New Brunswick Board of Commissioners of Public Utilities

Hearing

In the Matter of an application by New Brunswick Power Corporation dated June 21, 2002 in connection with an Open Access Transmission Tariff

Delta Hotel, Saint John, N.B.
January 7th, 2003 10:00 a.m.

CHAIRMAN: David C. Nicholson, Q.C.

COMMISSIONERS: J. Cowan-McGuigan
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BOARD COUNSEL: Peter MacNutt, Q.C.

BOARD SECRETARY: Lorraine Légère

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CHAIRMAN: Good morning, ladies and gentlemen.

Mr. Hashey, to begin, do you have any preliminary matters?

MR. HASHEY: Mr. Chairman, I would prefer to complete my cross examination now. And then at break time we will be able to tell you -- hopefully we will have some additional answers to undertakings.

And we will be able to indicate to you which ones we can't answer and why and make arrangements to have things delivered and what have you. So that is -- if that is suitable that would be the preferable way.

CHAIRMAN: It is no problem with the Board. Any other parties, any preliminary matters? Mr. Smellie?

MR. SMELLIE: Good morning, Mr. Chairman. I have three matters to deal with. First of all in response to Mr. MacNutt's request that we provide hard copies or revised pages of the corrections that Dr. Earle made to his evidence in interrogatory responses yesterday, what we have done is produced a package of black lined pages.

I have given the requisite number of copies to the Secretary and to Mr. MacNutt and to counsel for the applicant. And I have put copies at the back of the room.

What I would suggest, Mr. Chairman, is we simply just mark these pages as another exhibit or as the next exhibit. And then the record will be abundantly clear.

CHAIRMAN: Okay. That sounds good to me. JDI-29.

MR. SMELLIE: The second matter, Mr. Chairman -- and I raise it now simply so that you might think about it. You may not have to think about it for very long.

But in any event I was reflecting earlier on your comments yesterday in terms of our schedule and reconvening either on the 27th of this month or the 10th of next month on the basis that it is reasonable to anticipate legislation by the end of this month being introduced.

My concern, Mr. Chairman -- and I have raised this briefly with Mr. Hashey, is that in terms of the January 27th date, it seems to me that there is a date between now and then beyond which, if the legislation were to be introduced beyond that date, that to digest the legislation, to consider it, to determine whether or not you want to file some evidence on it or come back and speak to it, we would just lose the January 27th date.

So I was musing about whether or not it would be more efficient if we simply just fixed the return date as being the 10th of next month.

And then everybody would know that if the legislation came in on the 23rd let's say of January, that there would nevertheless be a reasonable period of time to do all of that consideration and digestion before coming back to (a) speak to the legislation by way of a witness if you wanted to.

But we would know that we would do that if anybody wanted to do it. And (b) we would be arguing on the 10th of February. I just raise it. And I'm happy of course to -- if we would stick with the present plan. Or I'm happy to change it. But I just thought I would raise it for your consideration, sir.

CHAIRMAN: Thank you, Mr. Smellie. We will consider. And Mr. Hashey can address it after he has concluded his cross, if that is the way he wants to proceed.

Any other matters, sir?

MR. SMELLIE: One, sir. Yesterday at transcript 2,078-79 -- and I will put these questions in reverse order. Mr. Hashey in the course of his cross examination of Dr. Yatchew said this.

The first question -- it is actually the second in time. But the first that I want to bring up is this, beginning at line 25 of page 2,078. "Well, that is not what I was saying. I'm saying that JDI has been highly critical of New Brunswick Power."

And I have heard -- you know, the cross examination went on for days, suggestions that there was uncertainty in their numbers. There was questions on management.

The prior question to that, which appears at line 11 of page 2,078 is as follows. "Well, I have listened to the presentation this morning. And I have heard comments to indicate that management is poor."

I take my friend's cross examination seriously, Mr. Chairman. And I certainly take those kinds of remarks seriously.

My review of the presentation as it appears in the transcript makes it clear that no member of this witness panel said that NB Power's management was poor. And to suggest or equate the lengthy cross examination prompted by a detailed and complex application means that my client is highly critical of NB Power was, with respect, unfounded.

JDI does not think that its most important supplier is poorly managed. But nevertheless, whether for by reason of his misapprehension of the record or otherwise, my friend has now made the suggestion that that is exactly what my client thinks on the public record.

And so with your indulgence, Mr. Chairman, I think it is only fair that Mr. Mosher, who is the employee of JDI in this witness panel, be offered an opportunity to clarify the situation now, before my friend continues with his cross examination.

CHAIRMAN: Mr. Hashey?

MR. HASHEY: I have no problem. And I apologize if I misinterpreted the interpretation.

CHAIRMAN: I think you did yesterday too, sir.

MR. HASHEY: I beg your pardon?

CHAIRMAN: I think you did yesterday as well allude to the fact that you did not wish to impugn any motives or -- that was my recollection.

However, Mr. Mosher, go ahead.

MR. MOSHER: Thank you, Mr. Chairman. I think it is a little bit unfortunate, maybe the remark that was said, and specifically being directed to Dr. Yatchew.

J.D. Irving, as I started my presentation yesterday, stated that we were not in the business of appearing before regulatory boards.

We are very concerned about the rates that industrials pay in this province. We have stated that many times within our presentation and within the record.

To state that we are very critical about their management and to state that their management is poor is absolutely false. We have a longstanding record of a good working relationship with the members within NB Power.

And as we move forward with the process of reregulation it is even more important for us to have an even better working relationship with the members and the management of NB Power.

So that is all I have to say.

MR. SMELLIE: Thank you, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Smellie. Any other intervenors have any preliminary matters?

MR. HASHEY: Mr. Chairman, I have no problem addressing the February 10th issue. I have no difficulty with that whatsoever if that is the preference. It would seem to me that it would make sense that we do set a date that is appropriately down the road.

And I can see Mr. Smellie's reasoning in suggesting that that might be more appropriate based on the fact that nothing yet has been tabled. And we will need some time. But I just put it on there. That is obviously not my --

CHAIRMAN: All right.

MR. HASHEY: -- determination or decision. I just let you know that.

CHAIRMAN: All right. I appreciate that. The Board will consider that after the conclusion of this panel's evidence and speak with the parties concerning it.

Go ahead, Mr. Hashey.

MR. HASHEY: Thank you very much, Mr. Chairman.

Q. - Dr. Yatchew, I think you would agree with me that this Board must be concerned about starting this new company on the right footing, would you not?

DR. YATCHEW: Yes.

Q. - And you would further agree, I think, that the Board must make sure that the company entering into a commercially viable world must be adequately capitalized?

DR. YATCHEW: Yes. Though there is a distinction here between deemed capital structures and actual capital structures that might come from decisions by government.

Q. - Right. And, Dr. Yatchew, I would suggest to you that no regulatory board that I am aware of, and maybe you are aware of one, that has ever awarded an 8.25 percent ROE on a start up transmission company?

DR. YATCHEW: I am not aware of a Board awarding 8 and a quarter on a start up transmission company, though I'm not sure that that's the right comparison that would need to be made. What we want to be looking at is the risk premium that's awarded over and above the risk free rates.

One of the reasons that we tend to observe higher awarded rates historically is simply because the risk free rate has been higher.

So if we take a look at what is a reasonable premium above the risk free rate, and we look at the gas pipeline business, for example, the National Energy Board, after an extensive generic hearing, concluded that a 3 percent benchmark premium over the risk free rate was a reasonable premium.

Now that also, by the way, included floatation costs, which would be about a quarter of a point. It would be about 25 basis points. Some people estimate it as being higher. The figure that I have recommended is just over 250 basis points. So that's let's say two and a half percent versus a 3 percent that the NEB awarded as the benchmark rate of return. Take off floatation costs from the pipeline award, and you are down to about two and three-quarters.

So the difference between mine of two and a half and the two and three-quarters of the National Energy Board is -- is rather modest.

Q. - Sir, the most recent award in comparable business with lesser risk was TransEnergie where this exact 8.25 percent was recommended. And I think you indicated yesterday they went somewhere over 9.5, some 9.7?

DR. YATCHEW: I believe that to be the case, yes.

Q. - Yes. Now --

DR. YATCHEW: They also, I believe, went with a 30/70 debt ratio or equity debt structure, yes.

Q. - Right. And you would agree with me, as stated by Mr. Craig in his article, or the three person article that I put forward yesterday, which was marked as the latest exhibit. And I quote from page 82 on the far column. "All else equal, more debt in a firm's capital structure increases the required ROE." You would agree with that?

DR. YATCHEW: Yes.

Q. - And I see in their model they used a 60/40 in the next sentence?

DR. YATCHEW: Yes, they did.

Q. - And that would be consistent with the evidence you heard here concerning what the investment bankers are suggesting currently?

DR. YATCHEW: I'm sorry --

Q. - Were you present when --

DR. YATCHEW: -- investment bankers said?

Q. - -- Ms. MacFarlane was questioned on the investment bankers and what they were currently recommending in relation to the new structure?

DR. YATCHEW: I'm not -- I don't recollect that.

Q. - You may not have been here in fairness, I think. Don't worry about that. That's a matter of evidence. We don't need to debate that.

In your report you have used what I have heard referred to as the CAPM method, CAPM?

DR. YATCHEW: Yes, sir.

Q. - And you would agree that Dr. Morin also used this method, along with others, in a way that you don't necessarily agree with, but he did employ the same method and other methods, did he not?

DR. YATCHEW: Yes, he did.

Q. - Yes. And Booth and Berkowitz in their evidence in Quebec didn't limit themselves to the CAPM method?

DR. YATCHEW: No, they did not.

Q. - No.

DR. YATCHEW: Incidentally, neither did I.

Q. - But you didn't use the discounted cash flow method, did you?

DR. YATCHEW: I didn't actually perform the discounted cash flow calculation. One of the reasons I didn't is because there are very reliable discounted cash flow results in the literature.

The three papers that I have quoted, Blanchard, the Fama and French paper, the Claus and Thomas papers are -- each of them are variants of the discounted cash flow methodology. They have covered -- they have done this analysis very carefully over various periods of time. And they have concluded that a reasonable market return on equity is in the range of about two and a half to 4 percent. And that is in part what I relied upon in coming to my conclusions.

In fact, I was rather surprised that Dr. Morin does discounted cash flow calculations to come up with his market return on equity. His equity return comes up with figures on the order of 7 and a half percent for the United States.

These are untested, unaudited in the sense that nobody has actually sent these calculations to a journal in a paper and said, yes, we have reviewed them and they are consistent with what -- with what our experience is. He did that and he didn't even refer to these other papers with -- which have done very detailed discounted cash flow calculations.

So sitting back as a -- sort of in my role as a journal editor, for example, I would take a look at evidence in literature that meets the goal standard that comes up with numbers on the order of 3 percent, two and a half let's say to 4 percent. And then I look at Dr. Morin's calculations, or I look at the calculations which are contained in this paper which come up -- which use a discounted cash flow methodology, which come up with much, much, much higher numbers. Which ones would you put -- attach weight to? Those that have been carefully audited and refereed or those that are simply reported.

