the appendix but as Ms. Chaplin is just pointing out in my ear, of course each company brings forth its own applications with its own measures so you'd probably have to drill down to the applications and my understanding is that Ofgem has accepted some of the applications of parties saying they look good, others they've turned back and said "Go away and do

some more homework." So from what ultimately is approved by Ofgem that’s an indication of what types of objectives they consider appropriate.

Q. **[183]** Okay. Thank you very much, that will be all for us. Merci beaucoup.

(13 h 55)

LA PRÉSIDENTE :

Merci Maître Fortier-Pesant. J’inviterais maintenant maître Neuman pour SÉ-AQLPA.

MR. JOHN D. TODD :

Just a... On RIIO there is a framework for setting outputs at table... at A-51 of the appendix, English version, figure 13, which may be of assistance to you.

EXAMINED BY Me DOMINIQUE NEUMAN:

Q. **[184]** Bonjour, Madame la Présidente; Madame, Messieurs les Régisseurs. Dominique Neuman pour Stratégies Énergétiques et l'Association québécoise de lutte contre la pollution atmosphérique. Good afternoon to both of you. I’ll ask my questions in English. All my questions will be directly or indirectly about public policy objectives within a PBR. First of all, Mr. Todd, in your resume, it was not indicated which were your clients in the various files in which you acted before different regulatory tribunals. In answer to AHQ-ARQ this morning, you stated that most... but I don’t think you said all of those clients were consumer groups. Were any of your clients an association that was aimed at promoting public policy objectives such as environmental groups or groups... or associations aimed at promoting energy efficiency or some other similar objective?

Mr. JOHN TODD :

A. I have generally not dealt with mandates around efficiency. There’s specialists in those areas that are retained for those... for that work. The simple allocation is in the nineteen nineties (1990's) wherever you see a consumer group, prob... they were a clients in the in the nineteen nineties (1990's) for the projects done then. And, subsequently, it was regulators, corporate interveners and utilities.

Q. **[185]** And utilities also.

A. And utilities also, yes.

Q. **[186]** What proportion, roughly?

A. Maybe half, give or take, would be utility revenue, twenty percent (20%) may be regulator revenue, thirty percent (30%) corporate interveners, or maybe twenty percent (20%). There’s a little bit...

I still work with some consumer advocates as well.

Q. **[187]** Okay. In the present case, your mandate, if I understand well, did not involve an evaluation of the particular situation of HQ, but it included an evaluation of the lessons learned from the... from other jurisdictions, what could be called the best practices, but I'll come over that term later, that could inspire future PBR for HQD or HQT. Is that correct?

A. That's correct. I'd say what we have tried to do, was put in our report things that the party should be thinking about in the upcoming process.

Q. **[188]** Okay. You also stated in your opening statement this morning, and in an answer to Option consommateurs, and it's also in various parts of your report, like on page 67, lines 18 to 23, that there is no single best practice for PBR, that each regime is tailored to the expectations of consumers and government policy within that jurisprudence. It must also take into account... it also... Okay, it must also take into account the structure of the industry being regulated. And you also stated in answer to Option consommateurs that the practices expected from each regulator will obviously depend on its legislation, the legislation that governs what the regulator can or should do.

A. Yes, through all that.

Q. **[189]** Okay. In that context, you mentioned a few minutes ago to my colleague of the RNCREQ that, at the outset of your mandate, you were made aware of section 48.1 of the act respecting the Régie de l'énergie.

A. Correct.

Q. **[190]** That's correct? Were you also made aware of article 5 of the act? If you want to have a copy of it, which states the elements that the Régie must take into account when exercising its jurisdiction...

A. I'm not certain whether that was in the request for proposal but I know I did review the legislation. So, without remembering, I know that we were not unaware of it, that we would have read the whole thing. But we were being guided essentially by the request for proposal, not the legislation in doing our work.

(14 h 00)

Q. **[191]** Okay, but the request for proposal mentioned 48.1, or that's also something you...

A. The RFP...

Q. **[192]** Yes?

A. ... provided context, which it was for the section 48.1, but not section 5.

Q. **[193]** Yes. Do you have section 5 in front of you, or do you want me to...

A. No. I don't.

Q. **[194]** ... to show it to you.

A. I do not.

Q. **[195]** Okay. It's section 5 of the Act in English. Yes. It's a very short article; it states that:

> In the exercise of its functions, the Régie shall reconcile the public interest, consumer protection and the fair treatment of the electric power carrier and of distributors. It shall promote the satisfaction of energy needs through sustainable development and with due regard for equity both on the individual and collective plains.

For the purpose of your evaluation of the lessons learned in the six jurisdictions that you examined, have you evaluated if and how any of these experiences could be useful in helping attaining the public policy objectives that are at issue in Québec and which I referred to in section 5, which mentions the public interest and sustainable development and equity.

A. We did not look at the PBR issues in the context of Québec, either the legislation or the operations of the company, or other factors. Our understanding of the mandate is that we are providing information on other experiences, and that the Régie and the parties will examine in that context.

Q. **[196]** I will talk to you about two of the six jurisdictions that you examined more specifically, the first one being the RIIO model in the U.K., and the second one being Ontario's fourth generation PBR model. In these two cases, the focus has been placed by the regulator on setting objectives for the utility and providing mechanisms favouring their attainment.

First of all, one preliminary question. Is it generally considered that the fourth generation mechanism in Ontario is a form of RIIO? Would you agree that it has some common characteristics with the RIIO model? And maybe... Anyway. One of you two can answer this question.

Ms. CYNTHIA J. CHAPLIN:

A. Okay. Yes, I would say that the fourth generation incentive mechanism in Ontario shares some of the features of RIIO, which makes sense, because regulators, quite commonly, look to developments amongst their colleagues, internationally, and are informed by that. So that would be a natural expectation.

There are certainly components of, that are in RIIO, that are not part of fourth general IR; I'm thinking specifically the innovation incentives as one of them. So I'd say there's similarities. But they are now the same. And I don't believe that fourth generation was established, I don't believe that that was an objective of the Ontario Energy Board, to set a framework, you know, exactly like RIIO. I think it was informed by RIIO, but again, shaped by the specific circumstances of Ontario, and the specific objectives that the Ontario regulator wanted to achieve.

(14 h 06)

Q. **[197]** In page 54 lines 22 to 27 of your report, concerning the RIIO model, from these lines, I understand that there are two tools that the regulator under RIIO possesses, to ensure that the objectives set under the RIIO model are attained. One of the tools are the incentives, the monetary incentives to the utility, and the second tool is the revocation of the licence if, and I quote:

In the event of repeated failure to deliver on the outputs, Ofgem retains the power to revoke the licence.

You will agree that revocation of a licence is quite an extreme measure, and I don't even know if it's ever been applied, or even been considered seriously as an issue. So unless you have other information otherwise so the only tools available to ensure the attainment of the objectives are the monetary incentives, would you agree with me? Under the RIIO model?

A. Sometimes a threat is so effective that it never has to be utilised and my observation from dealing with LDCs is that they do not ignore the risk that a licence can be pulled. That is a driver that causes them to adhere to all the rules as best they can and if they ever get in trouble, they fight hard to defend that they were not doing anything, they’ll get, you know, they’ll modify the behaviour and get in line so they don’t lose their licence. So I think the threat does affect behaviour but you are correct that if licences have been pulled, it’s been very rare. There certainly have been transfers between parties but often that’s, you know, in a bankruptcy situation which is a bit different than for non-compliance. But the primary threat, the primary instrument, you know, are the financial incentives.

Q. **[198]** Okay. You also agree that in the case of Hydro-Québec Distribution or Transport it's quite improbable that the licence would be revoked, whatever the regulatory situation is.

A. Now that sounds like a legal question to me.

Q. **[199]** Okay.

A. But if I was a lawyer, I'd suggest that probably is true.

Q. **[200]** Okay. You stated, even earlier today, that incentives are the main tool used by the regulator to ensure objectives are attained but you also stated that in some cases, and you mentioned as an example Crown corporations, sometimes utilities may not fully respond to incentives. So in your experience, besides monetary incentives and the hypothetical licence revocation, have you ever seen other tools being used by a regulator to ensure the attainment of the objectives set?

A. I see two things as being motivating, shall we say, to LDCs and in the electricity sector most of them, most of my clients that I deal on that side are either provincial Crowns or admissively owned.

And... one is the audit function that the regulator comes in and scrutinises what they're doing and perhaps that's related to sort of the moral suasion argument. Just as with people, if you want to motivate somebody, you have to understand what motivates them individually so with the company you have to understand what motivates them. Is it a scathing decision by a regulator, words written in a decision that motivates a company? I believe it does.

As some of you may be aware, we just had an auditor's report out on Hydro One and their billing system. That didn't change the problems of the billing system but a company doesn't want that kind of press so if you want to motivate them, you have to make things transparent. The OEB score card, part of what they've done is they've said "Every LDC must post their scorecard on their website for the press and their customers to read." The scorecard is also posted, the results are posted by the OEB comparing across all the utilities. That transparency of their performance, totally non financial, is something which I believe companies respond to. They don't want negative press reports and my basic concern with the scorecard is the extent to which, while its transparent, how effectively does it convey the messages you want conveyed the extent to which, while it's transparent, how effectively does it convey the message that you want conveyed to the public to create that motivation. So I would say you want a mechanism, aside from the financials, that is very clear, simple, understood by the public and the company cares what their scorecard looks like.

(14 h 11)

Q. **[201]** And in the examples you just gave, the audit, the scorecard, we're talking about an annual process? Something that's published annually?

A. Part of the renewed regulatory framework is an annual publishing of the scorecard and there is seventeen (17) measures, I mean, I think there's too many measures myself but there's different views on the scorecard but it is an annual scorecard.

Q. **[202]** O.K. And in these examples, in the event the audit or the results published in the scorecard are unacceptable, do not meet the objectives set, in the examples that you've looked at, has the regulator any power to intervene further in doing something about it, in being an active lead, ordering something to be done to correct the inadequacy?

A. You’re saying so aside from financial results? Yes, I think...

Ms. CYNTHIA J. CHAPLIN:

A. Well...

Mr. JOHN D. TODD:

A. Well, for Ontario certainly Cynthia, Ms. Chaplin, can tell you what their processes are.

Ms. CYNTHIA J. CHAPLIN:

A. In the case of Ontario, the regulator has broad directive powers to require companies to either report back or do studies or sort of address specific issues in a specific way so there are some non monetary tools. But monetary tools are often very effective too in terms of levying penalties or financial consequences for failure to meet expectations or meeting the performance requirements.

Q. **[203]** To Ms. Chaplin, that regulatory power in Ontario, is it exercisable on an annual basis or at the discretion of the tribunal?

A. It’s at the discretion of the tribunal. The most common context you’ll see it is, is in the context of a specific decision where perhaps through the review of the evidence and the review of the positions it becomes apparent to the regulator that there is, in some particular areas, shortcomings and they therefore direct, they may direct a reduction in the allowed cost but that might also be accompanied by a direction that, in the next application, the utility will be required to bring forth specific evidence to address specific issues so that might be benchmarking evidence, it might take some other form. So it’s a requirement to investigate an issue and report back. At a minimum.

Q. **[204]** One of the issues that incentives or penalties may pose, and I’d like to see with you if that problem has ever been addressed by regulators in the examples that you’ve looked at, the problem would be that if a public policy objective is not attained, that the net result would be that consumers would benefit from that by paying lower tariffs so the public policy objective would still not be attained but the net result would be that the tariffs would be lesser, with no concrete way of ensuring that the missing objectives are indeed attained at some point in the future to correct what has been observed.

Mr. JOHN D. TODD:

A. I think that that is an identified concern with some of the early, including some of the existing PBR regimes and that is one of the reasons why RIIO type regimes have moved to the companies are required to file a plan. And...