So the short answer is my conclusions rely quite heavily on the discounted cash flow methodology, but through analyses that have met very, very high standards.

Q. - You would agree with me that FERC has traditionally used the discounted cash flow method to calculate a fair and reasonable return on equity?

DR. YATCHEW: Yes.

Q. - And in the paper that I put forward to you yesterday --

DR. YATCHEW: Yes.

Q. - -- it's interesting. And would you please turn to page 85 and look at the table?

DR. YATCHEW: Yes.

Q. - And you would agree with me that CAPM method is by far the lowest --

DR. YATCHEW: In their calculations --

Q. - -- of the calculations?

DR. YATCHEW: In their calculations, yes. It may also be the most -- it is more consistent with the overwhelming evidence from both the financial community and the professional economic academic community than any of these other figures.

Q. - So you don't agree, obviously, with what these three authors who combined on this paper and have very impeccable credentials, I would suggest, are putting forward in this article?

DR. YATCHEW: I don't agree with the conclusions. I also don't agree with the -- with some of the fundamental statistical assertions that are made, first without being tested and even not meeting sort of basic statistical criteria.

For example, their discussion of decoupling of the electricity industry from the other industries is actually -- it's incorrect. It's not as inconsistent with the data at that point in time when they did the analysis, which would have been -- my guess is sometime in the year 2000 because they have used data through 1999. But their statistical conclusions are certainly not supported by the data that has -- that has emerged subsequently in 2000 and 2001.

Q. - But Booth and Berkowitz, who you have put forward here in your paper in great, great detail, including their analysis, were using 1999 as well, were they not, and earlier?

DR. YATCHEW: I'm sure they were using historic data. I don't recall at what point their -- their data stopped, so to speak.

Q. - You didn't review it? You didn't audit it to find that out?

DR. YATCHEW: I did review the Booth and Berkowitz studies. Let me point out again that I had -- am not relying principally on the analysis -- on the analyses that they have made. I am relying principally on the analyses that have been audited, that are published in top journals.

Q. - And it just happened that your number was identical to theirs by accident?

DR. YATCHEW: Which number?

Q. - Both numbers. 8.25 and 70/30.

DR. YATCHEW: 70/30 is also identical to a lot of other people, including the National Energy Board. The return on equity I'm not sure is identical because you would have to take a look at what their risk premium is. As I recall, they used a higher risk free rate. So if you adjust for the risk free rate, and you also incorporate flotation costs, the actual premium that they are recommending is probably different. And we could do the calculation.

Q. - But you haven't done. You didn't do the calculation in your evidence?

DR. YATCHEW: I may have done it at that time. I don't -- I may have done it just in the course of reviewing it just for comparison purposes. I don't have it at hand. It can be done easily.

Q. - So then you take complete disagreement with this article that just happened to be published in the same electricity journal as you publish? Let's go right to the conclusion.

DR. YATCHEW: Sorry?

Q. - Let's go to the conclusion of this article. I am sorry to interrupt you.

DR. YATCHEW: Could I interrupt? Could I answer that question?

Q. - I'm sorry, yes. Do answer that question.

DR. YATCHEW: I just wanted to take a moment to think about this.

Q. - Sure.

DR. YATCHEW: We could go line by line through this article. There are lots of true statements made in this article, I'm sure. For example, you quoted one that I agreed with immediately. All else equal more debt in a firm's capital structure increases the required return on equity. There are fundamental conclusions in this paper and statistical analyses that I do not agree with.

A good example is their argument about the -- what's happened to relative risk to the betas. For example, if you turn to page -- I guess it's page 81. Excuse me, it would be page 83 of the article, figure 1.

Now essentially what these -- what this figure depicts is betas or gas distribution companies, which is a thicker line. Gas pipelines, which is the dotted line. And electricity utilities, which is the thinner solid line. And you can see that these graphs wander around quite a bit. And that's something I feel very comfortable with. This is -- I see this kind of variation constantly when I look at data. In this case this is time series data.

Now their conclusion that there has been a decoupling of betas of the electricity industry from everybody else is rooted in the -- there is a rather -- what looks like a rather precipitous drop in the thin solid line on the right-hand side of the graph around the 1999 marking below. Do you see that, Mr. Hashey?

Q. - I see that.

DR. YATCHEW: Now we have to be a little bit careful because the way this graph is drawn, the top of that -- the top of that decline is -- touches on the thicker solid line, the gas distribution line. So it's actually a precipitous drop, but it's not -- it doesn't go all the way up to that -- the solid thick line peak there.

I realize this would be so much easier if I could just point to it on a graph. But their basic conclusion is this, we see this drop in betas and therefore these industries have decoupled from each other. That's the fundamental conclusion that they have come to.

Now have these industries decoupled from each other? Let's say there is a statistician who knows nothing about the energy industry, looks at these data and looks at the graphs continuing in 1999 and sees all three of them declining in a very similar fashion. The statistician would not prima facie conclude that that is a decoupling of the three industries.

Moreover, if that looks like a precipitous drop in electricity betas, look at the drops in gas -- in the dotted line betas and the gas pipeline betas around 1997. They drop actually quite a bit more. And yet that's not considered a decoupling.

So the statistician looks at this and starts asking well, first of all, if I would do some tests on whether these industries have decoupled post that drop in 1999, it doesn't look that I would conclude statistically that they have decoupled. There has been a shift as there has been a shift elsewhere. But there is no decoupling going on. So now let me turn to JDI NBP interrogatory response number 20.

MR. SMELLIE: That is at page 35 of that interrogatory response, Mr. Chairman.

DR. YATCHEW: Yes. And if we could turn to the last page of that interrogatory response which is page 37. It would be page 37, I believe. Do you have that, Mr. Hashey?

Q. - I do.

DR. YATCHEW: Now what I did here was calculated betas for various industries, for various companies, not just electrics. And what is rather interesting is that individually there is a decline in these betas going from -- some around 1999 or 1998 forward. It's not always regular. That's not unusual in statistical data. But the general pattern here is that there is a tendency for betas to decline collectively across various kinds of companies in various segments of the energy industry. That is not decoupling of electricity from natural gas and from other companies.

So the -- it's been a very long answer but what I'm suggesting is this, that first of all I disagree with the conclusions on the -- of this paper on the actual return on equity results that they are coming up with. Their discounted cash flow methodology which is the same, and by the way uses the same data as Claus and Thomas use. It is the IDES data which is referenced in a footnote to their paper. It's the same data. They are coming up with very different results, much higher results.

I put enormous weight into refereed papers that have been properly analyzed, published in the top journal in financial economics, the top journal of finance.

Q. - You would agree with me, sir, that this is not one single author? These are three very highly qualified individuals, if you look at their qualifications here on that paper, would you not agree with that?

DR. YATCHEW: I'm sure they are qualified. And by the way, I think part of the issue is that their analysis was done in 1999/2000. Since that time there has been much stronger confirmation of the fact that what we have been observing is betas declining, relative risk declining for these types of energy industries because of a flight to safety, a flight to quality in the marketplace. There has been a lot of volatility in the overall marketplace.

So I'm not -- they may have made reasonable errors, not unexpected errors at the time they did the analyses with respect to certainly the betas. With respect to the return on equity, I think that they simply ignored and in fact didn't even reference, as Dr. Morin doesn't reference, a rather large and very weighty literature on what market returns on equity are.

The market return on equity for the whole market is going to be estimated more precisely than individual returns for sub-segments of the industry or for individual companies. Yet both of these, both these three authors and Dr. Morin completely ignore that information.

Q. - Would you agree with them -- we will see if we might get one other little agreement here -- what it says in the last paragraph, "it is exactly when the restructuring market is in its early stages that the risks from inadequate transmission investment are the greatest"?

DR. YATCHEW: I could see merits to that point being made. Yes, I can see merit to that point being made. But let me just step back again.

MR. HASHEY: Well I think really if that's the answer that's --

MR. SMELLIE: Well let him explain his answer, Mr. Hashey.

MR. HASHEY: Oh, you want -- okay, fine, Mr. Smellie. Thank you.

DR. YATCHEW: I would like to, because essentially once again the context of the analysis done in this paper is the US context. The essential underpinning, as I see it here, is that you have got to provide high rates of return, otherwise you won't attract people into the transmission investment business.

That's a little bit of a tricky argument to make because decisions on transmission are ultimately part of a regulatory process. It's not -- it's not a market driven process the way returns on investments in dot coms, software companies, is a market driven process, and that has great volatility and great uncertainty and has enormous forward impacts.

Here the argument that they are making is that you have got to give them not only a reasonable rate of return, you have got to give them more of a rate of return because you might not be able -- you might not attract enough money into -- enough investment in transmission.

Well it would seem to me that there is a regulator there who has got to be party to this decision to determine what the sort of right transmission investments are. And to a very large degree it seems to me that transmission investments are made rather divorced from consideration of what the right return equity is out there. I think that regulators come to a decision on whether a particular transmission expansion, such as a tie or expansion of a tie to the US, whether that is -- will be used and useful, whether it is beneficial overall, what are the net benefits, should it be a larger expansion, should it be a smaller expansion. And to somehow factor into that, well if we give them a slightly higher rate of return rather than a slightly lower rate of return, does that mean we are going to get more transmission investment and therefore the right transmission investment?

So while I see that the -- I mean, I think transmission is a very, very important segment. I mean it is the lifeline. It is what transports electricity. You have got to have proper levels of investment in transmission.

I don't think that quote, erring on the high side, which is the suggestion here, is going to ensue that the right transmission decisions or the right transmission investments are made. Moreover in my view the recommendations that I have made on return equity are adequate to ensure that people would be willing to invest in the transmission business as they have been willing to invest in the gas pipeline business for decades as it went through restructuring, with similar kinds of uncertainties of restructuring and deregulation on the supply side that you will be going through and we will be going through in Ontario eventually as well.

So I agree with the proposition that transmission is very important and it is important to invest in it properly. I don't agree with the proposition that you want to build in an additional rate of return, that that will somehow promote or ensure proper investment.

Q. - Thank you, Dr. Yatchew. Mr. Mosher, and again I apologize to you if I made any imprecise or improper comments concerning your views and your cooperation, although I did hear you say that you weren't able to meet with NB Power and in fairness I think this request came after there was requirement to file to this Board and things of that nature possibly. I know that there has always been a cooperative spirit and that has been the way you have felt about it and we hope that continues, correct?

MR. MOSHER: That is correct.

Q. - Thank you, sir. Have you had a chance to see this paper that I have referenced? And I don't want to get into details or try to get you talking about betas or things of that nature. But you would agree with Dr. Yatchew, I assume, that it is important that there is a proper ROE set for TransCo and the fact that there is a reliable transmission system in the Province of New Brunswick is essential to the delivery of power to your company and other companies of similar nature?

MR. MOSHER: I would certainly agree with the second part of your statement that it's very important to have a very reliable transmission company within the Province of New Brunswick. I'm not sure that I would necessarily agree in total with your first statement.

Q. - Okay. But you do agree, and I think you have stated that it is important to have an effective competitive marketplace?

MR. MOSHER: I had stated that we believe that it's important to have an effective competitive generation market.

Q. - And you do agree that as far as transmission goes it accounts for only about ten percent of the total cost of power?

MR. MOSHER: As I stated in my presentation, it's very difficult today, if not impossible, to determine what the total cost of transmission is. That was one of the requests that I made, as did other intervenors in their interrogatory process, to tell me what the -- or to give us some indication as to what the current transmission cost is.

Q. - Have you not come up with an estimate of approximately ten percent or have you come to that at all really?

MR. MOSHER: Of the current cost?

Q. - Yes, sir.

MR. MOSHER: Not of the current cost. I have come up with an estimate of what the future cost is of the current bundled rate.

Q. - Yes. And that is contained in your JDI-7.

MR. MOSHER: You are referring to the supplemental response?

Q. - Yes, I am.

MR. MOSHER: Supplemental response specifically references self-generators?

MR. SMELLIE: I'm sorry, Mr. Chairman, to interrupt. Which JDI-7 are we talking about?

CHAIRMAN: I was going to ask the same myself.

MR. SMELLIE: Is it NBP-7, is it --

MR. HASHEY: Oh, I'm sorry. I think it's exhibit JDI-7 in this matter.

MR. MOSHER: Yes, that is the calculation for a self-generator.

Q. - Correct. And included as a matter of interest in that document towards the end of it I noted that in your presentation yesterday you put the last page forward showing the comparisons. And I just wanted to clarify two very short points on that.

MR. MOSHER: Yes.

Q. - You indicated that -- this of course is total power cost, generation distribution, transmission, what have you, is it not?

MR. MOSHER: You are talking about the --

Q. - Your exhibit.

MR. MOSHER: The last page being the EMCO chart?

Q. - Yes, sir.

MR. MOSHER: That is total cost.

Q. - Right. And one thing I asked you yesterday, if you could show us beyond 1999 and to clarify so that we don't mislead, in fact you did include that to show that there had been a slight drop and then a slight increase as well following that in the years 2000. In fact when you look at the previous page in that exhibit, second to last page --

MR. MOSHER: Yes.

Q. - -- that does show that there has been a levelling and a small drop after the 1999 period?

MR. MOSHER: That was a change in the large industrial rate structure, yes.

Q. - Yes. Now in this exhibit you have prepared an analysis of the potential transmission tariff rate impact for the Irving Pulp & Paper facility using its actual operational data for the year 2001, is that what you have done here?

MR. MOSHER: Yes.

Q. - And in this exhibit you have explained the current interruptible energy pricing method and compared the fixed cost component against the potential transmission tariff costs?

MR. MOSHER: That is correct.

Q. - And I think what you are showing here or indicating that your belief that the potential transmission tariff costs labelled as proposed OATT estimates represents about 163 percent increase over the current fixed costs for the Irving Pulp & Paper facility, is that correct?

MR. MOSHER: What I'm comparing is the current contribution to fixed cost that is included in the energy that the self-generator has consumed and paid to NB Power to just the transmission piece based under the proposed OATT.

Q. - Right. And in doing the calculation you have made assumptions, right?

MR. MOSHER: Yes, I have.

Q. - And with regard to the transmission service in this you have assessed that network integration service would be used by the Irving Pulp & Paper facility, is that correct?

MR. MOSHER: That is correct.

Q. - But wouldn't you agree with me that the tariff enables that point to point service could be used rather than the network integration service?

MR. MOSHER: No, I would not agree with that.

Q. - So you have not heard the Panel C -- well you weren't here to hear Panel C presentation, were you?

MR. MOSHER: I was in and out. I'm not sure which specific part of Panel C you are referring to.

Q. - Well I mean, if you just go to the presentation that was made which showed the point to point service that's available as being an option.

CHAIRMAN: Mr. Hashey, that's an exhibit, is it not, sir?

MR. HASHEY: Yes, it is, and I haven't -- it's A-26.

CHAIRMAN: Thank you.

MR. HASHEY: It's the one that was repeated which is called

"Step 4, Defined Services Offered".

MR. SOLLOWS: What page?

CHAIRMAN: Which slide are you referring to, Mr. Hashey?

MR. HASHEY: Page 11.

CHAIRMAN: 11. Thank you.

MR. MOSHER: I have that.

Q. - That wouldn't change your view?

MR. MOSHER: No. As a matter of fact that is one of the -- this document and exhibit A-10 that defines the terms and conditions of point-to-point would seem to imply that point-to-point is specifically from one generator to unload, whereas the Irving Pulp and Paper facility currently receives energy from the standard offer service. So that would not change my opinion.

Q. - So you don't believe, what you have read, that you would have a choice of service?

MR. MOSHER: I guess if I could step back a little bit and just basically step through some of the assumptions and some of the inputs into this, that may clarify that a little bit.

Q. - Sure.

MR. MOSHER: I guess the first issue, when you look at any of the self-generators today within the province, and I believe there are about seven or eight self-generators, this level of service that I investigated was based on receiving terms -- or service that is similar to the terms and conditions that they currently receive today, which means they do not require to do any scheduling, reservations. They just basically are energy consumers. The distribution company or standard offer service provider provides all of their services on their behalf.

The second part of the analysis, as I have shown, is that today the interruptible surplus portion that the self-generators consume has a fixed cost adder. And that fixed cost is paid to all of NB Power or the current bundled NB Power, which I had assumed would be fixed cost contribution to generation, distribution and transmission. The calculated numbers that I have shown are only that that would be implied under the transmission portion of this tariff.

A third concern is that, you know, any of the contracts that these self-generators have today, certainly if there was going to be some appropriate means of which they could receive point-to-point service would need obviously to be restructured, which would require some interim or some phased-in approach with the standard offer service provider at that time.

One other point I would like to make is in this analysis none -- or there has been no charge estimated for such things as energy imbalance, energy redispatch, any costs associated with internal scheduling per se. So I think my numbers are actually fairly conservative.

Q. - But you are assuming that you stay on standard offer service?

MR. MOSHER: Yes, I am.

Q. - And you are aware, or are you, that the tariff enables the transmission customer to self-supply ancillary services?

MR. MOSHER: I'm aware there is a provision there for self-provision, yes.

Q. - And you have not taken that into consideration?

MR. MOSHER: One of the concerns certainly about self-provision, and if you go through your point-to-point calculation, is that if I self-provide you have included no cost for doing that.

It basically assumes that my self-provision I do internally has zero impact and zero cost to the operation. So you have basically put that in as zero, which I do not believe is correct.

It also implies that self-provision of ancillary services by my self-generator is significantly less expensive than provision of those ancillary services from the standard offer service provider or the transmission provider.

Q. - And you haven't been able to do a check on that?

MR. HASHEY: Now we are talking about a document, Mr. Chairman, that obviously here that is a little bit unfair. We have supplied to my friend, and which document obviously has been reviewed by Mr. Mosher, which was some recalculations using some of the alternatives.

Now this is the only area that I thought that we might bring a rebuttal evidence in. And I think we still will be this morning. But I thought it was only fair that we do provide this to Mr. Mosher and let him comment on it.

I would offer that as an exhibit now and have a witness appear and comment on that to show what the alternatives would be. This is really the only area of rebuttal that I thought that would probably be necessary.

MR. SMELLIE: Well, Mr. Chairman, just as an immediate response to that, indeed I was wondering when my friend was going to reveal the fact of the document. Rebuttal is of course appropriate under certain circumstances.

He has now engaged the witness on the issue that is relevant. He has the witness here. And he can discuss it with the witness. There is no need for rebuttal.

MR. HASHEY: Well, I think there is, Mr. Chairman, based upon what has been said here by the witness. I mean, clearly the understanding of what is intended, I think we should clarify that for the record.

MR. SMELLIE: No, Mr. Chairman, I'm sorry. He has now danced around this document. In my respectful submission he should now put the document to the witness and examine him on it.

MR. HASHEY: Oh, I intend to. And can do.

MR. SMELLIE: Just let me finish, Mr. Hashey.

MR. HASHEY: Yes.

MR. SMELLIE: And then the record will be clear on the alternative scenario. But with respect, Mr. Chairman, I don't think it is appropriate for Mr. Hashey to want to have it both ways.

Either he rebuts the evidence that Irving put in or he cross examines him on it. But he doesn't get to do both, surely.

MR. HASHEY: I don't agree with that proposition, Mr. Chairman. I think it is only fair that when I'm commenting on a witness' document, that we give this, an additional document to him for review and comment before we bring forward our witness. I think that would be the appropriate and the fair process to follow here.

CHAIRMAN: Now, Mr. Hashey, do you have any other series of questions for this Panel?

MR. HASHEY: No. I just have a few more questions for Mr. Mosher on this and one other little topic.

CHAIRMAN: All right. Well then what we will do is we will take our break at this time subject only to other counsel have anything they wish to add to what JDI and the applicant has addressed the Board on? All right. We will take a 15 minute break.

(Recess - 10:45 a.m. - 11:00 a.m.)

CHAIRMAN: The lay persons have come out on top in this ruling. In other words they have put the lawyers in their place. The Board wishes to get the best evidence out in front of it that it possibly can.

Mr. Hashey, we will suggest to you as follows, that if you have a document that you mark it for identification and attempt to have the witness comment on it and get where you want to go in reference to that document in that fashion. If after all is said and done you still believe you need to bring rebuttal testimony, well then the Board will hear your argument as to that at that time. Okay?

MR. HASHEY: Thank you, Mr. Chairman. I don't believe I have referred to this document yet. I know I did supply a document and I would like to call a witness on that document to explain it, to answer some of the answers. I mean, if Mr. Smellie is going to continue to object I won't refer to this document to this witness. I have only examined him at this point on exhibit 7, JDI-7. I will continue to examine him on JDI-7 to clarify it, and then explain why we believe that there are differences in that. That might be the easier way.

CHAIRMAN: I don't want to get into too much of a discussion here, but my anticipation is that this is a document that has been produced by the applicant which would allude to presumably the interpretation that JDI has put on the tariff.

MR. SMELLIE: Mr. Chairman, I may owe everybody an apology. This document was sent to me by Ms. Tracy on Friday last and I understood the purpose of sending it to me was so, in accordance with the usual rules, my witnesses could review it before Mr. Hashey cross examined them on the document. I can't imagine why Mr. Hashey would send me a document that he was going to use in rebuttal evidence.

MR. HASHEY: Well I would have. Absolutely would have. I don't -- this document was just prepared last week. It's not something that I would want to ambush my learned friend with. I recognized there was a number of numbers in it that had to be reviewed. And to me that goes to rebuttal.

CHAIRMAN: Well I think we will proceed. Let me put it this way. My sense before we took the break was that the questions that you were putting to this Panel concerning JDI-7 were an attempt to clear up some points that this mystery document might go to?

MR. HASHEY: I think that's fair.