Q. **[205]** To file what?

A. A plan.

Q. **[206]** Okay.

A. A plan in terms of what they're going to do, what they're going to achieve in terms of outcomes that would include any public policy objectives. If the plan is not specific enough or does not set their own targets at a level satisfactory to the regulator, they're sent back and told to, you know, improve their plan and once they have filed a plan, they're expected to accomplish what they have in effect promised. And RIIO has not been around long enough to know what happens if people submit plans that the regulator likes and underperform but there will be, the way it's laid out, there will be financial consequences, they are private sector companies but, at a minimum, there would also be publication of their results, you know, transparency, which creates the other pressure to say what you're going to do and then do it.

(14 h 17)

Q. **[207]** Okay. In your report, you mention, in some cases... actually, in the case of New York, that a mechanism of true-ups, a true-up mechanism was installed. If I understand correctly, it's an optional mechanism set up in two thousand seven (2007) by which the utility can choose if it wishes to ask for the true-ups. Generally, it would be when it's in the interest of the utility to do so. And I'm referring to two parts of your report, page 45 and 46, as well as page A-38, where you mention that true-up optional mechanisms, which exist since April two thousand seven (2007) in New York. First of all, I'll ask you if it's correct to... if my understanding is correct that the true-up mechanism is not automatic. It's only at the option of the utility that it's been... that it would be accomplished, in New York.

A. The details... again, I guess this is a subject to check, my understanding is that it's not a true-up mechanism that is put into place and is at the company's discretion whether to exercise it or not. They were directed to develop and implement systems which, if you true-up, you true-up. And if there's some discretion, there would be discretion about having a true-up mechanism. But I... does it say that there was an option in terms of, you can take it if it's in your favour and not take it if it's against you?

Q. **[208]** Well, I see that the last line of that paragraph... the last sentence of that paragraph, which is at the top of page 46, the sentence reads as follows:

> The mechanism has a "trigger" feature meaning that the utility is allowed to file for a decoupling adjustment when the accumulated balance meets the specified threshold.

A. Okay, what that is, is that there is a deferral account which tracks the amount to be trued-up. And the company can trigger... the decoupling mechanism is not automatically... the account is not disposed of automatically on a yearly basis. The intent there is that when the accumulated balance becomes large enough, that is worth the time and trouble of the regulator to review it and allow disposition of it into rates.

Q. **[209]** Okay.

A. But the trigger mechanism is the amount of it. And there are many examples of deferral accounts which have to reach a certain level before they'd be disposed of outside of an normal cost of service hearing. And that's just a regulatory effort...

Q. **[210]** Yes.

A. ... mechanism, avoiding a regulatatory process to dispose of small amounts of money.

Q. **[211]** Okay. But in the other jurisdictions, including the five other jurisdictions that you examined in the report, are the true-up mechanisms automatically taking place every year or not? I couldn't find the answer in the report.

A. Actually, I am not certain, but remember that the true-up mechanism is required when you have a revenue-cap because, given that you actually charge rates, you may over collect or under collect relative to your revenue target. Right? And, therefore, the difference between the allowed revenue and the actual revenue collect is either paid back to customers or collected from them. It is purely, essentially, an administrative consideration, as to whether you do it automatically or not. When it's not automatic, at a particular point in time, if it's a separate proceeding, no regulator would want to do that without there being enough dollars to be worth the effort. Otherwise, you'd let it roll forward; you'd let it continue to accumulate until there's enough dollars to be worth having a proceeding to dispose of the dollars and set new rates.

Q. **[212]** How about a mechanism that would simply evaluate at the end of the year, of the report year of the utility, whether or not the forecasts correspond to reality? A mechanism that would compare the sales that would... the forecast sales with the actual sales, the forecast expenses with their actual expenses? Is that part of the different mechanisms that you've observed?

A. Yes, the true-up is where you're charging on a volumetric basis.

Q. **[213]** Yes.

A. But what you're allowed to keep is a global amount of revenue.

Q. **[214]** Yes, Okay.

A. So, you always have a variance.

Q. **[215]** Okay.

A. In some cases, that may cancel out over the years; so you let it roll forward. In some cases, you dispose of it. But you'd normally only dispose of it when you have a rate-setting process in any case. So, if you have a five-year plan and you've set rates for five years, you would not have a rate-setting process until the end of the five years, unless there is a true-up required that was significant enough to say, "We're going to have to add two cents to rates," so that the company can get its money. Otherwise, it's carrying a shortfall.

Q. **[216]** And in the five or six examples in your report, it's only at the end of the multi-year report... the multi-year period that an adjustment is being made to compare...

A. No.

Q. **[217]** ... revenue forecast and expenses forecast...

A. Okay.

Q. **[218]** ... with reality, or is it yearly?

(14 h 24)

A. It's not for variances in revenue and expenses, unless it's an earnings sharing mechanism, then it's... both would be a factor. It's where you've got a revenue cap not a price cap. Okay? So, that's the... the transmission companies only. And the true-up mechanism would be part of whenever you reset rates. So whenever you reset rates...

Q. **[219]** For the past.

A. ... that's smaller factors.
Q. **[220]** For the past. To reevaluate the past.
A. You reset rates on a going forward basis. So you are, if you have over or under-collection of the target revenue for one or two or three years, whenever you reset rates, that would be taken into account when you reset rates.

Ms. CYNTHIA J. CHAPLIN:

A. And just to be clear, the material that's included in the report about Con Edison, is about what's often referred to as revenue decoupling. So you can have revenue decoupling with PBR, but you can also do revenue decoupling without PBR. So it's a form of an incentive, by decoupling they're by, removing any disincentive to promoting energy efficiency. But in a sense, it's not, this feature of Con Edison is not, it's not, sorry, a PBR. But it's part of the example of Con Edison which this accumulation of characteristics is creating a PBR like, a regime that is PBR.
Q. **[221]** Bon. My last question. In several parts of your report, by example on page 7 lines 23 to 27, you mentioned that:

> ... as new technologies make self-generation more economic, the risk

> that consumers will begin to reduce or eliminate their reliance on the grid is an emerging concern.

You also mention it on page 83 lines 7 to 14, that self-generation causes:

> ... the risk that customers will begin to reduce or eliminate their reliance on the grid...

which

> ... is an emerging concern.

Have you considered that on the contrary, the increase in the number or the volume of electricity consumption that could be self-generated could be considered not as a concern, but on the contrary, as an objective of the PBR? And I put that in the following context: there's an energy policy from the Québec government that lasted from two thousand, year two thousand six (2006) to two thousand fifteen (2015). There'll be a new one soon. And that policy statement expressed the wish of the government to increase self-generation of electricity for small volumes. So would you agree that it could be considered not as a concern, but on the contrary as an objective to be attained, and for which various incentives would be part of a mechanism?

Mr. JOHN D. TODD:

A. Yes. We can agree. The word concerned was not intended to suggest there was a concern from a public policy perspective or it was a negative thing. It is a potential concern for the distributors and for a design of a PBR system. It's something you have to think about. If that is an objective, you would have to make sure your design, flexibility, the rates, recognize that. And you wouldn't want your PBR system to fail because you're achieving desirable reductions in demand or for generation.

Q. **[222]** Thank you very much. So as the tribunal mentioned earlier today, we have a few other questions that we didn't have the opportunity to ask, but we will insert in a letter to be sent to...

LA PRÉSIDENTE :

Demain matin.

Me DOMINIQUE NEUMAN:

... tomorrow. Thank you very much.

LA PRÉSIDENTE :

Merci beaucoup Maître Neuman. J'inviterais maintenant Maître Sicard. Après l'intervention de maître Sicard, nous prendrons une pause.

(14 h 29)

EXAMINED BY Me HÉLÈNE SICARD:

Q. **[223]** Hélène Sicard, pour l'Union des consommateurs. Bonjour Madame la Présidente, Maître Duquette, Monsieur Houle. Good afternoon Madame Chaplin, Monsieur Todd. I don't have a very strong voice and I don't want to play with the mic so if you don't hear me, tell me and will try to find a way to adjust. Thank you. So as my confrère from Option consommateurs said, we've divided our questions in various sections. I will have questions first on the consumer aspect you've treated. I will have questions about the penalties you've talked about. I will have questions about procedure and productivity.

I will start with consumer and I will invite you to go to page 2, line 28. I will read the section to you.

> In general, PBR regimes have evolved from relatively simple rate control mechanisms to more complicated regimes that recognize concerns other than reducing costs, such as improving standards, implementing government

policies related to energy conservation, increasing the role of renewable generation, consumer responsiveness, etc. A few regimes have evolved to outcome-based regimes that seek to address these broader issues with a more comprehensive and more flexible approach.

The terms "consumer responsiveness" have been translated in the French version into "réceptivité aux besoins des consommateurs" so my first question to you is this "réceptivité aux besoins des consommateurs" mentions an openness to consumer needs, I'm not listening to the translation but I presume that's the way. Is this what you mean when you say "consumer responsiveness"?

A. Yes.

Q. **[224]** Thank you. Now, can you give us examples of those needs that are being responded to?

A. Some utilities, and more so in some jurisdictions than others, are implementing on their websites the ability for customers to access their billing information, a lot of detail comparison, easy dashboards to look at their energy efficiency. The concept of where this can go is that people in the future will be able to connect their computers to real time information on energy consumption simultaneously with real time cost of power and connected to devices in their home to manage energy in a very sophisticated technological way.

Q. **[225]** Okay. Could it go as far as to include, for example, special programmes to help low income families?

A. Yes, those types of programmes have been implemented in several jurisdictions and if PBR is your mechanism for setting rates, that becomes part of your PBR regime.

Q. **[226]** Okay. Now how would those be measured? How would the Board or the intervener take the measure of whether or not it has been respected? Like if you're supposed to, for example, reduce rates by two cents (2¢) it's easy: you look if there's been a two cent (2¢) reduction in expenses. But how do we go about measuring those elements that are important for my client but are, to a certain extent, not tangible money-wise or more difficult to evaluate. How are they evaluated in practice when they've been implemented?

A. I think there are two sides to that question. One is what should the policy be, i.e. should there be

a lower rate and how low should that rate be? That is probably not part of consumer responsiveness in terms of the company's operations, that's the regulatory process which... and I'll address that. But having dealt with those issues in the past, within this gambit, measuring things would be, of the qualifying low income households for example, how many are participating in the programme and receiving the benefits and there would be ways to develop measures that indicate the number of people who are in the programme and some estimates of the number of people within a service territory who would qualify, based on income data, for example.
(14 h 34)

Q. **[227]** So, I'm sorry to interrupt, I want to go a bit broader with the question. It's just, we're talking about consumer responsiveness and also... and more broadly, you've talked about seeing things on the Internet, being able to follow up your "consommation" and all those things. It's more globally. I understand from your answer, and am I wrong, that every single element that would be included under consumer responsiveness would have to be followed individually. There couldn't be a global indicator to follow the result of consumer responsiveness.

A. One of the approaches that is deemed appropriate by some regulators is to have customer satisfaction surveys which would be a survey with a result of customer satisfaction, which would be one number overall and would be intended to encompass all of these issues. Different issues affect different segments of the population. So, that becomes a matter of survey design.

Q. **[228]** Thank you. Then, I'm going to bring you to page 4 to... yes, page 4 to 5, line 29 of page 4, to line 3 of page 5.

> The Better Regulation program brought together a number of reforms, including new annual reporting on efficiencies, new tools to assess business expenditure forecasts, stronger incentives, a better way to determine the return on investment and a better consumer engagement framework.

Could... first question, could there be an annual reporting on efficiency and other measures, within a multi-year PBR?