CHAIRMAN: All right. I don't -- you know, the witness has already seen it. Your -- well I'm going to have to huddle with the laymen again here is what I am going to have to do.

MR. HASHEY: No, I have no problem with him referring to it. I mean, it would be completely unfair in my view that if I was giving a document in rebuttal that rebutted a document of Mr. Mosher's, that if he and Mr. Smellie were not aware of it in advance, there are technical -- there are a number of calculations in that document, and that was the purpose and it's no other purpose. If it's wrong it's wrong. Fine.

MR. SMELLIE: Mr. Chairman, it's not a question of Mr. Mosher wanting to refer to the document. The only reason the document exists is to enable Mr. Hashey to cross examine the witness about it. That's why it was sent.

MR. HASHEY: Not true. Not true. It's partially true. I fully intend to have a witness come and rebut on that document. And in fairness for my friend and Mr. Mosher to review it would be the only fair way to play this game, and not all of a sudden produce a document here today to get a days' adjournment while they have to review it.

MR. SMELLIE: It's very difficult, Mr. Chairman, for the witness to refer to a document that the Panel doesn't have, i.e., you. So it's an empty invitation, with respect.

CHAIRMAN: Mr. MacNutt, do you have anything you wish to assist the Board with in this regard?

MR. MACNUTT: Only that if the document has been provided to the witness through his counsel why not have it introduced and then the questions can be put with respect to that document. Have it marked as an exhibit.

CHAIRMAN: I think that's what the laymen on the Panel also indicated they wanted to have done because they want to know what is going on. They want to know if in fact there are two different interpretations of the tariff, what are they, and they don't frankly want to get all tied up in the law of evidence and rebuttal. They just want to get the evidence out here.

So, Mr. Hashey, will you give the secretary copies of it?

MR. HASHEY: Yes.

CHAIRMAN: We will mark it for identification --

MR. HASHEY: Thank you, Mr. Chairman.

CHAIRMAN: -- and the Panel can comment on it and we will go from there.

Subject to comment of counsel, my normal practice is to call this marked for identification A-44, which would be the same exhibit number if in fact it does become an exhibit.

MR. SMELLIE: That's fine with me, Mr. Chairman.

MR. HASHEY: Thank you, Mr. Chairman.

MR. SMELLIE: Mr. Chairman, excuse me --

CHAIRMAN: Mr. Smellie? Yes.

MR. SMELLIE: -- this is not the document that was sent to me on Friday. It's different.

MR. HASHEY: That I apologize for. I have no idea why that happened, if there is such a difference. Maybe we -- if Mr. Smellie could show us what was sent to him Friday, because this was the document that I --

MR. SMELLIE: That's what was sent to me on Friday. This is what was sent to me today. You tell me if they are the same and I will back off. None of this stuff is what I got.

MR. HASHEY: I think it was just a matter of e-mail printing. You know, there are some additions on the bottom of that page. The chart was printed and the comments below that were there aren't there.

I think in sending the document what my friend has suggested the last two pages of this document have two charts and below on the document that we have provided this morning, and which was on the document that was intended to be sent in fairness, is just a summation of what is already in the document itself. I mean, it's right there. It comes straight from the document. There is no -- nothing different that is not in that document.

You see, Mr. Chairman, what my friend is suggesting that the bottom part is not on the document he got this morning. It was on the document and somehow in the transmission through this -- the way we send things today that was excluded. It's not new evidence. The evidence is already in the previous two to three pages of that document. It's just a summary of what we are saying is there.

CHAIRMAN: All right. What I am going to suggest, Mr. Hashey, is --

MR. HASHEY: It was sent. It just -- it was not printed out.

MR. SMELLIE: Mr. Chairman, I -- go ahead. I just want the record to show --

MR. HASHEY: I apologize for it.

MR. SMELLIE: -- that the document that I received on Friday is not the same as the document that you have marked for identification. That's all.

CHAIRMAN: I think Mr. Hashey has indicated the differences. Does the Panel want an opportunity to review the identification A-44 before Mr. Hashey asks any questions, since there obviously is a difference by whatever accident or however it happened?

If you want to take 10 or 15 minutes to go through that, why we will take a brief recess.

MR. HASHEY: Could I ask a question of the witness though first? I'm wondering -- we also sent it I believe to JDI and I'm wondering if that document that was received by JDI had that on it? I don't know whether it did or didn't.

MR. SMELLIE: Indeed, Mr. Chairman, the version that was received, that was sent on Friday, I can tell you because I wasn't in my office on Friday, is in fact the version that was to Mr. Mosher at JDI.

MR. HASHEY: Okay. Thank you, Mr. Smellie.

MR. MOSHER: If I could just take 30 seconds with my Panel.

CHAIRMAN: Sure. Take 30 seconds or 10 minutes.

MR. MOSHER: I guess we would request a 10 minute break, please.

CHAIRMAN: Sure. You let us know --

MR. HASHEY: Mr. Chairman, can I make a suggestion? Why don't we deal now with the undertakings and maybe then take our lunch break and then resume the Panel? We could conclude fairly promptly this afternoon. Would that make any sense, or would you prefer to do it otherwise?

CHAIRMAN: I have no -- that is no problem from my perspective at all. Mr. Smellie or any of the Intervenors?

MR. SMELLIE: I'm quite content to do that, Mr. Chairman. Is it permissible for -- that's fine.

CHAIRMAN: All right. We will do that. Go ahead, Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman. We have answers this morning to -- we have done our best to try to clean up undertakings. We haven't been able to get complete answers.

If I could refer to exhibit -- sorry, to undertaking number 45 that was requested to provide some attestation as to the bands within which credit spreads the utilities may typically fall. That was asked by Mr. MacNutt. We have tried to get an answer from Dr. Morin. He has referred us to the investment community for this information and NB Power has requested that information from CIBC World Markets, and we will provide that just as quickly as possible. That we think we are going to receive very soon. I don't think there is a lot arising from that but that will have to be provided after today.

The second one that falls in that category is undertaking number 47, which is the request to Sharon MacFarlane, again from Mr. MacNutt, on the 19th of December, requesting a table to support the 6.89 allocation of corporate debt to Transmission. This is still under development and we are going to have to submit that one after the close of the hearing. We apologize for that but we just could not get that done over the holidays.

CHAIRMAN: You mean after today?

MR. HASHEY: After today, yes. Then on a little bit more positive note, and I think there is -- we have undertakings 28 and 30 that we can provide here this morning. I should say there is undertaking 13 that's still outstanding and that will have to be also supplied afterwards. I think that will leave us with those three. I will have to address the one that you referenced yesterday but at this point I think what we should do is we can put to you the answers to undertakings 28 and 30 right now and table that, if we might.

CHAIRMAN: Certainly. That's one exhibit, the responses to undertakings 28 and 30. And that will be given the exhibit number of A-45.

Go ahead, Mr. Hashey.

MR. HASHEY: Thank you. Then there is an answer to the question raised yesterday by Mr. MacNutt. It was raised earlier but -- and that is that table 4 amendment, what other tables change as a result of the amendment to table 4. And we have that which gives three tables, tables 1, 5 and 8. It will be a four page document. We would offer that.

CHAIRMAN: This will be A-46.

MR. HASHEY: Thank you, Mr. Chairman. On the more difficult topic, and I can assure you that we attempted to co-operate in every possible way with everyone and the books and books of undertakings would show that, but the Board has requested projections prepared for the restructuring process.

We indicated to Mr. Gillis when he requested projections that they were prepared for the Minister of Natural Resources and Energy to assist him in the restructuring plans and are confidential. We have been trying to find out where that matter stood.

Obviously as most of us sit at this table here, if not all of us, we are not involved in the decisions as to what may be happening to NB Power. There are a number of people, most of them not here, who have been requested to produce the information.

Models obviously have been prepared for the Minister. They have not been vetted in the proper fashion for purposes of evidence. And these models do not contain data that will be used in the company's budget and business plan. That is not something that would be appropriate.

The legislation as we know and discussed as far as we know is still being drafted. It has never been tabled. And there has been no vetting.

Confidentiality is there by the Right of Information Act, Section 6, which requires confidential -- documents that are provided to the Minister to be confidential. I don't think that we should try to breach that confidentiality.

There is a suggestion that we might provide something but I don't think there is anything that really would be worthwhile for the Board in any event, from what I understand from this material.

We have supplied to the Board great detail on all of the financial information that we could possibly put together. We have answered hundreds of undertakings in a very, very short time, a difficult time. There has been days of cross examination which have raised a number of issues on numbers and those are things that will have to be addressed.

But I think the important point here probably is that guidance and direction provided by this Board is what will be very material to making appropriate budgeting and business plans for this independent TransCo. This is the intention I believe of being here is to get the guidance from you people. You are here for that purpose and we highly respect that. And anything that was done in a manner to give the Minister information on this overall project, I think would be quite inappropriate and certainly I'm not authorized to release that document. I apologize for that.

CHAIRMAN: Mr. Hashey, just refresh my memory. Is this -- what you have been speaking of, is this as a result of a request for an updated business plan?

MR. HASHEY: Yes, it was. It might have been a request of Mr. Richardson. In fairness I think it was. And it was -- I believe it's on the list as number 23, on the undertaking list that we have tried to keep updated and prepared.

CHAIRMAN: Yes. Just to clarify, Mr. Richardson has just indicated he was simply looking for a business plan for TransCo and not all of the various butterflies and holdcos and whatever -- or debtcos, but just simply the company that we all presume will come into being on the 1st of April and looking out.

MR. HASHEY: There is not one that has been prepared for the purpose of supplying to the board of directors of this company. I think that's half the problem with the process we are in here, is we have come forward -- I would think the evidence is the best example of a business plan, good, bad or indifferent as it may be, to indicate what is the intention with respect to the future TransCo operation.

There has been -- there is no -- there is going to be a board of TransCo which will obviously have to prepare a long-term business plan. I would suggest that business plan to a large extent would depend on what this Board is going to decide and direct. You know, I know from the banking standpoint and I understand very much where Mr. Richardson is coming from, when somebody comes for a loan they come to him with a business plan and a very detailed business plan, and that's what he expects and anticipates.

Unfortunately there is no specific business plan other than a model that has been prepared based upon some of the things that we are asking this Board to decide, and which may have to be substantially altered if there is a decision of this Board that indicates things that we aren't anticipating, such as the return on equity and capital which is very basic to this thing. It's an unusual process I know but that's the process we are in here.

CHAIRMAN: All right. The Board will talk about what we have just heard.

MR. HASHEY: Sure. And I welcome any other comments or thoughts or directions even on that. I respect what you are thinking.

CHAIRMAN: It's my recollection that you had suggested that now we adjourn for lunch and come back at 1:00 o'clock.

MR. HASHEY: Which ever way you want to do it. I think there are people with travel plans. I don't intend to be very long. I think we can circumvent this little last issue that we are dealing with. I would be no more than a half an hour with Mr. Mosher. I would then like -- and will be asking that I could call somebody just to clarify this one point. No lengthy rebuttal.