Ms. CYNTHIA J. CHAPLIN:

A. Yes, I think that that's often a very important component of a multi-year PBR, is ongoing reporting. And that can take a variety of forms. In Ontario, there's the scorecards. So, that's looking at some particular outcomes. But you may also want there to be regular reporting of basic data, because although you want the system to be allowing the company's flexibility to go off and run their operations, and run them more efficiently, it's very important for the regulatory framework and for the regulator to understand what's going on, and therefore to get that reporting and to really see what's happening, and for there to be transparency around that. Because that's how the analytical tools can become stronger and also if the company is responding in a way, an unexpected way or something unusual has happened, there's an opportunity to look into that and determine if something... if some sort of an action needs to be taken. So, it's not a matter of setting a regime and just everybody goes away and comes back in five years. That wouldn't work well.

Q. **[229]** One of my follow up questions to that was: if they report on specific elements annually and if the board deems it necessary to have a more in-depth review of one of those elements, that, for example, they would deem problematic, whether with the forecast, or another element... could we plan to have then a yearly review of those problems?

A. You could do that but when considering that, you need to take into account, well, are you going to end up with an annual review which starts to look more and more like an annual cost of service rate case? So, it's being cautious. Certainly, a regulator needs to reserve the ability and the discretion to investigate what needs to be investigated but not... you don't want to end up slipping... you know, unintentionally slipping back into a full annual rate case.

Q. **[230]** If there are no serious problems.

A. Well, if... you'll see sometimes, for example, what are known as off-ramps. So, if there are serious... some series of serious events or very unusual results, then it may be a time to just say, "Well, should the framework...

Q. **[231]** Yes.

A. ... should we draw a halt to this or we review it or re-examine it from the ground up?"

Q. **[232]** Thank you. Mr. Todd, or Madam Chaplin, in that sentence I've read to you, page 4 and 5, line 29 to 3 of page 5, you use the term "better consumer engagement framework". What did you mean by that, briefly?

Mr. JOHN D. TODD:

A. Frankly, I did not mean anything by that. If you... the beginning of the paragraph says, this is the national electricity... the... oh! Sorry, the Australian Energy Regulator...

Q. **[233]** Uh-huh.

A. ... in twenty thirteen (2013), undertook a Better Regulation program, it's bringing these things things together and these are basically its words that it's trying to create a better consumer engagement framework. So, it's expecting the companies to hear more of what the customers are saying...

Q. **[234]** Okay.

A. ... and report back to the Board through, I think , Ms. Chaplin, was referring earlier, there's various techniques, customers surveys and so on. With more time, we will see whether it truly is better.

Q. **[235]** Okay.

Ms. CYNTHIA J. CHAPLIN:

A. And that's comparable to what's happening in the

U.K. and in Ontario as well. This expectation that when the utilities come in with their plans, that they demonstrate how they have engaged with their customers and to what extent that those... the outcomes of that have been incorporated into their plans.

Mr. JOHN D. TODD:

A. And part of outcome based is it's telling the companies what they want from them, but saying, "You bring something forward to us in term of how you're going to achieve those outcomes," and we'll either say, "Yes, that's good enough, or, No, go back and try again."

(14 h 41)

Q. **[236]** Okay. Ppage 55 lines 14 to 19, you talk, it's the RIIO model:

> From the high-level objectives of the RIIO model, six specific output categories have been developed:

And then, you name the six, but two have retained our attention: customer satisfaction and social obligations. Can you give some example of what those two output categories include?

Mr. JOHN D. TODD:

A. While Ms. Chaplin looks for that in the Appendix.

Q. **[237]** Oh. Okay.
A. Basically, customer satisfaction, they are doing more surveying of customers. There's also concern that the system is becoming very complicated, and Ofgem has set out, I'll refer to it on page 57 line 14, Ofgem has introduced a consumer challenge group, to ensure all customer issues are dealt with by a representative group of stakeholders.
Q. **[238]** Well, you're touching on my next question. I would like to know if you can give us more information on that customer challenge group, as to whether, do you think it would be comparable to the interveners that we have in Ontario and Québec's jurisdiction, or is it something more specific?
A. I've sent you, all I know is contained there and on the previous page, 56, lines 17 to 20.
Q. **[239]** Yes.
A. This group includes members who are intended to reflect the expertise and interest of existing and future customers.
Q. **[240]** But...
A. Their primary role is to ensure the customers' view are fully considered. So they are people who are appointed to this committee, who are, this is not sort of pure layman. This is people representing

the views, similar to participants to this proceedings.

Q. **[241]** Okay. Do you know who they're appointed by?

A. I believe Ofgem has put it together. I'm sure, by talking to parties that have participated in the process, but I'm not sure how the appointments are done.

Q. **[242]** Okay. Could you change... Oh. Sorry.

Ms. CYNTHIA J. CHAPLIN:

A. Oh. I was just going to add that I was at a conference just a couple of weeks ago, and the chair of the Ontario Energy Board has announced that they intended to establish some form of consumer challenge panel, and they're looking at the role of interveners, and how those may be different or complementary.

Q. **[243]** Is there a document or something that is...

A. I believe all the...

Q. **[244]** ... accessible, as to what he intends to do, that you could give us a reference to?

A. I don't, it may have been mentioned, I think it's been mentioned in some of her speeches. I don't know if any formal letter has been issued.

Q. **[245]** Okay. If you find a reference, could you provide it, if you happen to come by it? Thank you.

Penalty now, page 21, lines 29 to...

Me LOUIS LEGAULT :

Maître Sicard, est-ce que vous en faites un engagement formel, parce que, ou si vous allez le demander par écrit?

Me HÉLÈNE SICARD :

Je vais le redemander par écrit, puisqu'on a pris cet engagement. Je voulais...

Me LOUIS LEGAULT :

Ça va être plus simple.

Me HÉLÈNE SICARD :

... aller plus vite...

LA PRÉSIDENTE :

S'il vous plaît.

Me HÉLÈNE SICARD :

... je me suis dit. Puis vous pourrez juger à ce moment-là de si c'est pertinent ou pas de l'avoir. C'était l'idée derrière la question. Merci. Alors page 21, ligne... Sorry. Page 21, lines 21, 22. You wrote:

> As a result, many regulators enhanced their PBR regimes by adopting mandatory quality of service standards, sometimes with associated financial penalties.

Could you tell us a bit more about these penalties? For example, do you deem them effective, and how are they decided, and what would they apply to?

Mr. JOHN D. TODD:

A. The jurisdictions that have them that I'm aware of, and for example, Alberta, there was, that I know of but were not in the study, BCUC technically had some. They were, there are difficulties in applying them, because there's concern about fairness. So if there's under performance due to some event outside of the company's control, there is a willingness to be lenient, shall we say. But determining whether they should be held responsible or not can be an onerous process.

Q. **[246]** But if I may stop you Mr. Todd...

A. Yes.

Q. **[247]** ... I would have like to, when I say how did they go about it, it's like does the Board impose them the minute something is wrong, or do stakeholders or interveners have to come before the Board and say: look, the results show they're underscored severely on that level; then, the penalty should apply. It was more like the mechanic of the penalty system.

(14 h 47)

A. Some regulators have the opportunity to impose penalties in response to a complaint.

Q. **[248]** Okay.

A. I'm not aware of any that have been imposed, sort of complaint related penalties imposed on utilities. There certainly have been penalties imposed on retailers for violations of consumer protection rules and so on. More often for a regulated company, it is an issue that comes up in the rate setting process and recognised under most PBR regimes, you actually are adjusting rates on a yearly basis. I mean, where there is a formula, you still need a rate change. A rate change means a proceeding has to happen before the regulator but because it's done by a formula, it is very streamlined – it's often a paper process – but that creates an opportunity on an annual basis to raise these kinds of issues that there has been, shall we say, a violation for which there should be a financial penalty imposed and parties can present arguments and the regulator would make a decision.

Q. **[249]** Okay.

Ms. CYNTHIA J. CHAPLIN:

A. And another structure is actually to set it up in advance so, in other words, to say "Here is what we're going to measure, you know, how soon you answer the phone." just as an example. "Here is the standard we're going to set, how often should you achieve that." and then these will be, if failure to achieve that standard will then be associated with specific amounts. So, in other words, in that framework, it's being set up so that the utility knows going into it what the cost will be for failing to meet the performance standard.

Q. **[250]** Okay. My time is running out so I'm going to change subject and come back to penalty if I have time because I would like to talk about productivity efficiency and prevision. We understand from the study and what you've presented that the general idea is that a transmission or provider or distributor should be rewarded for their efficiency but how can the Board identify what is real efficiency and what is, for example, reporting cost or reporting project? Do you have an idea of how that can be done?

Mr. JOHN D. TODD:

A. To clarify the question, are you saying can they be sure that the lower costs are real lower costs or are they accounting sleights of hand? Is that your question?

Q. **[251]** Well, I’m not going to go as far as saying accounting sleights of hand but expenses that were planned have been reported...

A. Okay.

Q. **[252]** ... for whatever reason. I’m not giving you examples of what’s happening in Québec and what we’ve seen in previous cases because you’ve said you’re not familiar with Québec so we’re not going to go there. So I’m talking in general. We agree that a company should be rewarded if it does efficiency. My question to you is how can the Board ensure that what we are rewarding is real efficiency?

A. That links to the comment I made before that really what you’re incenting is cost reduction and you can be, by reviewing the accounting that is done and requiring continuity in terms of the accounting practices, you’ve identified that there have been real cost savings. The concern is have the cost savings come at the expense of some aspect of service? So some cost reductions, if they have negative impacts, will be seen right away. So an LDC in a small town may close an office where customers can come in and pay their bill in the office. That reduces the staff, that cuts costs.

There is a reduction of service. The regulators don’t try to stop that. They say "You’re dealing with your customers, if you think that’s an appropriate thing to do and that reduces costs and rates, that’s fine."

Q. **[253]** Okay.

A. And they get rewarded for not letting customers come and pay their bill in person. A more dangerous thing or a tougher concern is: will maintenance get deferred, annual maintenance, so that the equipment doesn’t last as long and what you’re doing is increasing the costs because the annual maintenance is not done and therefore you have higher capital costs two years down the road. Or you are making capital investments and you buy something cheap that’s only going to last ten (10) years instead of something better quality – it would cost ten percent (10%) more but it would last twenty (20) years. Those types of things are a struggle, which is why there are sometimes capital trackers to put certain capital expenditures outside including...

Q. **[254]** Okay.

A. ... long-term investments and that’s where the planning comes into play "Give us long term plans." But it is a challenge. The same sort of challenges can exist with cost of service except that there may be more license to spend money so there's no incentive to save that money.

(14 h 52)

Q. **[255]** Okay. I'm going to ask you another question. We talk about efficiency, we also have seen conduct total factor productivity studies on different types, levels, referred to for various places in your report. Should a total factor productivity study give us... or inform us on the efficiency that could be gained and realized by a corporation, by a service provider?

A. They do not speak to the future. They speak to the past. They use historic data. So, the general concept is that they can use a total factor productivity study to determine past performance and the assumption is that the past regulatory regime was inefficient. Therefore, the company could do better than they have done in past performance, which is why you add a stretch factor to the historic TFP performance.

Q. **[256]** In your opinion, before a regulator gets involved with setting a PBR for service provider, should it order or should it see to get some kind of study in order to evaluate the efficiency that

can be gained within the company?
A. Assuming appropriate data are available, that is an option. Some jurisdictions have started with that. Norway is the prime example. Other jurisdictions, such as Ontario, have used it on an ongoing basis. Other jurisdictions have said, "What we want is a cost trend that's better than the past," and if you assume sort of... there's no major changes, you could argue that past cost trends is an approximation of a total factor productivity trend. But that is very much a simplistic approach to it
Q. **[257]** You mean, just looking at past cost?
A. Just looking at past cost because what's driving them, conditions change. Growth rates... the rate of growth versus rate of replacement can have a significant impact on cost trends relative to rates, for example.
Q. **[258]** Well, do you agree with us that PBR should try to quote, unquote, "attack and reflect and deal with a reality"?
A. Yes, I think what you're saying is: is a TFP study desirable? Probably, yes, they're commonly but not always used. But again we are not trying to present anything as try to tell the Régie, this is something which is a necessary part...