CHAIRMAN: Okay. So we will come back at 1:00 o'clock then.

(Recess - 11:30 a.m. - 1:00 p.m.)

CHAIRMAN: Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman. Mr. Chairman, before I complete cross examination, I thought it would be worth clarifying. I'm not sure that I did a very good job of presenting our position on the last undertaking. And over the lunch hour we went back to the transcript to find out how this developed and what was said. And I think it might assist Mr. Richardson and assist the Board if I reference that and then indicate what I was really saying or trying to say this morning.

We think there could be some misunderstanding regarding the request for the business plan. And we believed we were being asked to provide modelling that is currently being undertaken for the restructured companies. And in the transcript the -- Mr. Richardson asked Ms. MacFarlane -- and she said, we have our balance sheet, NB Power's balance sheet for 2002. And Mr. Richardson then said, do you have a business plan? Has that been updated? And Ms. MacFarlane then referenced and said the second question, what is the business plan. The business plan to the extent that we issued a document that was available for public consumption in the past, we have not done that. And on certain areas of the business we will not be doing that. We have built a 10 and a much less rigorous 30-year model in order to allow us to look at the future of these companies, what the capitalization will mean, what risk we have in earnings, what risk we have in expenses. How much tolerance there is to absorb the risk. How much dividend policies will be exhibited, et cetera. Then the question is is that available? And that is the models that we have a problem that we can't release.

But I think on the business plan aspect as to the updated business plan, the latest information is what we have in this evidence. The evidence as presented it does have that.

NB Power is currently preparing a business plan in order to submit it to credit rating agencies for a credit rating. The processor document cannot be completed until we have the decisions of this Board regarding revenue streams for transmission tariff and ancillary services.

The plan cannot be completed until the Board has issued its ruling. Other than that the best information available is really what we have put in evidence in this matter.

CHAIRMAN: Thank you, Mr. Hashey.

MR. HASHEY: That I hope clarifies that a bit.

CHAIRMAN: I think Commissioner Richardson has a couple of follow-ups on that. This goes on forever.

MR. HASHEY: Well, that's fine. Would he prefer to at the conclusion of this Board to recall Ms. MacFarlane for those questions? Would that be a better way to approach it?

CHAIRMAN: No.

MR. RICHARDSON: No. Can I ask him now or --

CHAIRMAN: Ask him now, sir.

MR. RICHARDSON: Ask him now. Thank you, Mr. Chairman. Mr. Hashey, the whole concept of going to the market to raise funds of course, you must accompany that request with a business plan and which you indicated here now that will be prepared. And I would have expected to see a business plan that was prepared on your best information as you now stand without any decision from this Board at first. Any business plan in that regard can be amended accordingly. It -- then I -- it raised some questions to me -- this whole presentation regarding the transmission company, was this formally approved by your board of directors? Did the board actually pass your presentation formally?

MR. HASHEY: Can I seek instructions on that? I will have to ask.

CHAIRMAN: Yes.

MR. HASHEY: All of the aspects of it relate -- not all -- the board obviously didn't read the huge amount of evidence.

CHAIRMAN: Gracious sakes, why not. We did. Go ahead, Mr. Hashey.

MR. HASHEY: I will test you on it. But they did have before them the basics which were approved. The idea of the capital structure, return on equity. And the other basic financial aspects were all reviewed with the board, yes.

MR. RICHARDSON: So the board did approve it?

MR. HASHEY: Yes. Yes, Mr. Richardson.

MR. RICHARDSON: My concern is that a board would approve a document to go forward without an accompanying business plan. That is one of the basic things in any -- running any organization. That is the point I'm trying to make. Thank you very much.

MR. HASHEY: Thank you, sir. Mr. Mosher -- I'm sorry, there is no other preliminaries that I know of. Proceed?

CHAIRMAN: Any other -- fine go ahead, Mr. Hashey.

Q. - Mr. Mosher, we have talked a little bit about this Ident. A-44 and JDI-7. The first page of this Ident. 44 -- or Ident. A-44, I'm sorry, is identical to your table 2 in your Ident. -- or JDI-7 that you prepared, or prepared under your authority obviously.

I think it is intended to be with the exception maybe of the title at the top.

MR. MOSHER: That appears to be the case, yes.

Q. - Yes. And, sir, as I understand it, that if you stay on standard offer, there is no impact on rates. Is that basically the case?

MR. MOSHER: Are you asking me?

Q. - Yes.

MR. MOSHER: I can't answer that question. That's really I would have thought a completely separate policy decision or a decision that will be dealt with when the standard offer provider files specific rates. I have no understanding of what the standard offer rates will be in the future.

Q. - Okay. But my --

A. That's one of the difficulties, I think, in identifying this whole piece is that we are looking specifically at a transmission cost or a transmission tariff where, you know, obviously how that fits in with the future standard offer service contracts is very unclear.

Q. - So this analysis, as I understand it, is what would happen if you leave standard offer as it currently is?

A. I think as I said earlier, the service that I analyzed was the comparable service that I have today, which would be comparable to network integration service. And my understanding is that on the day the market opens I will have a new line on my bill that would state here is what the distribution company has incurred based on services that have been provided to you.

So I think it doesn't really make any assumption that I stay on standard offer service or I leave standard offer service and move forward. I think it's based on the way the tariff is laid out what I would see as a cost incurred as opposed -- as incurred by this tariff.

Q. - Okay. So then the 234,898 number at the bottom of this is what you currently are paying. Is that correct?

CHAIRMAN: Sorry, what are you referring to, Mr. Hashey?

MR. HASHEY: I'm sorry. I'm on table 2 or ident A-4, 1st page. One of five pages.

CHAIRMAN: Yes. All right.

MR. HASHEY: And at the bottom it does indicate the number of 234,898.

MR. MOSHER: That number is derived from table 1, right in table 1.

Q. - Right. And that's intended to be what you are currently paying for these ancillary services? No. I'm sorry.

MR. MOSHER: No.

Q. - What you are paying under standard offer. I'm sorry.

MR. MOSHER: And maybe -- carry on. That is what I currently pay based on my current service level as total fixed cost. In my 1. -- $1.35 million total annual power bill, $234,000 is what I pay in fixed cost to the vertically integrated NBTel.

Q. - NB Power?

MR. MOSHER: Sorry, yes.

Q. - Now the 616,772 is the number that you have computed?

MR. MOSHER: That is correct.

Q. - And that is based upon what you understand the evidence to be and what you would be paying, as I understand it, if you take network service under the new proposed tariff based upon your current usages? Would that be correct?

MR. MOSHER: That is correct.

Q. - Now if you would go to page 2 of the document that has been supplied and marked as ident. A-44?

MR. MOSHER: Yes.

Q. - That document, I would suggest to you, has been prepared on the basis of a point to point service with no self supply of ancillary services, as it is entitled.

Now you didn't do your calculations, I take it, based on the point to point service?

MR. MOSHER: No, I did not.

Q. - And looking at these numbers, do you see anything basically wrong assuming that point to point would be available?

MR. MOSHER: I think you just made a big statement, assuming that point to point is available to a customer with inside the standard offer service.

I have many concerns, I think, that I tried to outline this morning, as to that assumption and many other pieces of that assumption.

Q. - So standard offer. So you admit that you are within the standard offer service currently?

MR. MOSHER: Maybe as a point of clarification, is there any other service today?

Q. - Not that I know of.

MR. MOSHER: So then I am.

Q. - I believe that is the standard offer of service. So you would be familiar with that --

MR. MOSHER: Right.

Q. - -- through the White Paper discussion?

MR. MOSHER: Yes. So the short answer is, yes, I am, then.

Q. - Right. And going to the third page -- and I realize that I believe you took an issue this morning with me on this. That what this intends to do is to analyze the point to point service and self supply of ancillary services. And I think you indicated to me that if you were doing self supply there would be additional costs. And there would have to be decisions made on the provisions of the service that's not yet made. And that would be correct, would it not? I think you indicated, for instance --

MR. MOSHER: I believe that's correct, yes.

Q. - Yes. And you haven't been able to check these numbers, or I take it haven't checked the numbers to confirm their accuracy, or have you? Basic accuracy without -- and I recognize there is a cost issue.

MR. MOSHER: I have no reason to dispute the calculations that you have done.

Q. - No. It's the issue as to how they apply which is concerning you, correct? Take your time.

MR. MOSHER: One of the concerns that I am having is what -- if we are going to look at this document, is trying to compare kind of an apple to an apple, which is what my response was attempting to do. Is to compare what I pay today under a certain service to what I would potentially pay in the future under that same service.

As we go through this and go through the point to point and looking at the potential for self provision of ancillary services is really comparing an apple to something completely different. So I think I would have to go back and look at this calculation much more elaborately.

And maybe you could -- could help me. If your clients could tell me what I pay today of that 234 -- or 234,000, what percentage or what value of that goes to the transmission company versus the generation versus the distribution. And then that may be able to make a much better comparison of service levels.

Q. - You would acknowledge that under the new scheme, of course, things are to open up, and there is to be alternates available, which you would be aware of through your involvement from early on in this matter?

MR. MOSHER: I understand there is alternative generation available, yes. There still will be one transmission service provider.

Q. - Dr. Earle, you wish to say something?

DR. EARLE: Yes. Mr. Hashey, if I may, I would like to add something to this discussion to illustrate concerns of J.D. Irving.

And I have a visual aid prepared. And with your permission and if it pleases the Board, could this be distributed so I can illustrate our concerns?

MR. HASHEY: I think the idea of the Board is to get all of the evidence before them. I don't object.

DR. EARLE: Thank you.

CHAIRMAN: <u>JDI-30</u>.

DR. EARLE: This picture represents my understanding of the type of scenario that New Brunswick Power is proposing. It's not exactly in terms of the one number that's on the document the same, but, you know, subject to correction this is my understanding of what they are proposing be done.

Now just to sort of walk through the picture, the load level is on the left-hand side and I have drawn a line of load level for a self-generator. And we have a dashed line going across, and this represents point to point reservation that would cover their load under normal circumstances, with the rest of their load being of course self-supplied.

So under the scenario, as I understand it, you have a point to point reservation of 5 megawatts which normally covers their needs. Occasionally, however, the unit goes off line, and this can be unexpected. And so temporarily you are going to have to have unreserved transmission and be subject to unreserved transmission charges.

And I believe under their scenario that's for one hour, and then you have -- it's either four or five hours where I have the other space next to the shaded space, which is the temporary point to point reservation while the unit is off.

So essentially they are saying the load -- starting on the left-hand side of the picture, the load is under the dash line which is the firm point to point reservation 5 megawatts. The unit goes off line. You have the shaded region of unreserved transmission. Then you have this area of temporary point to point reservation while the unit is off. The unit comes back on line. You don't need that more. You return to your ordinary service.

Now there are a couple of concerns for this in order to think about comparability of service. One is that in order to effectuate this sort of scenario it would be necessary to first arrange for the point to point service, find a generator to sell the power, reserve the transmission, figure out the ancillaries. I suppose they could simply take them from New Brunswick Power.

But more importantly is what happens when the unit goes off line. You need somebody there to scramble, go on to the computerized transmission reservation system OASIS, find the transmission, and monitor the system, figure out how much you need in terms of length of time, so on and so forth, so -- as well as find the contract presumably that would supply that point to point reservation.

So that's quite an involved job. Many of the facilities we are talking about are 24 hours a day, seven days a week operation. This implies you always have to have somebody there to do this job. That's a considerable expense of course to have trained people to do that 24 hours a day, seven days a week.

So there is additional expense in here in managing this sort of scenario that I think has to be taken into account. I can't really quantify if but I think you would probably be talking of easily two or three people, maybe five people, in order to handle this. That's one point.

The second point is point to point -- firm point to point service -- it's called firm because you know it's going to be there for you, except under exceptional circumstances. If you have a firm point to point reservation, the transmission is there for you to use. The problem under this scenario is that, well if the unit goes off line and you need this extra transmission capacity all of a sudden, there is no guarantee that it's going to be there for you.

So under that scenario you have the possibility that you will get curtailed. And that of course is of great concern for a -- for industry, because if you shut down one of these processes, you know, even for a few hours, it can be extremely expensive. And that basically illustrates why we are having -- why we don't think we can really compare current service to the point to point scenario.

I might also add again a bit of this is like having only one piece of a jigsaw puzzle and you don't know what the other pieces are. So it's difficult -- it's very difficult to say without knowing, well what standard offer of service is going to look like under a point to point scenario, how that would work, what the prices would be, what the implications would be. But it does seem to us certainly that the scenario they are suggesting while possible, I mean it's not in the record, that -- my reading of the record that it's actually possible, but if it is possible it seems that there are a number of other costs that it implies. It also implies this big risk of curtailment.

Thank you.

Q. - Thank you, Dr. Earle. I will leave that topic and I will ask to have Mr. Porter called back particularly to explain some of the matters that have just been discussed.

A couple of other questions, Mr. Mosher. You -- I guess your concern has been expressed by many as the question of the deliberate and controlled approach, I think you have indicated that in your evidence clearly.

MR. MOSHER: That is correct.

Q. - And in the White Paper it called for a deliberate and controlled approach, did it not?

MR. MOSHER: Yes, it did.

Q. - Yes. And really this started -- this approach started about two-and-a-half years before the White Paper? There was a restructuring started to be looked at and I think you may have had some involvement with that?

MR. MOSHER: I had involvement with the market design committee, yes.

Q. - And you were with the market design committee that worked through the process and filed the report, so you personally would be familiar with that?

MR. MOSHER: That was a very helpful process. It involved many stakeholders absolutely.

Q. - And JDI was an active member of that, right?

MR. MOSHER: That is correct.

Q. - And there was a select committee even before that time that held public hearings and JDI was involved with that as well, I think, were they not?

MR. MOSHER: That is correct.

MR. HASHEY: Right. Thank you, Mr. Mosher. I have no further questions of this Panel, Mr. Chairman. Thank you.

CHAIRMAN: Thank you, Mr. Hashey. Mr. MacNutt, have you changed your mind?

MR. MACNUTT: The Board counsel has no questions on cross examination of this panel, Mr. Chairman.

CHAIRMAN: Go ahead.

MR. RICHARDSON: Thank you, Mr. Chairman.

<u>EXAMINATION BY MR. RICHARDSON</u>:

Q. - Dr. Yatchew, I have a few questions regarding your debt to equity. And I'm trying desperately to understand exactly where you are coming from and how it relates to today's world.

I'm a great believer that we deal in today and tomorrow and not in history necessarily. And therefore I would like your comments and so on to a couple of points.

So we are all singing from the same song sheets, I believe you fully understand that the new company as created by NB Power, the transmission company, according to what we understand, will be operated on a commercially viable basis, and that it will be on a stand-alone basis, and that there will be no government guarantees and no further support by government. In other words there is no lifeline.

Is that as you understand the situation?

MR. YATCHEW: Yes, sir.

Q. - The current economic environment relative to the investment bankers in regards to the marketing of bonds, and particularly to the electrical industry, has been very difficult, certainly since the Enron situation and in the past six months where downgrades have been rapid. It has made an environment that it is not easy to market.

Would you agree with that?

MR. YATCHEW: I think certainly Enron did have an effect but particularly on companies that are involved in supply for example or on the more competitive side of the business.

The transmission business is much more secure, in fact would be a very secure part of the business in comparison to other segments of the industry.

Q. - I understand that. But any division of electricity per se will face a certain black mark as a result of the whole operation?

MR. YATCHEW: I'm sorry. I didn't quite follow that. A certain black market? Black mark?

Q. - The electricity industry suffers a black mark as a result of perhaps the generation side being hit harder than anything else.

And the downgrades that have taken place in the last six months have been quite dramatic. And in the investment banks both in United States and Canada have taken some horrendous hits.

In other words, investment bankers aren't standing at the corner jumping up and down to buy bonds of an electricity company, whether it is transmission or otherwise.

Would you -- is that fair to say?

MR. YATCHEW: I haven't examined to determine what has happened to stand-alone transmission companies. In fact I think there are relatively few of them. So I can't really speak to that directly.

But I would not be surprised if there were downgrades in other segments of the industry.

Q. - And I'm not talking downgrades of transmission alone --

MR. YATCHEW: Right.

Q. - -- but I'm talking about the industry as a whole. And as an industry you have a problem in the marketplace right now from an investment banker standpoint?

MR. YATCHEW: There is certainly some uncertainty in the market, in the electricity marketplace right now, yes, because of restructuring going on.

In fact in some areas we are moving towards reregulation and away from deregulation, which might provide a little bit more security to the rating agencies, though I'm not a bond rater.

Q. - I understand that. But I'm trying to come from the point that these are things that I assume that you have taken some consideration in --

MR. YATCHEW: Yes.

Q. - -- and considered in coming forward with your point of view as to what the debt equity should be?

MR. YATCHEW: Yes.

Q. - In your testimony yesterday you talked about the gas industry and how over the last 20 years they were able to survive with a 70/30 percent debt to equity?

MR. YATCHEW: The gas pipeline industry, that is correct.

Q. - Right. And I guess what I'm having some difficulty with is how you relate your process in coming to a conclusion to NB Power Transmission as of January 2003. And what did you do in this regard?

We got an environment. You know the structure that NB Power must operate in. You know the environment is not an easy one today. And as a matter of fact, according to my information, Standard & Poors indicated something like $30 billion in debt refinancing over the next 18 to 24 months. And that was back in August, which was going to make the markets very tight.

So you know, how do you relate your findings with the real world of NB Power today who must go out and market those bonds?

MR. YATCHEW: There is market pressure that emerges and subsides in various industries when it comes to borrowing. But I started from several points.

One of the points that you have reiterated is this, that I did look back at what happened to the gas pipeline industry. The gas pipeline industry also underwent deregulation. And there was actually a great deal of uncertainty, what would happen on supply side, for example.

The gas pipeline operated -- the gas pipeline industry operated -- when I say 30/70, in some cases operated below at even higher debt ratios, some of the pipeline companies did.

So from the point of view of evolution of deregulation or restructuring, what impact that might have, it is of value to look back at what has happened to the gas pipeline industry.

So that was one of the points that I focused on, to try to get a handle on what was likely to happen in this transmission business as opposed to the gas transmission business.

Even now when there is substantial competition emerging in the gas pipeline business in this country, the debt ratio has only shifted about three percentage points, to 67/33 by the NEB.

Let me describe another type of process, mental process that I went through. There is a rather large literature in economics and in finance on capital structure. And it begins many years ago.

But there is actually a very nice review article of what economists know about capital structure. The paper is entitled "Capital Structure". And it is published in the Journal of Economic Perspectives by Stewart Myers who is a co-author of one of the leading texts in corporate finance, very recent, last year.

And one of the things that the article points out is that the empirical evidence -- and of course we have to look at market pressure. But we also have to look at the big picture. What is the empirical evidence over time? Is there an optimal capital structure that firms naturally gravitate to?

In the same sense that for example if our body's temperature differs from 98.6 there are natural processes that drive us towards the optimal body temperature.

The overwhelming conclusion, based on many, many studies is that there is no such thing as an optimal capital structure. And there are only partial theories.

So that is something else that I took into consideration, precisely because the empirical evidence is that there are firms out there with very similar risk characteristics operating under very, very different capital structures and doing so quite successfully.

Now having looked at that, it does seem to me that a primary consideration is well, what is a reasonable -- not a stingy capital structure. I think a stingy capital structure would be 25 percent equity, 75 percent debt. But a reasonable capital structure of let's say 30/70, should that allow this company to succeed in borrowing markets. Again, given the way gas pipelines are treated, I would think so, yes.

In addition, the equity -- the capital structure and even the return on equity are not the only things that are considered by rating agencies. Their standard checklist sheet considers the cost performance, benchmark against other utilities, that is the efficiency of the company as compared to others.

So the direction that I'm suggesting is provide the company with a reasonable capital structure and let them worry, which is where the responsibility really ought to be.

Let them worry about making sure that they signal the marketplace well enough so that the marketplace recognizes that this is an efficient company and that one should not worry about lending it money.

Rather than whoever is providing them, anteing up the funds initially, the government and taxpayer worry about it, I would put this directly in the incentive remuneration of management and senior executives.

Here is your 30/70. Here is your return on equity, a reasonable return on equity that we have allowed. If you do better, if rating agencies give you good ratings, guess what? You get a bonus for that.

So my whole approach to it is trying to build this into the incentives of managers rather than somehow view it as this is somehow that has to be exogenously or externally provided in its entirety.

It is as much driven by the success of managers and executives, that is their ratings in the marketplace, as by their capital structure going from 30 to 35 or their return on equity going from 8 1/4 to 8 3/4.

Q. - Have you examined the balance sheet of NB Power and the management of NB Power in coming to your conclusion?

MR. YATCHEW: I have not done a careful examination of the balance sheet principally because this exercise is an exercise of what the deemed or perhaps actual future debt equity structure will be as a result of for example a debt equity swap.

Q. - Have you ever been involved with an organization that had to go to the bond market? Have you met with investment bankers?

MR. YATCHEW: I have not. But I have been -- I have reviewed ratings and those sorts of things many times in the course of public hearings.

Q. - I understand.

MR. YATCHEW: But I have not actually participated.

Q. - And my concern is that I have heard a lot of comments about textbooks and theory. But you know, we deal in a real world. And we have to sell those bonds.

And you can't -- and if there is weaknesses within the structure that is coming forth, some of that weakness can be mitigated by increased capital to start with, an increased equity position.

And my concern is that we get an organization off the ground and we don't give it a chance to survive. Because remember, in this particular case there is no lifeline. The government is not coming back to bail it out.

And it is different when you had the government guarantee and the fact that you knew that they were going to be there. And I don't think you can come forward and make a recommendation until you have examined all aspects of it, Doctor.