Q. **[259]** No, no, no.
A. Yes.

Ms. CYNTHIA J. CHAPLIN:

A. But...
Q. **[260]** I understood that you said from the start you want to make recommendations. I'm asking what you think of those. Je vais arrêter ici, Madame la Présidente, parce que je vois que j'arrive à ma demi-heure; à moins que vous ne me donniez plus de temps. Puis, je vais vous soumettre quelques questions par écrit, mais si vous êtes passionnés par le sujet, je peux continuer.

LA PRÉSIDENTE :

J'apprécie votre offre.

Me HÉLÈNE SICARD :

Merci.

LA PRÉSIDENTE :

Puis, je la prends. Alors, nous prendrons une pause de quinze (15) minutes. Nous reviendrons donc à trois heures quinze (15 h 15). Merci.

SUSPENSION DE L'AUDIENCE

REPRISE DE L'AUDIENCE

(15 h 15)

LA PRÉSIDENTE :

Maître Lescop?

Me RAPHAËL LESCOP :
Bonjour.
EXAMINED BY Me RAPHAËL LESCOP:
Q. **[261]** So yes. I had like forty (40) questions. But I, you know, most of them, some of the questions were already answered. So I will choose the one that you did not answer fully. I know that you answered some questions about section 48.1, and I just need a confirmation that you did not the verification that the six regimes that you analysed in your report can or cannot be implemented in light of section 48.1 of the Act.
Mr. JOHN D. TODD:
A. We have not looked at that.
Q. **[262]** You have not looked at that. And in the course of your mandate, did you gather the legal framework of, you know, the regimes you analysed? Did you? I mean you analysed regimes from Norway, from Ontario. Did you gather the legal framework, and maybe we can obtain this framework, in order to compare these frameworks with section 48.1?
A. No. The mandate did not include looking at the legal framework that's driving it. That's probably more a piece of legal research.
Q. **[263]** Thank you. Now, with your report, I will, can

you go to page 17, line 17. It says:

> The cost of service approach has a number of shortcomings that are widely recognized in the literature, as discussed in the preceding section, as well as several practical concerns that have been identified by regulators.

And then, at line 20:

> First, the regulator is at a disadvantage when trying to determine whether expenditures are really needed. The utility has access to far more information than the regulator.

My question concerns the information, and how, can you explain in length how the PBR regime improved this shortcoming, concerning the information?

A. It does not improve the information. It circumvents the problem by attempting to align the interests in the company. So it is in the interest, the interest of customers and the company. Customers want to see costs reduced to gain efficiency and have lower rates. The company, if the company has an incentive to find ways to cut costs, then those interests are aligned. So without getting the information, by having an incentive for the company to find ways to reduce its costs, the regulator doesn't have to know how to do it. The company will do it, by being rewarded for cost reductions. And that's what PBRs are trying to do.

Q. **[264]** Okay. So the PBR, just to summarize, does not improve the quality or the precision of the information. It just circumvents the issue under a cost...

A. Yes.

Q. **[265]** ... regime.

A. Yes.

(15 h 20)

Q. **[266]** Now, I'll take you to page 3 of your report, lines 23 to 27. So I'll read a portion of line 24:

> While multi-year regimes generally provide less effective incentives for improving productivity than CPI-X regimes, they do provide greater opportunities for a utility to benefit from efficiency improvements than annual cost of service reviews.

Can you just expand on these opportunities please?

A. There are essentially two types of opportunities. One type is if you have somebody on staff that you don’t really need, you fire them, your cost will go down this year and then lower next year and the year after and the year after. In a standard cost of service, you get rid of that person and you save that salary for one year and the next year your rates go down and you have lower costs.

Q. **[267]** Okay.

A. And the customer benefits from that. Now, you have to live without that person and maybe it would be nice to have him around. So companies don’t have much incentive to do it. With a five year term, you get rid of that person this year, you now save on that salary over five years. The potential, the total benefit to the shareholders is five times as great. You do that for more people, you reorganise your teams, you cut ten percent (10%) of your staff, big payoff for five years.

The other type of saving is one where you have to spend money up front in order to save money over time so I might have to make a capital investment in a new technology, my costs in the short run go up. Costs go down in the future and the cost of service, if I do that on an unplanned basis – like I just see the opportunity, I go ahead and do that in the current year – my costs are now higher, I overspend perhaps, next year I'm back at cost of service, built into my rates are the savings, I get no benefit, I just have those higher costs so in fact, where you have to make an upfront capital investment that is paid off over time there's no incentive and, in fact, one of the problems, even with PBR, is if the payback on a capital investment is ten (10) years, it's not justified within a five year PBR.

Q. **[268]** Okay.

A. The general concept is that you want to make it long enough that most capital invest... productivity investments that would be attractive to a business corporation, would actually be realisable in that term - five years is actually a pretty good time for a payback period - and if you have that end of term treatment, the rolling return, so even if you carry out that investment into year five, if you're going to get the benefit for five years in extending the next term, then you retain that incentive to implement productivity measures.

Q. **[269]** Okay. And so did you just compare the PBR with the COS regime and is there a comparison to be made in between different regimes of the PBR?

Because not all of the PBR regimes are multi-year, no? Is there...

A. Yes.

Q. **[270]** ... a distinction to be made between PBR regimes on this issue?

A. The multi-year, such as Con Edison, tend to be shorter terms.

Q. **[271]** Okay.

A. So the shorter the term, the less the bang for savings. So in cost of service regimes, they've tended to be four, five or even longer years whereas multi-year, because of the difficulty in forecasting costs – yes, multi-year means you're actually forecasting costs out – it's hard to forecast costs out five years so they tend to be shorter than your typical PBR regime which is formula-based.

Q. **[272]** Okay. Perfect. Thank you. I will now take you to page 6 of your report, lines 12 to 19 but I will read only line 15.

> As a result of this increasing complexity, the latest evolution of the U.K., Australian and Ontario regimes has been to adopt comprehensive outcomes-based regimes.

> These PBR regimes emphasize measuring success in terms of defined performance outcomes.

And my question concerns the last sentence.

> They require the utilities to demonstrate that they are developing business plans based on consumer engagement and comprehensive planning.

Can you expand on this last sentence? What do you mean by "consumer engagement and comprehensive planning"?

A. Consumer engagement varies a bit by jurisdiction. Ms. Chaplin may want to speak to Ontario where they’re asking for greater consumer engagement. Companies are starting to do it. The Board has not been prescriptive about exactly what that should look like so as companies bring in customer engagement strategies that are accepted or rejected, we’ll gradually learn what is acceptable in Ontario. Ofgem, part of that is referring to the committee that’s been set up, you know, that process so that’s really the consumer engagement is different strategies often proposed by the company but they have to propose something that’s good enough for the regulator to accept and, of course, other parties can comment on it to say we don't think that's good enough. Similarly with planning...

Q. **[273]** But can you...

A. Yes?

Q. **[274]** Just before you go on planning, so consumer... So it's an engagement towards customers or?

A. Yes, it's... The way the chair of the Board has put it in speeches is "We want the LDC to be able to demonstrate to us convincingly..." well, it's essentially what she said "... demonstrate to us convincingly that they have talked to their customers, heard their concerns..."

Q. **[275]** Okay.

A. "... and are bringing back to us those concerns." It's not enough to simply come in and say "Here's a one pager that lists the customer concerns."

Q. **[276]** Okay.

A. What's the process? Convince them that you've got a process that is a good process to hear those concerns.

(15 h 27)

Q. **[277]** But on that particular issue, is the PBR regime an improvement on, as opposed to the cost of service regime because here in Québec, Hydro-Québec would probably say that they do this, despite the fact that there is no PBR regime in place. Is that part... so, the last sentence, is that particular to a PBR regime or it can be applied to any kind of regime, where there's a monopoly?

A. Some of the concepts, these kinds of concepts can be done without PBR.

Q. **[278]** Okay.

A. But the performance-based part is that those mechanisms, such as listening to your customers, developing a plan, that becomes a performance objective. And performance-based regulation then measure how you do against that plan.

Q. **[279]** Okay.

A. And we'll reward you for achieve it, potentially penalize you for not achieving it.

Q. **[280]** Okay.

A. While you can do that within a traditional cost of service, you're now turning that cost of service into something which has some features of performance-based regulation.

Q. **[281]** I understand. So, it's an improvement of something that is already done, but it's, you know...

A. Yes. The point is there’s not a bright line between...
Q. **[282]** Yes.
A. .... cost of service and performance-based. It’s... we said, it’s sort of an evolution. All PBR is really enhanced cost of service, if you want.
Q. **[283]** Okay. Perfect. And, so, can you just continue on the comprehensive planing?
A. Similar, comprehensive planing is... covers more than what your customers want. It may be an investment plan. It may be an evolution of the business. It could cover environmental issues. It can cover, you know... it can cover anything that is set around the objective of the PBR system. And the planing... the scope of planing, and it may be one or more plans, would normally be addressing whatever the objectives of the regime are.
Q. **[284]** Okay. Thank you. That leads me to page 32 of your report; just after section 4.2.1, during the cost of the regulatory regime, so:

> The most obvious benefit of the Ontario regime is that the overall cost of regulation is significantly lower than it would have been if traditional cost of service regulation

with annual rate applications had been introduced.

I think that you touched on that subject with maître David, I think. But can you just expand on this and specifically answer the following question: what costs can be avoided with a PBR regime?

Ms. CYNTHIA J. CHAPLIN:

A. So, the costs that are avoided there were having close to eighty (80) individual electricity distributors come in for cost of service rate applications every year.

Q. **[285]** Okay.

A. So, if just a traditional cost of service was used, it would require eighty (80). And the regulator was not resourced to be able to conduct that kind of activity.

Q. **[286]** Okay.

A. So, by setting... by having a generic process to set the framework, and then engaging each of the distributors to apply that framework and come up with a specific plan, that streamlined how those would be reviewed. And then, each of those... in different generations of the Ontario framework have been different terms but even the initial ones were at least three years. And now, in fourth generation, it's to be five years. So, there's sort of two levels of efficiency in terms of setting many of the parameters for all of the distributors and then, also having an extended term.

Q. **[287]** Okay. But from what we... you know, about the Québec regime, how would this translate in Québec? You know, if we ever have a PBR regime in place, do you know how would this translate in cost reduction or length of hearings and...

A. Well, as we also say elsewhere in the report, shifting to a PBR doesn't necessarily reduce costs because you will be conducting different activities.

Q. **[288]** Okay.

A. But what... one of the reasons many regulators pursue it is because what the focus is then on, is on higher value added activities. So, instead of reviewing costs annually, without really being able to step back and see what might be achievable in terms of greater efficiencies over the long-term, you are setting it for a longer term. So, you're not having that very detailed cost review. But instead, you're perhaps going to put the resources into doing, you know, total factor productivity tests, which are detailed analytical or benchmarking studies. So, you may be directing the resources into another, potentially, higher value added activity.

Q. **[289]** Okay. I understand, thank you very much.

A. Oh, and I guess another thing is that it also, for the utility, instead of having such a large proportion of its activity being preparing and mounting an application every year, it can actually use some of those resources to be doing things like finding greater productivity.

Q. **[290]** I understand.

A. So, instead of just creating great applications, they can be using those resources in other ways.

Q. **[291]** Okay. Thank you very much for this answer. And my question, on page 34 now, relates to more or less what we've just discussed. At page 34, lines 10 and 11,

> Fifteen years has passed since the OEB began the process of implementing PBR. Key factors in the success achieved by the OEB to date include:
> Developing clear policies using transparent process that allow for significant stakeholder participation.