MR. YATCHEW: I'm not a bond rater. But the evidence that is very, very hard for me to move off my scope of vision is the private sector companies that don't have lifelines like the gas, natural gas transmission companies that have operated for a long time through all kinds of uncertainties in the marketplace, through market crashes. In 20 years a lot of things happen. A lot of things can happen.

Q. - Look, I understand that. But you got to examine management of the company that is going to be out there. You have to examine what has taken place over the last seven or eight years.

The track record has got to be a big part of how you assess the amount of debt equity that will be coming forth.

Even if that debt equity is on the higher end for a short period of time, you can't ignore that. If you are, you are not dealing with the real world.

MR. YATCHEW: I'm sorry, I didn't follow that. Even if that debt equity is higher for a short period of time?

Q. - In other words, you got to give the company a chance to get off the ground. If there are some mistakes along the way and they wipe out their equity, there is nobody to pick up the pieces.

MR. YATCHEW: That is a direction we could go in as well. Because in fact if you granted them 40/60 and they wiped out their equity, the fact of the matter is that governments have had to come to the rescue of private sector companies.

For example California, because electricity is so important, however the government wishes to sever itself from the electricity business -- and I'm very happy that it is trying to commercialize this business -- in the end it can't sit by and watch the company collapse.

And that is something that the markets take very seriously, that the risk of bankruptcy of a transmission company is extremely low. Because no government can afford to stand by and let it go bankrupt.

Q. - So what you are saying then, the government really is going to have to come to support it, whether their stated policy is that they won't?

MR. YATCHEW: What I'm saying is this. The government's stated policy may very well be that it will not come to its support. And there is no reason that the government of California would even have had a stated policy to come to the rescue of private companies.

But political realities, the realities that you speak of, the realities that exist in the marketplace, realities by which raters review companies, is that no government can let a transmission company in the end disappear. All the lights will be out here.

So even if the government sends a signal to the marketplace, this is stand-alone, we are not going to prop this up, we are not going to come to its rescue, and we are going to do everything that we can to ensure that this company is run as efficiently as possible through whatever regulatory devices that we have at our disposal, that is in effect the mode by which I hope that this whole process realizes itself.

Q. - Have you ever run a commercial organization, Doctor?

MR. YATCHEW: No. But I do sit on the board of a small energy company by the name of --

Q. - But you are not -- you have never run commercial organizations in your lifetime?

MR. YATCHEW: No, sir.

MR. RICHARDSON: Thank you very much.

BY THE CHAIRMAN:

Q. - Mr. Mosher, I just have a couple of questions. All I'm trying to do is make sure I have got the record clear in my own head on this one. And it has to do with JDI-7. And I have marked for identification A-44.

My understanding from hearing your testimony is that the responses that JDI gave for the supplementary interrogatory which is marked JDI-7 is that you were trying to compare and contrast your present bill from NB Power with what appeared to be a comparable service under the new tariff, is that correct?

MR. MOSHER: Basically that is correct. I tried to take where we were today and say what would just the transmission component be in the future.

I think within my response I also stated I had no understanding what the breakdown of that 235,000 is which goes to the integrated company. So I -- the 235,000 that we paid today is to the vertically-integrated NB Power.

Q. - Yes.

MR. MOSHER: The calculation that I did for the future says what is just the transmission component, no fixed costs contribution to generation or distribution.

So in one sense I believe I understated.

Q. - Okay. Now with what you have seen of marked for identification A-44, you I gather don't really disagree with the mathematical calculations that are in that exhibit, as far as you have checked them?

MR. MOSHER: No, I do not.

Q. - And if NB Power says that you are entitled to take the services that are represented in that exhibit, you are not here to quarrel about that. It may possibly be the case?

MR. MOSHER: It very well may be. Again, it gets into -- they are saying if I'm willing to take a very different service with a different level of risk, what could it possibly be?

Because in their calculation they have basically said if I'm willing to take point-to-point and self-provide, there is actually a savings, which seems a bit counter-intuitive.

It just doesn't seem right that if there is no risk and it is very easy to do, that I can save money. Does that make sense?

Q. - I understand. In this business, yes, I do understand.

MR. MOSHER: I mean --

Q. - Not to cut you off. But then for instance, JDI-30 which is Dr. Earle's graph that he just explained to us, is a possible additional risk that if you were to go and take some of the services that are in marked for identification A-44 that might possibly arise.

And my sense of your testimony is that you haven't really studied those because there is so much unknown?

MR. MOSHER: It is all wrapped up in uncertainty. The transmission tariff in itself is very unclear. And it makes no mention at all of what the standard offer service would look like, how you could possibly take point-to-point from the standard offer service.

You know, in the exhibits that were presented, point-to-point is from one generator to one load. It is a specific path. And it seems very unclear how you could do that.

CHAIRMAN: Those are all the questions I have. Thank you.

Mr. Smellie?

MR. SMELLIE: I think Mr. Sollows has a question, Mr. Chairman.

CHAIRMAN: Sorry. That was an oversight. It wasn't purposeful.

<u>EXAMINATION BY MR. SOLLOWS</u>:

Q. - Just a few questions. For Mr. Earle, I'm looking at page 15 of your evidence, and just lines 9 through 13. You are clearly stating that you feel embedded costs.

That has been clear that that is JDI's position throughout this, that embedded costs should be used to provide the services for generation-based auxiliary services?

MR. EARLE: Yes.

Q. - My question is how would you view the issue of opportunity costs for NB Power providing those services, to provide those services they had to forego an opportunity in the New England market to export capacity?

How would we -- I mean, would it not be fair to compensate them for that foregone --

MR. EARLE: This -- yes. I understand what you are asking. And this is a very difficult issue in which I think different interests have to be balanced.

I think that in this case, when we are in a period of transition from a vertically integrated utility into a nascent market, there is some degree of deference that should be given to the Province and the ratepayers in the province.

This has been something that has been done very often in -- certainly in the United States when a utility has adopted an 888 style open access transmission tariff, they have used embedded costs. Because simply there is no market to price those.

Now I understand from my reading of the transcript -- and I apologize because I can't point you to right now where it was said.

But my understanding is that with respect to opportunity costs, New Brunswick Power has also essentially said the same thing, that when they are -- when they have spoken of opportunity costs, what they have meant is an issue of well, gee, you know, we have to run a more expensive generator within the province in order to provide the ancillary service. And that is a type of redispatch cost.

They also spoke about that in the context of energy imbalance as well. And frankly I agree with their position. It is a reasonable balancing of interest I think in this case.

Q. - Okay. No. That is fine. Thank you.

One further question. And it could be either for you, Dr. Yatchew or you, Dr. Earle.

When I dug through Dr. Morin's evidence, one piece of -- one of his exhibits was a list of an estimate of risk premium for trans' -- or not transmission -- integrated electric utilities, Moody's Integrated Electric Utilities Index over 70, 80 years.

And when I looked at that data I found that there seemed to be a fairly significant correlation, at least since 1965, between the risk premium and the risk-free rate of return.

Now is that something that generally occurs? Or is that just an anomaly in that data? I guess the reason I'm interested is we have before us a proposal which has an off-ramp in terms of performance-based regulation that is tied to the risk-free rate.

And if there is some underlying correlation that could be used to adjust things in a formulaic sense, it might be a more practical way to deal with it.

MR. YATCHEW: There is this correlation historically. And the main reason for it is that we had this inflation period during the '70's that drove up interest rates. And so what happened really was that interest rates went up a lot because they contained -- particularly long-term interest rates contained a risk premium that is there even today, but to a much lesser degree. And that is what squeezed down the equity premium. Because the equity premium above long-term rates was no longer a pure risk-free -- excuse me, it was no longer being taken over a pure risk-free rate. Because the long-term bond rate was no longer a risk-free rate. It had had its own risk premium inside it as well. That is also one of the reasons why quite a few people who use the CAPM model actually use the "true risk-free rate" which is the one-year rate or a short-term rate. I don't want to go to -- that really complicates the problem before you. Statistically speaking, to try to exploit this correlation in the adjustment formula, would be in my view very, very difficult to get anything. We are really talking about a second order adjustment.

MR. SOLLOWS: Okay. That is fine. Thank you very much.

CHAIRMAN: Mr. Smellie?

CHAIRMAN: Mr. Smellie.

REDIRECT EXAMINATION BY MR. SMELLIE:

Q. - Thank you, Mr. Chairman. Dr. Earle, could you turn your mind, please, to the discussion you had with Mr. Morrison on your recommended level of operating maintenance and amortization expense for inclusion in New Brunswick Power transmission rates beginning this April, which is at page 8 and 9 of your evidence? Would you do that for me?

DR. EARLE: Yes.

Q. - Now let me just -- I have a couple of premises to this re-examination and then one question for clarification. Your first position is that that category of expense should be limited to historic levels of about $34.7 million, right?

DR. EARLE: That is correct.

Q. - You also suggested on the strength of the Stone & Webster report from 1999 that operating maintenance and amortization expense could be fixed at $33.6 million or $1.1 million less than historic levels?

DR. EARLE: That is correct.

Q. - Now, Mr. Morrison discussed with you the three reasons why OM&A savings are available to New Brunswick Power. And you will recall his discussion about dioxin litigation and right-of-way clearings and the like. Looking at page 9 of your evidence, can you just clarify for us, please, which of the cost saving measures cited by Stone & Webster led you to your conclusion that $1.1 million of savings are available to NB Power?

DR. EARLE: I only used the last one which is the reliability based evaluation methods. And the reason I did that was that was the one that Stone & Webster clearly quantified.

Q. - Thank you. Yesterday, Dr. Earle, Mr. Morrison asked you -- and the transcript reference, I don't think you need to turn it up, is 2,062 -- he asked you without being very specific about it, whether you were aware that Alberta or somebody in Alberta used proxy units to price ancillary services in 1996. And you said you were not so aware. Do you recall that?

DR. EARLE: Yes.

Q. - Can you comment for us, sir, on the present practice of FERC in this regard?

DR. EARLE: They do not use proxy units.

Q. - Thank you. Dr. Yatchew, can you turn your mind, please, to your discussion with Mr. Hashey about Hydro Quebec

TransEnergie and you will recall that he took you through various points of comparison or non-comparison between that utility and New Brunswick Power Transmission, do you recall that, sir?

DR. YATCHEW: Yes, I do.

Q. - Just for clarification and confirmation, did I understand you to mention this morning that in the TransEnergie decision that he was taking you through, that tribunal made a decision on capital structure for that utility?

DR. YATCHEW: Yes, it did.

Q. - And what was that capital structure?

DR. YATCHEW: It was a 70/30 capital structure.

Q. -And are you able to comment, sir, on the Regie's treatment of TransEnergie as regards performance based ratemaking?

DR. YATCHEW: My recollection is that they have taken a slow process to this and actually delayed it. Broadly consistent with other boards, the Ontario Energy Board has taken a fairly measured stage process to performance based regulation.

Q. - All right. Doctor, later Mr. Hashey posited with you that you only used the capital asset pricing model in your assessment of return on equity. And you recall your discussion with him about the DCF approach to that subject matter, do you?