So in these PBR, well in these hearings under a PBR regime, the participation of stakeholders, can you describe what it is as opposed to the participation under a COS regime?

A. So, in that example there, as Ontario as gone through its evolution and developing each generation of its PBR, it has had very broad-based stakeholder activity, so the whole suite of interveners, maybe there's a dozen kind of key interveners, are involved in those setting the principles, setting the design parameters.

Then when a specific distributor applies under that framework, there may be fewer interveners that participate because in Ontario some of the distributors are very small. So because the interveners have had... have helped shape what the broad principles are and what the basic design features are, they then feel it's not as necessary for them to be involved in the detailed application...

Q. **[292]** Okay.

A. ... for a particular distributor. So that reduces the costs overall...

Q. **[293]** Overall.

A. ... and for that particular distributor. But they still had that input in determining, you know...

Q. **[294]** Initially.

A. ... will there be earning sharing, what should the term be, what should the productivity factor be.

Q. **[295]** Okay.

A. So those parameters.

Q. **[296]** So the involvement is really at the beginning and then, after, it depends on each particular request.

A. Yes.

Q. **[297]** Okay. At page 38 of the report, protection against, well... So page 38, line 24,

> Protection against the deterioration of service quality was seen by the AUC as a key component of a successful PBR regime. The AUC's model therefore sought to ensure that service quality was not compromised in pursuing cost reductions.

Can you explain in more details why a PBR regime can lead to a deterioration of service?

A. I guess it goes back to, it's a characterisation, it's very broad brushed characterisation that cost of service leads to perhaps overinvestment because that's what the shareholder earns a return on. But likewise, imposing a PBR type regime can lead to service deterioration because the incentive then is to cut costs so what you want, what the regulator wants the utility to do is to become more productive so, in other words, still deliver the same service but do it for less cost.

Q. **[298]** Uh-huh.

A. But the easiest way to cut, you know, is to just cut costs and perhaps to have service deteriorate. So that was a situation that, in the early days of introducing PBR in the U.K., that's sometimes what happened, is the costs were cut dramatically but there were significant customer complaints around service so there was a very early recognition that because there would be that incentive, you needed to put in complimentary requirements to ensure that what you were really getting the companies to do is to become more productive, not to sacrifice service quality.

Q. **[299]** Okay. And if you continue in the paragraph, you talk about measures to take in order to avoid this problem. But are these measures, is this the only measure or... Are they efficient these measures? I mean, because you said there's two opposites: on one hand, you say that cost of

service leads to over expense and the other... But, you know, are they measures just to reach a middle ground in the PBR regime?
A. Well, this is an example of how Alberta...
Q. **[300]** Okay.
A. ... has chosen to address the issue. So not everywhere uses penalties,but almost every, all of the frameworks that I'm familiar with certainly require at least reporting, so that there's a monitoring of what is going on.
Q. **[301]** Okay.
A. And there may even be, I believe there may even be somewhere there's even an incentive if there's exceptional service, that there's the potential for...
Q. **[302]** Okay. But you need a deterrent. I mean, the only reporting... If there's no deterrent, then why would the utility...
(15 h 38)
A. Well, and there are often arguments as to whether reporting is a sufficient deterrent.
Q. **[303]** Okay.
A. Mr. Todd spoke earlier about often, transparency can be an effective tool to modify, to encourage different behaviour; it may not be sufficient but

it’s one of the tools.

Q. **[304]** Okay. And the penalty, has it been applied or used? Or you aware that... you know, because it’s one thing to have penalty in the regime but are you aware if that led to, you know, hearings on, you know, on that particular aspect of the regime? It’s just...

Mr. JOHN D. TODD:

A. I’d...

Q. **[305]** Yes?

A. The reference is there. This is... in Alberta, my recollection is there have been the possibility of penalties raised in proceeding a couple of times, but as far as I’m aware, just the proceedings I’m aware of, they did not end up imposing penalties.

Q. **[306]** Okay.

A. But they’re actively considered.

Q. **[307]** Perfect. And I know I have three more minutes, so I’ll ask one more question and I’ll have maybe two or three written questions for tomorrow. Just trying to... So, I will... at page 77, section 9.2.4, the... so, you write about the Norwegian model. It says, and one bullet... the last bullet is:

> External benchmarking requires a

cooperative effort so that the required data can be collected on a consistent basis, and be audited for accuracy.

Here in Québec, since we're a monopoly, probably that we need to use external benchmarking. And you write here in page 77 that it can be, it's not necessarily replicable in other jurisdictions. I was wondering about the external benchmarking and the cooperative effort, can you just expand on these difficulties and, you know, what step can be taken in order to obtain such a good external benchmarking?

A. Norway is the prime example here. Transmission, initially, they... the regulator negotiated to arrange for a comparator which was Sweden. So, they had one comparator which was really not sufficient but it got them started. And, subsequently, I think they've gone through two iterations of expanding the sample size by negotiating with other European regulators to create a group who were sharing data. And, in effect, the regulators doing benchmarking of European utilities, which tried to correct for differences in their operating territories.

So, number 1, it took a number of years to, number 1, find people who are prepared to partner with you; and then, develop the data, the accounting information that was consistent so that you could actually use it in the benchmarking study, because you have to have consistent or, at least, take financial information and modify it into a consistent format for comparison purposes. And they were successful, ultimately, in creating a fairly good sample size that they, at least, believe provides them with a good... good date, good benchmarking information.

Q. **[308]** But are you aware of... these types of efforts in North America or in America?

A. Well, there is... most companies in North America, regulator or not, do benchmarking studies for internal purposes to help them identify how they're stacking up within their industry and identify areas to improve. So, benchmarking is a very widely used methodology for understanding your business and looking for ways to improve. It is not used for regulatory purposes at this time.

Q. **[309]** Okay. Merci.

LA PRÉSIDENTE :

Merci. Alors, maître Turmel pour les questions de l'AQCIE-CIFQ, s'il en est.

EXAMINED BY Me ANDRÉ TURMEL:

Q. **[310]** Il y en a, mais moins. Alors, Madame la Présidente, pour votre compréhension. Et, alors, je vais tenter d’être efficace. Bon, hello again to the panel. So, we go directly to page 26 of the report. Page 26, you do discuss in your observations the tradeoff that you mention between earnings sharing mechanism and PBR. I'm at page 26, lines 5 to 12, and then, so there's a discussion, you tried to weight the different approaches and then, you conclude at lines 23 and 24:

> Hence, the more challenging the embedded productivity target the less justification there is for earnings sharing mechanism.

So, end of quote. So are you saying that, in fact, an ESM can not live along with a BPR mechanism, here? You're not saying that, right?

(15 h 44)

Mr. JOHN D. TODD:

A. No. I'm not saying that.

Q. **[311]** Okay. Would you please just expand a little bit on that?

A. Within any PBR regime, a goal is to ensure that the customer benefits from lower costs and lower rates, but the incentives means the company must also benefit by having a portion of the cost savings. The earnings sharing mechanism in its simplest form says: here is, in the past, you had productivity gains of one percent (1 %) a year. So going forward, we'll assume you have one percent (1 %) a year, and if you do better than that, we'll be sharing, say fifty-fifty (50-50), both sides win.

An alternative is to say: we're going to give the customers a one percent (1 %) savings, so you're going to have a productivity assumption, in setting rates, of two percent (2 %). So customers will be doing one percent (1 %) better than they have done in the past. If you can do better than two percent (2 %), you keep all of it. So it's just, it's a different way of approaching sharing between the customer and the company.

Q. **[312]** Okay. Thank you. Now, with respect to the process, when the Régie will launch the detailed PBR, the PBR process has already been launched, but the detailed process moving to the next step, what should be the starting point in relation to HQT, HQD cost of service? Should the Régie, and I don't... I know that you're not, shall not go into the detail of HQ; but as a general concept, the starting point perspec... analysis of the cost of service, should we have an exhaustive first time starting point, a strong analysis of the cost of service or we should do it as a normal way of doing business?

A. The conventional approach is that you have to have a cost of service to set cost based rates as a starting point. That is normally just done as a traditional cost of service. So, you probably, there are some cases where they did not have that, as in Ontario, where there was no regulatory regime before, there had been no cost of service. And essentially, the first cost of service review, as in Ontario, were historic costs. So the cost of service in two thousand and six (2006); they just said: file with us your two thousand and four (2004), which are actuals. So there's no cost to defend, this is what they actually spend. And that became the base starting point.

Q. **[313]** Okay.

A. But given that you have a cost of service history, you would take... you would have a first-year cost of service application which probably would be the starting point of the regime. So it would be after you decided on the regime, that you will have cost of service, which may, because you're about the measures, may say: it will be slightly enhanced. Because if you're going to be monitoring performance measures, that cost of service base review would probably include information filing for monitoring performance, performance indicators such as reliability and so on. Many of those are already filed on a regular basis, I mean, the regulator expects reliability information, it's part of the filing.

When Ontario introduced the score card of the seventeen (17) measures, I think fourteen (14) were already being filed, some for five years or more. So, a lot of that information is already available, but it may be enhanced.

Q. **[314]** Thank you for your answer. In a jurisdiction where test year is being used as a cost of service analysis, that's the fact in Québec, as you know; in launching the process, knowing that we've been using test year for the last year, and may have lead to over earnings, as you may have heard, but that's not the issue. Should we base our the cost analysis using last historical year and place of test year, knowing that test year may have lead to some over earnings, or do you see an important point here of choosing which test or which year, sorry, to use?

A. Some jurisdictions still use an historic test year.

Q. **[315]** Yes.

A. They're concerned with that around what's called regulatory lag, because those costs are old costs, not current costs. I think the last jurisdiction was Manitoba in around nineteen ninety (1990), converted to future test year.

(15 h 49)

So, that’s generally accepted as the appropriate base. If there’s over earnings, that is meant to be addressed through the cost of service review and disallow some costs and, even in a cost of service regime, the regulator can say, relative to the historic year, or the bridge year, that there should be some productivity built in and it’s not there.

So one of the things that happens with cost of service reviews, you know, the rebasing every three, four, five years in different regimes in Ontario, is often the negotiations where essentially a formulaic approach. You’d say, "Well, we’ll give you inflation minus a productivity and let’s argue over how much productivity is appropriate for you as a particular LDC."

You can do that as part of a cost of service to come up with the right number on an envelope basis for the test year. Then you flow into your formulaic adjustment and rates from your year, or revenues.

Q. **[316]** Okay. Thank you. I know that you've discussed at length that question, but let's discuss a little bit about revenue cap versus rate cap. Generally speaking, are you favouring yourself a method, one or the other, with one to, well, install that process, not install, but launch the process of PBR? Is there a better method to be used as a, well, being commonly used elsewhere, starting with revenue cap or rate cap?

A. Ultimately, what the Régie sets are rates.

Q. **[317]** Yes.

A. A rate cap is the sort of logical way to go that we have a rate today, we're going to adjust a rate by a formula from year to year. The exception to that standard simple rule, and took me lots of reasons that you might argue about that, but the standard exception to that is for transmission where you say there can be significant changes in volume throughput and even though the volume throughput changes, there will be essentially no change in costs. So, a simple example, could Hydro-Québec stimulate a lot of new point to point service, you know, wheeling power through the province and increase its revenue with existing facilities, no change in costs. I don't know the answer to that question, but that may be an opportunity to significantly increase revenues, in which case the Régie may say, "Well, what we should be doing is capping revenues in total and hopefully they generate additional revenues, whether it's fortuitous or not but those extra revenues then, instead of going to the bottom line as net income, would go into a deferral account and get fed back to customers."

Similarly, if there is a high risk that due to weather factors, for example, or economic drivers, throughput goes way down but costs stay exactly the same, it's protection for the company to say, "We have a revenue cap and if our throughput goes down in a completely unanticipated way and our costs are the same, we get to put that shortfall in a deferral account and collect at a later year."

Q. **[318]** Okay. Thank you. So now we'll go through what remains of your report being not untouched, if I may so. This morning I have alluded to that question, but it’s written at page 1 that you wrote that,

> A regime that works well with shareholder-owned utilities may be less effective if used to regulate a crown corporation.

I have another set of question, I don’t want to repeat all of this morning, but so even if regulation of a Crown corporation is less effective as you said, should the regulatory system of a Crown corporation therefore be different? If it’s less effective, it brings...

A. Okay. The important word in that sentence is "may".

Q. **[319]** Okay.

A. You have to look at context.

Q. **[320]** Yes.

A. The first question is: does the regulator leave that the Crown corporation is acting just like a shareholder company and will respond to financial incentives?

Q. **[321]** Okay.

A. If the response to that question is yes, it’s no different. And there definitely are Crown

Corporations, utilities that act just like a shareholder-owned company and are very responsive t financial incentives and penalties.

On the other hand, if the belief is they will not be responsive, that if you give them a productivity target they will actually not implement productivity measures, but will simply take a lower net income, then you may want to say, "Okay, how do we motivate them?" and that would be a context specific answer to that question.

Q. **[322]** Okay. So no special treatment, it depends on the context. This is what I get.
(15 h 54)
R. Sort of do whatever works.
Q. **[323]** Yes. Okay, thank you. Would you please confirm that multi-year rate plans, MRPs, with attrition relief mechanism, based on industry price and productivity trends are now employed for energy distributors in Alberta, BC, and Ontario? Is that...
A. Yes. Sorry...
Q. **[324]** Yes, well, I have no link to your report. I just...
A. Yes.
Q. **[325]** ... it’s a general question stemming from the

subject. So, if you have... if you're able to answer, okay, if not, it's okay.
A. I didn't quite catch the question.
Q. **[326]** Okay, I'll repeat.
A. Yes.
Q. **[327]** Okay, so, well, multi-year rate plans, okay?
A. Yes. As in Consolidated Edison?
Q. **[328]** That could be, but I'm talking now about Canada.
A. Yes.
Q. **[329]** MRPS with attrition relief mechanism, based on industry price and productivity trends, are now employed for energy distributors in Alberta, BC, and Ontario. Is that something that you are aware of?
A. Yes. It's terminology. I guess it's the multi-year plans, I mean all the PBR plans, the multi-year plans. And if they have a plan in costs, there... yes, there are those regimes in Canada.
Q. **[330]** Okay.
A. That's one of the options in Ontario, for example.
Q. **[331]** Okay, but those ones are specified with attrition, I believe, mechanisms based on industry price. I think that's the focus of the question.
A. Based on industry price?

Q. **[332]** Yes.

A. Do we say that?

Ms. CYNTHIA J. CHAPLIN:

A. I'm sorry, if what you are referring to is a formulaic annual adjustment related to inflation and productivity, then the answer is yes.

Q. **[333]** Okay. Yes, I think sounds better this way.

Mr. JOHN D. TODD:

A. Okay.

Q. **[334]** Many of the PBR approaches you have surveyed have utilized statistical benchmarking, you mentioned that, do you believe that it is... that this is a generally desirable component of PBR that should be short-listed as a... for consideration by the Régie? Meaning that using that method, is that something strong enough?

A. It's definitely worthy of consideration.

Q. **[335]** Okay.

A. It requires a lot of work and you have to determine, number 1, you have the data, and number 2, it's worth the effort, given all your objectives and the broader issues.

Q. **[336]** Okay. Now, discussing some questions on price cap and revenue cap regulation. I think you have referred to... in the U.K., just want to make sure

that the... I think, do you know Dr. Littlechild?
A. Not personally, but yes, I...
Q. **[337]** Yes. Okay.
A. ... I'm very familiar with his work.
Q. **[338]** Perfect. And I think that... would you please confirm that his approach to PBR, which involves rate escalation based on multi-year cost forecast, was first applied to British Telecomm utilities in the mid-eighties (mid-80's)?
A. Yes.
Q. **[339]** Okay. Would you also confirm that an alternative form of PBR with rate escalation based on industry input price and productivity trends - that sounds like Madam Chaplin - arose independently in the US and was first used there in the railroad and telecom regulation in the eighties (80's)?
A. Yes.
Q. **[340]** That's good for... Yes?
A. At least... at least the eighties (80's). I mean, I think... we think we mentioned earlier forms of...
Q. **[341]** Yes.
A. ... what could be called price cap regulation, go back a hundred (100) years.
Q. **[342]** Okay.

A. The literature talks about this extensively for many decades before any regulators implemented them.

Q. **[343]** Now, let's discuss a little bit about the development of PBR itself. One question here: in capital intensive industries, such as power transmission and distribution, are premature capital expenditures, capex, a potential problem, as well as the inefficient deferral of capex? I want to have your view on that.

A. Yes, I mean the classic concept referred to is gold plating of... you may get a return on capital. It would be consistent with that to make early investments.

Q. **[344]** Yes, Okay.

A. We're talking concepts here.

Q. **[345]** Okay, now going on page 25, we're a page away from the end. On page 25 of your report, you state that:

> Most PBR regimes have automatic rate adjustment formulas, predetermined periods between the rates reviews and the reliance on external productivity standards.

(16 h 00)

My question here is: should the proceeding be informed by evidence on external productivity standards?

A. To the extent you can. External productivity standard, that is in the context of the OEB, right?

Q. **[346]** Yes.

A. And one of the concerns of the OEB was that when they looked at labour productivity, waged settlements tended to flow one LDC to the other, and there's sort of a self-reinforcing, what you say, inflation wages. And therefore, there's a need to look outside the industry for comparative wage scales, for example, what's appropriate pay levels which links to productivity, cost of labour versus what of the productivity labour. And similarly, where you're doing comparison, where you have a lot of companies within the industry, comparing those companies may be comparing inefficient companies and saying: well, they're all equally inefficient. Therefore, they're all efficient. Right?

So the concept was if you want to look outside to make sure that they were efficient compared to competitive industries for doing the same types of activities.

Q. **[347]** Thank you very much. Now, I'm moving to page

27 at lines 20 and 21, in the observations section. You mention about:

> One approach is to undertake negotiations or an alternative dispute resolution processes after the regulator has set out the objectives and/or criteria for PBR.

Would you explain what you mean by, I'm sorry if you've already been asked the question before, but what do you mean by alternative dispute resolution, here? I know what it is, but in that context? And why it might be helpful in the design of PBR plan?

Ms. CYNTHIA J. CHAPLIN:

A. Well, I can give an example. In the case, historically, in Ontario, for example, forum, there was initially, it was called the Natural Gas Forum. So it wasn't a specific hearing, but it was a process by which the Board investigated what the design parameters should be for that next generation of natural gas PBR. And so, that set out some standards and expectations. And so, that was done and fully decided and determined and established by the Ontario Energy Board.

The gas companies then went and, at least one of them was then successful and actually they made an application, but in the hearing process, there was a settlement process. And because they reached a settlement, that was broadly aligned with the parameters that the Board had set in advance, so the Board found that to be acceptable, so that's an example.

Q. **[348]** Okay.

A. More recently, the Ontario Energy Board has looked at a number of custom IR applications. So these are the more complex PBR regimes that are being set up. And so, for some of those, the Ontario Energy Board said that it really didn't want to have a settlement process as part of the hearing, until it had heard a few of the cases completely. But it has now just recently accepted an negotiated settlement for one of the utilities, for this form of framework, this custom IR, it has now accepted it. So...

Q. **[349]** Okay. Thank you for that's very helpful. But if, at the end of the day, that settlement doesn't work, I mean the negotiation, so they go back to the Board and there's some sort of an arbitration? Is that sort of...

A. Yes. The...

Q. **[350]** Okay.

A. The settlement process, generally speaking, is part of the overall hearing process. So it's an opportunity for the parties to get together to discuss if either they can settle all of the issues or some of the issues. So whatever is not settled would go to the oral hearing and be adjudicated that way.

Q. **[351]** Finally on that, so I understand that an arbitration approach, would that make sense, for example, if the regulator chooses the most reasonable X factors amongst those proposed by the parties, if they can not settle? Would that be some kind of a, something that you know? It looks like or it smells like what you described?

A. Yes. I mean, I don't have direct experience with that particular scenario, but by in large, the PBR regimes in Ontario that have been negotiated, they've been negotiated as an entire package, because it involves tradeoffs in terms of what the parties are prepared to accept.

Q. **[352]** Thank you. Un instant. Je pense j'ai terminé. Je vais vérifier avec monsieur... Alors pour être efficace, le reste des questions, on le déposera par écrit, en espérant qu'elles soient retenues par la Régie. Merci de votre patience. Thank you very much for your patience.

LA PRÉSIDENTE :

Merci Maître Turmel. Nous entendrons maintenant Maître Fraser.

EXAMINED BY Me ÉRIC FRASER:

Q. **[353]** Merci Madame la Présidente. Bonjour Madame et Monsieur les Régisseurs. Good afternoon to the panel, Mr. Todd, Ms. Chaplin. It's been a long day. I'll try to be short, but I will not try to speak too fast, compassionate, maybe. I'm always compassionate. So let's go.

Let's start with some methodology question. I understand, from your testimony previously this morning, that the selected sample of the jurisdictions you chose was... had the objective, mainly of giving a general picture and overview of the principal parameters of PBR, is that correct?

(16 h 06)

Mr. JOHN D. TODD:

A. The initial review was to identify what jurisdictions had PBR regimes and to get a high level understanding to help us select a set that could be reviewed in detail economically.

Q. **[354]** Okay. You were not in the world of trying to search for comparables?

A. No.
Q. **[355]** Would you agree that from the jurisdictions you studied that probably the most important objective number 1 would be to attain with PBR some cost reduction or cost efficiency? That would be the number 1 objective?
A. As a generalisation...
Q. **[356]** Yes.
A. ... yes.
Q. **[357]** And could we say that the number 2, and mainly from the jurisdiction you studied and I think especially at Ontario that streamlining of the regulatory process is also one of the main objectives that was looked for by the Board in the jurisdictions you looked into?
A. Yes, but not always. I mean, certainly in Ontario that was a necessary, perhaps that was even number 1, that you had to have a streamlined regulatory process. Others, where they were creating new regimes, U.K., Australia for example, again, just to manage the new industry, they needed an efficient...
Q. **[358]** Yes.
A. It was looking for an efficient process so that was a very high priority. I think in Alberta, which

came in more recently, it was not about streamlining their process, the did a very lengthy process to bring in the system. It was probably more just "We want to get costs down in the industry."

Q. **[359]** We've noticed, still in the same line of questioning from Hydro-Québec, we've noticed that all of the jurisdictions you've chosen regulate a fairly large amount of utilities – that's why I asked the first question. Ontario is the example, I think that in the report we say that there's about seventy (70) electric distributors that were... Norway, am I correct if I say there was a hundred and sixty (160) electric distributors in Norway?

A. Distributors, yes. One transmission company.

Q. **[360]** And one transmission.

A. Norway was there mainly because of its transmission experience.

Q. **[361]** Okay. The PBR was put in place mainly for the transmission?

A. No, no, Norway was selected...

Q. **[362]** Yes...

A. ... because it's one of the three that were there because they are a transmission regulator, they regulate essentially one transmission company.

Ontario also although we are looking at them for distribution. It has a small number of transmission companies.

Q. **[363]** Okay. But the hundred and sixty (160) electric distributors are regulated under PBR?

A. That's correct. In Norway, yes.

Q. **[364]** In the U.K., I think there's six electric distributors and three trans co, is that correct?

A. Yes.

Q. **[365]** Alberta, eight electric distributors?

A. It sounds right, in that ballpark, yes.

Q. **[366]** Australia, is that correct that there's approximately thirteen (13) electric distributors?

A. Across the different states, I'm not sure the number but it sounds about right.

Q. **[367]** Okay. And for New York, if I say forty-seven (47) is that roughly a right number?

A. Yes, but the regulatory regime is Consolidated Edison specific.

Q. **[368]** Okay.

A. It's sort of done differently there. They were not looking at a PBR regime for the New York PSC, it was for Consolidated Edison.

Q. **[369]** Thank you. I know that the report doesn't specifically in one section talk about the implementation strategies. I know that it is talked all over the report and you have testified this morning on some of the... let's say, best practices or objectives you will want for properly implementing PBR.

(16 h 11)

Is it fair to say that pacing is an important thing? Like taking time to put in place the proper regime and having the engagement of all the stakeholders, as one of the main preoccupation a board must have?

A. There... it is important to allow sufficient time to design the regime, intelligently.

Q. **[370]** Uh-huh.

A. That is not something that is done while watching TV at night. At the same time, there is a need to move forward. So, that does not... you know, there's a limit to taking time to think about things.

Q. **[371]** Okay. So, it's the pacing, it's the...

A. It's pacing...

Q. **[372]** ... the right amount of...

A. ... it's a balance. It's a bal...

Q. **[373]** A balance.

A. ... you don't want to rush it but you don't want any dragging of feet.

Q. **[374]** Is it fair to say that stability and predictability are also objectives you want to attain? You don’t want to rush things. You don’t want to disturb everything while implementing?

A. First, you develop a plan, and then, you implement the plan. If you’re going down a path of a plan that may be, if it’s predictable... change can be predictable, but change can also be significant. It’s still predictable, and people have time to adapt for it. Admittedly, I think we would say that most regulators have gone down the path of evolution not revolution.

Q. **[375]** Okay.

A. And there seems to be good reasons for that.

Q. **[376]** Would you say that size and scale is an important... and geography of service area is an... of a particular utility, is an important consideration in designing an effective PBR programme?

A. Not necessarily for the design of the PBR. If you’re doing things like benchmarking, those issues need to be taken into account.

Q. **[377]** Uh-huh.

A. Norway, for example, one of the issues they ran into was that small utilities had different cost structures than large utilities. And when mergers took place, that created a problem because the costs that were allowed for larger utilities were lower than costs for small utilities; therefore, they had a disincentive to merge. But, so, if you're talking, cost structures are different, depending on scale, yes; if you're talking about the design of a PBR regime, by and large, similar regimes to apply to large utilities and small utilities, there may be some features that are unique, depending on size. But that's all part of the context.

Q. **[378]** Okay. So, it will all come down to cost structure because of geography or size and scale, having an impact on cost structure.

A. But that affects the way you do benchmarking,but that's not really the design of PBR.

Q. **[379]** I see. You testified... I think it was you, Ms. Chaplin, that BCUC uses PBR for regulating electric distributors or...

A. I probably referred to that because I was the one involved in those creation of those regimes.

Q. **[380]** Okay. But BCUC uses PBR either for gas or either for electricity distributors or...

A. Yes, it implemented PBR for all... both gas and electricity, starting in the early nineties (90's).
Q. **[381]** Okay. I understand that BC Hydro is not regulated with a PBR regime.
A. I thought you were going to cut off the sentence at "not regulated," but, yes, and I don't think it every was subject to a PBR regime.
Q. **[382]** Okay. I'm asking you that because BC Hydro is often referred as a comparable to Hydro-Québec and I was wondering why... if the regulator has employed PBR, he does not employ it with BC Hydro.
A. I don't know what was in the head of the regulator for that... for that reason. I know there are... there's special legislative issues around BC Hydro. So, there may be legal reasons that I'm unaware of. And also there were some structural changes, BCTC... BC Transmission Company was split off and then was reintegrated.
Q. **[383]** Brought back together.
A. So, those kinds of disruptions would have made PBR a little more difficult than other circumstances. Plus within the whole, all the export issues need to be addressed separately. They do not have this, the same separation of distribution, transmission, and generation, although there is the, sort of an

export arm. So there are complexities there. I was not involved in any exercise to explore PBR for BC Hydro and I don't think there ever was one.

Q. **[384]** Okay. I understand from your report that you referred to two Canadian jurisdictions, you referred to one American jurisdiction, which, from a quality perspective, I know that they're representative, but from a quantity perspective, it seems to be relatively few. Would it be fair to say that most North American jurisdictions have not formally adopted PBR?

A. Yes. And there was this survey that was prepared, and I forget by whom, which is cited here, and I think a copy was made available on the Régie's website, which was a survey of what they called alternate regulation in the U.S., a chart which goes through all the jurisdictions and what they have in the way of alternative regulation. And if you go through that, very few of those, in my view, would qualify as the kind of PBR we're talking about.

Q. **[385]** Okay. And while preparing your report, do you know why there's so few, well not so few, but that most North American jurisdictions do not have formally adopted PBR?

A. That is a decision made by individual state regulators. I would suggest that there's a correlation between small jurisdictions, both in Canada and in the U.S., and jurisdictions that do not have PBR, which suggests to me that to address PBR requires a higher degree of sophistication than exist with the average regulator in North America. Look...

Q. **[386]** Okay.

A. ... New York PSC, Ontario BC; these are the larger regulators, those with the most resources, those who have more sophistication to look at total factor of productivity studies, all that kind of thing. Not necessarily definitive, but there's a correlation there.

Q. **[387]** Looking at transmission, again, same type of line of question, you have no North American transmitter in your report. Is it because that there is very few or many no transmitter that is regulated with PBR? I heard you speak about Enmax, but... Question is: is it because there are very few North American transmitters?

A. Compared to the number of distributors, yes, there's fewer.

Q. **[388]** But there's still a transmitter per state, so, at least, so...

A. Transmission in the U.S. is very different than Canada. So Ms. Chaplin's comment, side comment to me was that of course, there are merchant transmitters, which are a bit of a different treatment. In some jurisdictions, multiple transmitters within a state, and there's inter-connexions, all the trans-borders jurisdictions, it's a... it's much less of a stand-alone system than compared to Ontario or compared to Canadian provinces. So I'm not familiar enough with the U.S. to pursue that very far.

But it is transmission grid; it's very different from Canada, which doesn't necessarily rule out the possibility of doing PBR. But there's a lot of cost passthrough, which is kind of the basis of the revenue cap concept, where the concern is investing in transmission capacity. And that's more, there's more focus on projects and passing through costs of projects, as opposed to rate regulation.

Q. **[389]** Because of the cost structure?

A. Because of cost structure and just...

(16 h 22)

Q. **[390]** Okay.

A. ... the emphasis so I think that the regulatory, from what I've seen of the regulatory process in the US, it's far more focussed on projects than on rates.

Q. **[391]** Okay. And if we look at Canada, there's no transmitter either that is regulated by PBR except maybe for Enmax that I learned today but... That's correct?

A. And the prospect for Ontario which is a stated plan of the OEB but...

Q. **[392]** Okay. Is there a reason, speaking of Ontario, that they're at their fourth generation of PBR and still transmission is not regulated with PBR?

A. The reason is that distribution, in my view, and I'm not inside the head of the OEB, in my view distribution, because of the numbers, has been the high priority and it's still work in process.

Q. **[393]** Okay.

A. So they just haven't got, you know, worked down the to-do list to the point of transmission PBR yet.

Q. **[394]** I see. I understand from your report, and it has been repeated this morning or today, that a PBR will need to reflect the unique circumstances that prevail in Québec, taking into account characteristics that reflect both or separately

HQD’s and HQT’s situation. This is something that comes up in your report a few times, that’s correct?

A. Yes.

Q. **[395]** This morning you had, I’ll do the same exercise, at your slide 3 you had a list of things, elements that the design must reflect which is very informative.

Ms. CYNTHIA J. CHAPLIN:

A. Well those are a list of considerations.

Q. **[396]** Considerations?

A. It’s not a definitive or exhaustive or prescriptive list.

Q. **[397]** So I guess that if I were to expand on that list, good practice would also require to take into account things like the regulatory compact, acts regulations, previous decisions of the Board?

A. Yes, those would be considerations.

Q. **[398]** Past results of the utility? Both on efficiency and customer service?

A. Yes, utility performance is a factor.

Q. **[399]** We would have to take into account also, I guess, the usefulness and the value of the mechanism, regulatory mechanism and measures that are already in place? Is that fair?

A. Yes, that would be part of the current regulatory framework. I believe that's the sort of thing you're referring to so yes, that's...
Q. **[400]** Just specific of the framework. When we speak of regulatory efficiency, or streamlining, I understand, and correct me if I'm wrong or expand the subject, I understand that where regulatory efficiency translates it's because there are multi-year rate cases and there are, pardon me the expression, the 'one size fits all' that can be used like it is used in Ontario. Are there other considerations or other impacts or results from PBR that promote regulatory efficiency?
Mr. JOHN D. TODD:
A. Well, as with PBR talking about efficiency for companies, cost reduction, it tends to be looked at as cost reduction.
Q. **[401]** Cost reduction in the regulatory process?
A. In the regulatory... So PBR is supposed to improve efficiency, it actually targets cost reductions. Okay? In a regulatory process, I think it's important to draw a distinction between cost reduction, just the cost of regulation and the efficiency of regulation.
Q. **[402]** Uh-huh.

A. Okay? So streamlining will presumably reduce the cost of regulation: the lawyers' fees, the consultants' fees, the Régie's costs. Efficiency of regulation means a system for the same cost that gets better results in terms of the objectives of the regulator. So, for example, if the regulator's objective is to get lower rates and you end up with lower rates at the same cost, that is an improvement in the efficiency of the regulatory process. You may not save any money, but you have a more efficient process in that it achieves better results given the objectives for the same cost or less.

(16 h 28)

Q. **[403]** Uh-huh.

A. So, if we're talking about regulatory efficiency, the mere fact that you've got a mechanism that works better is arguably creating a more efficient regulatory process, even if the costs are the same.

Q. **[404]** I see. But I was more into practical... the practical side of regulatory efficiency, which is reducing the hearing time, reducing the...

A. It's cost...

Q. **[405]** ... information request, reducing the number of times you have to come up with a... rebasing,

let’s say, multi-year... more on those aspects.
A. Cost reduction, yes.
Q. **[406]** I guess, cost efficiency or regulatory efficiency.
Ms. CYNTHIA J. CHAPLIN:
A. I think what... Yes, there can be reductions by extending the term and therefore, not having as frequent cost of service inquiries. However, I don’t think that PBR is seen as a means of reducing the scrutiny or the rigour with which the companies are examined. And that’s why I spoke before about perhaps a shift in activities, so broader than each year examining the plan for vegetation management and whether or not it’s... you know? That there is broader examination of cost drivers or more analytical work done on benchmarking.
So, the objective is not neces... you know, a PBR is not a means of reducing... necessarily reducing the total regulatory burden on a company. What it’s doing is shifting it to more productive and more valuable inquiries. But there is this benefit of not having to have an annual rate case.
Q. **[407]** Okay, but when we speak of reducing regulatory process, it’s in 48.1 that is in your report. Because the example you gave me, you can do

it in cost of service. You can decide to be more productive while doing cost of service. You can decide to... one year, not to spend too much time on some items and spend much longer time on other items.

So, what is the difference between cost of service and PBR as it is an objective that has to be attain from the board, and as it seems, as I read, but maybe I didn't read correctly, that it is an objective that is attained by implementing PBR. Where do we attain this regulatory streamlining, this regulatory... they say "allégment" in the act. I'll get the translation.

Mr. JOHN D. TODD:

A. 48.1, sub 3...

Q. **[408]** Yes.

A. ... the first two streamlining.

Q. **[409]** Uh-huh.

A. So, there is a mandate for the Régie to use PBR to streamline...

Q. **[410]** Streamline the process. Knowing that there is only one distributor...

A. Yes. Okay.

Q. **[411]** ... my question is: where do we streamline the process with PBR compared to cost of service?

Where is the plus? Where do we gain something...

A. Okay.

Q. **[412]** ... in there?

A. As with companies' productivity improvements, many improvements require an upfront investment. So, in the short run, you spend more money in order to implement new technologies or new processes, which then operate more efficiently in the long run. The concept of PBR is that you can't just stop cost of service until you've got your PBR regime. So, you're investing upfront to develop a PBR regime which may not be a one time effort. It may be something that evolves. That's what we normally see. Once you do that, you may have a regime that requires a hearing, a review, a resetting of the mechanism, once every five years. So, you go from annual hearings, to one hearing every five years, for example. That would be streamline. You would have...

Q. **[413]** Okay.

A. ... an upfront design cost and over the next ten (10) or twenty (20) years, you now have one hearing every five years. And in some examples, like in... with the BCUC, with... as it was then BC Gas, became Tarrison and FortisBC.

They set up, I think it was a four year PBR regime. When they came in for re-basing, they took a look at it and said: looking pretty well, pretty good; we'll just tweak the numbers and carry on. And so, in effect, they had a two day hearing instead of a two week hearing, when they came in. So even the review process was actually very streamlined.

(16 h 33)

Q. **[414]** So I understand that the regulatory streamlining comes from the multi-year formula...

A. Right.

Q. **[415]** ... or the re-basing between the application of the formula?

A. Yes.

Q. **[416]** Is there anything else, or is that the main feature of PBR that enables regulatory streamlining?

A. That's the main feature that is commonly observed. There may be other jurisdictions' specific savings.

Q. **[417]** If we go with the jurisdiction you surveyed, are you able to, or were you able to identify too that the utilities and the Board concerned were successful to relieve, to obtain a relief in the regulatory process, a burden of the regulatory process? Have you been able to verify that?

A. In the juris...
Q. **[418]** And the way I say burden, excuse me, I say it evidently, it's the burden of having constant hearings, year to year.
A. The regulators don't like the word burden, and I've learned that myself.
Q. **[419]** Well...
A. It's not regulatory burden; it's regulatory opportunity.
Q. **[420]** Maybe I wasn't politically correct enough, but...
A. Several of the juris...
Q. **[421]** Hard work.
A. Several of the jurisdictions implemented PBR is really in a new, totally new situation. There's no comparison. The exception would be Alberta. And I think they're still going through the, you know, the early days of refining the process, so the payoff is potentially coming. The New York PSC with the multi-year approach definitely felt that they were saving on regulatory time. So that's the one that will be most, you know, they've gone from cost of service, went to multi-year, they had fewer hearings, they saved on regulatory costs.
Q. **[422]** Is it fair to say that price cap and revenue

cap are the main formula that are used to determine price and revenue in a PBR?
A. Yes. They are the common core of most PBR regimes. But in the multi-year...
Q. **[423]** Yes.
A. ... it can be different.
Q. **[424]** I understand that most regimes, when they're using price cap or revenue cap, are also using some kind of a parametric formula incorporating inflation, CPI minus 6. That's correct?
A. Yes.
Q. **[425]** I also understand that most of the regimes include a service quality performance follow-up using selected indicators? Is that correct?
A. Yes. I mean, I would suggest that in most regulatory regimes, there are service quality indicators, I mean, KD, KP type in their..
Q. **[426]** Okay.
A. I mean, there are measures that all regulators want to monitor around the performance of the company. They become a little more systematic and often broader, and the particular consequences can be introduced with respect to performance on those indicators. It's what happens when you introduce PBR.

Q. **[427]** Okay. I also understand that they always started, except maybe for Ontario, with a cost of service exercise, or they're based on a cost of service.
A. Yes. You need a cost based initial rates.
(16 h 39)
Q. **[428]** Is it fair to say that those are the most significant elements of PBR of the utilities that you've studied?
A. Personally, I would argue that the most significant element is a consistent and cohesive package of features. All the pieces have to fit together properly.
Q. **[429]** Okay.
A. And I am uncomfortable with looking at any one feature as being, you know, the key to it all. The cost reduction incentive has consequences for quality service. You need quality service indicators. There may be special circumstances where there's capital that can't be recovered without a capital track or some mechanism so you add that on. You look at the context and you have to build into it all of the pieces that create a cohesive and effective regime. That's why some time is required to think it through and explore and

make sure we get it right. There's enough experience and that time doesn't have to be extensive. The Alberta regime took a long time because they were doing massive data studies. Without the competing TFP studies, the time that they would have would have been much less.

Q. **[430]** Yes, I understand. It's a different mix of different measures that will fit with the utility that is under regulation. But I also understand that one or maybe, there's always one of those ingredients in the formula, one or more of those ingredients in the formula and it always comes up with a PBR?

A. Yes. Well, I think in the report there's a place we go through a couple of the steps.

Q. **[431]** Yes.

A. I think it's citing one of the authors and in order to get the incentive, you have to go to multi-year. That's your starting point. If you've got...

Q. **[432]** Multi-year is the starting point.

A. You've got to have multi-year so there's time to benefit, that's what the incentive is all about. If you're going to have multi-year, you have to have a mechanism for adjusting rates per year, therefore you get into a CPI-X or something.

Q. **[433]** Exactly.
A. There's a logical flow that once you take the first step, you know, you don't get to home plate until you go to first base, second base and third base and then home.
Q. **[434]** Okay. I see. Thank you. I will ask an hypothetical question but with a practical preoccupation for my client. There is this particular legislative tool that is built in in the Régie's Act that enables the government to express economic, social and environmental concerns with simple orders and counsels. We've had roughly seventeen (17) of those throughout my career, short career, and they can come up anytime. It's not a law, so it's not like you're seeing it coming. It can come up at the middle of a hearing, before a hearing, six months prior to a hearing but when you receive it six months prior to a hearing, you're lucky. Did you encounter similar situations in the jurisdictions you surveyed in your study?
A. So Ms. Chaplin, how many directives did the OEB receive during your short time with the OEB?
Ms. CYNTHIA J. CHAPLIN:
A. I don't remember the number but yes, I mean, it's a fact of life so what you'll see, I mean, one of the

features that we reference at the beginning of the report, I think it's at the beginning of the report, the idea that... There were some discussions earlier this morning about Z factors but another factor are what are commonly known as "Y factors" so that may be an issue which is being dealt with in a way that's separate and apart from the overall regulatory regime.

So in an example in Ontario, for the natural gas distributors, the monies that they spend on demand side management, so their conservation programmes, is set, that budget is set separately from the PBR regime and so forth, the Y factor. So, there's... PBR regimes are often built with sufficient flexibility to address issues that may arise, which are genuinely beyond the control of a company but are imperatives.

Q. **[435]** So, you would manage that with the Y factor or the Z factor?

A. That would be one that would be one approach. There may be others, but that's one that immediately springs to my mind.

Mr. JOHN D. TODD:

A. Assuming and be justified that the impact of a particular directive is significant enough to need special treatment. Many directives may not need special treatment. I can tell you in Ontario, not just... it’s not just the Energy Board that receives directives. There are many legislative changes and all distributors in Ontario have been... you know, complain about being continually buffeted with an unpredictable policy environment. And they would... I think, they would unreservedly express a pleasure if they could have the stability of Québec, as our political environment.

Q. **[436]** Okay, they do. But when you say that there are many directives, my understanding of it was that many directives were received to come up with a way to regulate. But the directive didn’t come up to express any concerns towards one particular distributor or transmitter, one utility, because we’re not speaking of regulatory framework. I just want to make sure that you’re not referring to directives that led... that were... directives that were on... directed on the regulatory framework. I’m speaking about...

Ms. CYNTHIA J. CHAPLIN:

A. On the companies.

Q. **[437]** ... directives on the...

A. On a company having to do...

Q. **[438]** ... on the company.
A. Yes, and I think within Ontario, there has been significant policy change and political... policy change which has required companies to take specific action. And that is something the regulator then considers whether or not the rate framework was sufficiently flexible to begin with, that it can be absorbed within it, or not. I mean, you're speaking about what is part of that general category of things which is the unexpected happens. Some... and utilities will frequently seek to recover extra costs. And that's something that's a traditional activity of the regulator to determine whether or not that's justified.
Q. **[439]** Okay. So, the PBR could manage those order in counsel or... by the government to...
A. Well, again, as we said in our beginning... in our opening comments that really, considering and examining and thinking about a particular context in Québec is important to help inform what design features you want to incorporate.
Q. **[440]** Okay. Thank you. A few final questions. Mr. Todd, based on your... you have commented on the challenge of measuring outputs. Could you explain how that was done for the utility you surveyed and

how long did it take?

Mr. JOHN D. TODD:

A. I can’t separate out the time spent on defining outputs, you know, relative to everything else.

Q. **[441]** Uh-huh.

A. Certainly, the evolution of the renewed regulatory framework, which included that, it was three years? Yes, so, it was about three years in Ontario. Ofgem was coming up with RIIO was close to that in itself, in terms of development. Now, in those cases, these were full outcome-based regimes, so, it’s much broader. And coming up with output indicators is part of a measure process which is often not the first stage of PBR, in fact, has never been the first stage of PBR. It is something where a more simplified version comes first and it evolves toward that, because a lot of homework does have to be done, and you want to establish baselines, collect data. You can’t introduce those kinds of measures in year 1. The Ontario scorecard uses five years of historic data to compare the current year to it, so you can use the fifth year.

Q. **[442]** Okay.

A. So you know, you want to, you actually want to gain some history before you introduce those kinds of measures. And they fluctuate; the liability fluctuates from year to year, as do most other things. And so, you actually need a trend line, not, you know, one year to compare to the prior.

Q. **[443]** Thanks. You also made comments on the challenge that is, that benchmarking offers to utility, mainly in North America. You have been asked a lot of questions about that. Would you agree that there are differences between the use of benchmarking for internal purposes versus the benchmarking used for PBR purposes?

A. To me, the primary difference is the risk with respect to how it will be used. The benchmarking, a good benchmarking study for regulatory purposes and for corporate internal use would be essentially the same methodology. They collect data, they want a large sample, they try to identify causes of differences, so that can be factored in analysis. With an internal study, the company can look at it and say, they can explain away bad results, or try to explain away to the bosses bad results. So their interpretation of those results are very much in their control.

If benchmarking is used for regulatory purposes, that benchmarking is no longer in the company's control. You've now got a regulator who's going to interpret that data their own way, and make their own decisions, which creates risk for the company.

Q. **[444]** So you need to be sure that the methodology, you agree with the methodology used in, you need to be sure that you have the proper information to be sure that there is no misinterpretation, which you can accommodate for internal purposes, but not for PBR?

A. You need to use the regulatory... you need a reasonable opportunity to have your input into ensuring that all those things are done. It's just like earning your return. You are, have to have a reasonable opportunity to earn your return, but it's not a guaranteed return. You're in the hands of the regulator. It's a hard life.

Q. **[445]** Thank you Mr. Todd. I think I'm finished. I'm just going to check. Ms. Chaplin, Mr. Todd, thank you very much. Madame la Présidente, j'ai terminé.

LA PRÉSIDENTE :

Merci beaucoup. Alors Maître...

Me LOUIS LEGAULT :

Madame la Présidente, on n'aura pas de questions additionnelles pour les témoins. Alors il me reste à les remercier. Thank you very much for the day you spent with us. It was very informative and useful and, again, my thanks.

LA PRÉSIDENTE :

Merci. Merci beaucoup. Alors ça complète l'audience d'aujourd'hui. Nous reprendrons ce dossier pour une rencontre préparatoire le quinze (15) juin. Nous vous écrirons bientôt. Alors bonne fin de journée.

AJOURNEMENT DE L'AUDIENCE

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