DR. YATCHEW: Yes, I do. I did rely on both classes of models, on CAPM models and DCF models as I stated.

Q. - Can you clarify, Doctor, whether there were any other methods or approaches that formed part of your consideration of that subject?

DR. YATCHEW: There were no other models that I relied upon. But I think it's very important to do reality checks on your numbers. And one of the reality checks that I kept coming back to is very simple, we don't need to know anything about CAPM models, we don't need to know anything about DCF models. We don't need to worry about their technical complexity. It's very simple.

If you take a look over the course of the 20th century inflation adjusted return on investment in equities in Canada was 6. -- roughly 6.5 percent. 6.4 percent, if I remember correctly. I can get the exact number. It's in triumph of the optimist. So 6.4 percent is the average rate of return inflation adjusted, inflation taken out for the whole 20th century for investing in the market portfolio.

The current inflation rate is 2 percent. Add that to 6.4 percent. You are up to 8.4 percent. That is certainly consistent with the recommendation that I have made, keeping in mind that this is the return for the market portfolio not for a less risky asset like a transmission investment.

So whenever I was doing anything statistical or more complex I would always come back to reality checks. That's probably my single most compelling reality check.

Q. - Thank you, Doctor. Now, Mr. Mosher, my friend, Mr. Hashey, asked you about the White Paper and the market design committee. And in your -- and in particular your personal familiarity with the market design committee's process, because you are a member of it. And he even asked you or put to you that prior to both of those processes there was a legislative committee in this province. Do you recall that line of questioning?

MR. MOSHER: Yes, I do.

Q. - Can you tell me whether or not the market design committee and its stakeholders discussed the current application of NB Power or any of the issues which this application presents?

MR. MOSHER: The market design committee was kind of your 30,000 foot level. None of the specifics of this application were ever discussed, no.

MR. SMELLIE: Thank you, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Smellie.

MR. SMELLIE: I don't believe there are any other -- any undertakings outstanding, Mr. Chairman, so perhaps this Panel could be released then?

CHAIRMAN: On behalf of the Board thank you, gentlemen, for your testimony. I wish you a safe journey. And that you can make that only flight out of here. We will take a break. Thank you.

(Recess)

CHAIRMAN: Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman. I would ask permission to call Mr. Porter on this -- only on this issue of the document that we have put in, and particularly to clarify this issue on point-to-point network service standard offer, et cetera. Probably have three or four questions maximum.

CHAIRMAN: Okay. Mr. Hashey, I'm just looking at exhibit JDI-7 and it's dated the 9th of December. So that would have been available when Mr. Porter -- or before Mr. Porter was on the stand, am I correct in that?

MR. HASHEY: That is correct, Mr. Chairman, but the ruling was that we couldn't rebut until after the evidence had been heard. Anything that came out in redirect obviously -- or in the testimony on cross examination we haven't gotten involved with, but this is one issue that didn't really develop until this Panel were on the stand.

CHAIRMAN: Mr. Smellie, do you have any comments?

MR. SMELLIE: No, sir.

CHAIRMAN: All right, Mr. Hashey. We will allow you to recall him and ask a few questions.

MR. HASHEY: Thank you, Mr. Chairman.

CHAIRMAN: Of course Mr. Smellie and any intervenor has an opportunity to examine after that.

MR. HASHEY: Absolutely. Thank you. Mr. Porter.

(MR. PORTER resworn)

REDIRECT EXAMINATION BY MR. HASHEY:

Q. - Mr. Porter, I just have a few short questions for you. First of all there seems to be some confusion on this standard offer issue. If you stay on standard offer can you clarify if you can take network or point-to-point service? Can you indicate how that works?

MR. PORTER: Yes. If you stay on standard offer you are a direct customer of NB Power customer services and the transmission customer, that is the entity that would hold or sign the service agreement to take transmission service, would be NB Power Customer Service. So therefore the customer, in this case we are talking about JDI, would not need to choose between point-to-point and network service. That would be an issue between NB Power Customer Service and New Brunswick Power Transmission.

Q. - Now if the customer --

CHAIRMAN: I will interrupt because --

MR. HASHEY: Please do.

CHAIRMAN: -- the question in my mind is what if they take -- let's say they take ten megawatts from a competitor of NB Power and that was on point-to-point. What happens to the other 90 -- let's say it's a hundred megawatt demand -- what happens to the other 90? Can they stay on standard offer service for that?

MR. PORTER: With respect to the tariff application only one entity can be the transmission customer, and that would be between the transmission customer -- the customer such as JDI and its providers, I guess now two providers at least, to resolve which one of the parties would be the customer that would take transmission service from NB Power Transmission.

CHAIRMAN: Okay. Carry on.

MR. PORTER: I might add that when the -- say JDI -- if JDI were to leave standard offer service, at that time they would have the option and it would be their responsibility to make a decision whether they want to take point-to-point service or network service. But that is a decision that they would only need to take if and when they did leave standard offer.

CHAIRMAN: Okay. Go ahead, Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman. You get rid of one of four questions.

Q. - Mr. Porter, we have marked a document here for identification which is exhibit identification A-44. Is this a document that you were involved in the preparation or to prepare it?

MR. PORTER: Yes, that's correct.

MR. HASHEY: Mr. Chairman, I will have Mr. Porter refer to this document but maybe I could offer it as an exhibit now.

CHAIRMAN: Yes. Any objections? Okay. The document marked for identification A-44 becomes Exhibit A-44. Go ahead, Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman.

Q. - Mr. Porter, could you please comment generally on what this document is intended to indicate and indicates?

MR. PORTER: The background on this of course is that in response -- in a supplementary response to an interrogatory from NB Power, JDI submitted the exhibit JDI-7. And in our examination of that document took note of the fact that indeed the assumption had been made that network service would be selected and that there would be no self-supply of ancillary services. And we questioned these assumptions and decided to perform an analysis under a different set of assumptions.

So as noted earlier, the first sheet, page 1 of 5, is essentially identical to that which was submitted by JDI, and the figure of $234,898 is what they pay today as a contribution to fixed costs under the standard offer service product.

The figure of $616,772 is what they would pay for transmission tariff including ancillary services if they were to leave standard offer service and choose to become a network service customer.

The next page, page 2, represents our analysis of what their costs would be if they were to leave standard offer and choose to take point-to-point service, but not self-supply any ancillary services. And there you see down towards the bottom the total for transmission ancillary services, the cost of $372,000 -- $372,397.

Lastly, on page 3 of 5 the assumptions and charges for the point to point service and the use of the wires stays the same but here we assume that JDI self-supplies for this load some of the ancillary services, namely operating reserve, the ten minute operating reserve and the 30 minute operating reserve. So those are both supplemental services.

That assumption is based on the fact that we are talking about an interruptible load here and this is a customer that also has additional interruptible loads that we believe with some modifications to the practices could offer up those -- that interruptible capability as ancillary services, thereby self-supply those services and not incur those specific costs from the tariff.

Q. - Thank you, Mr. Porter. And the last two pages are what, just in generalities?

MR. PORTER: Certainly. The last two pages are really a summary of the results of the analysis. So if we flip to page 4 of 5, you see their contribution to fixed costs as we see today under standard offer of service, and the second bar there, the $616,000 is what their analysis and our analysis shows for that same load if they were to leave standard offer and choose to take network service and not self-supply ancillaries. And the $372,000 again, if they chose -- left standard offer service, chose point-to-point service but did not self-supply ancillaries, and lastly if they did both, they chose all three, they leave standard offer, choose point-to-point service and choose to self-supply the ancillaries.

So you can see comparatively what the total annual cost would be under each of those scenarios.

Q. - And in the final one?

MR. PORTER: The final one we merely -- to show the same type of comparison that JDI had, we show the same figures with the energy costs added on. So on page 4 of 5 it's just the contribution to fixed costs. On page 5 of 5 it's really the total bill that they would see.

Q. - Now finally this afternoon Dr. Earle put before this Board an exhibit and then I would ask that you comment, please, on that with reference to the added risk from point-to-point service that have been mentioned?

MR. PORTER: Yes.

CHAIRMAN: Excuse me. That's JDI-30?

MR. HASHEY: JDI-30, right.

CHAIRMAN: Thank you.

MR. PORTER: First I would make the general comment that that diagram is generally very instructive and I appreciate that, in addition to the record. But I would say one of the comments that was made, as Mr. Hashey has noted, we take issue with, it's the issue of additional risk being on point-to-point service versus network service.

My understanding was that the suggestion is that in the case of constraint on the transmission system but as a customer on point-to-point service they would be at higher risk than a customer on network service. And I don't dispute the interpretation of -- the difference between network and point-to-point. What I would like to point out is that we have talked about here earlier that within our transmission system there is minimal -- very few situations in which there is congestion within the New Brunswick grid. Very, very rare.

Secondly, we are talking about load here, which is an interruptible load. So even today if there should be a transmission constraint on the New Brunswick system and that could be relieved by the interruption of this load, the system operator could very well choose to take that action, and they have the contractual rights to do so.

So since we are looking at a comparison here we had to be looking at differences between today versus under the tariff and my suggestion is that that risk exists today and would continue to exist under the tariff.

MR. HASHEY: Thank you, Mr. Porter. I have no further questions, Mr. Chairman. Thank you for your indulgence.

CHAIRMAN: Just a quick question on the follow up of the last one. My recollection of testimony that we had before us is, however, with interruptible clients today, you do not do it except on 24 hours notice?

MR. PORTER: That's typically the case. Our preference is to give forewarning to those customers. And the primary situation in which interruptibility occurs or is likely to occur, is a time of peak system load. And we have a pretty good prediction of that on a day ahead basis. So we know that there is that risk and so that notice is given.

CHAIRMAN: Okay. Thank you. Mr. Smellie?

MR. SMELLIE: Can I have 10 minutes, Mr. Chairman?

CHAIRMAN: Yes, sir. Why don't you take as much time as you want to. Let us know and we will come back in.

(Recess - 2:47 p.m. to 3:12 p.m.)

CHAIRMAN: Yes, go ahead, Mr. Smellie.

<u>RECROSS EXAMINATION BY MR. SMELLIE</u>:

MR. SMELLIE: Thank you, Mr. Chairman. Good afternoon, Mr. Porter.

MR. PORTER: Good afternoon.

Q. - As you appreciate, my colleague Mr. Nettleton and I appear on behalf of J.D. Irving and several members of the Canadian Manufacturers and Exporters New Brunswick Division. And it's on their behalf that I wish to put some questions to you with respect to your evidence adduced before the break.

You told us with reference to page 1 of what is now exhibit A-44, that the figure at the bottom of the page of

$234,898 is the contribution made by JDI to fixed costs under standard offer service, correct?

MR. PORTER: That's correct.

Q. - Can you tell me, sir, what percentage of that fixed cost contribution relates to transmission?

MR. PORTER: No, I cannot. Because there is -- that rate upon which that is determined is not broken down into the component pieces. That's a bundled rate. Therefore I cannot tell you a specific amount for the portion attributable to transmission.

Q. - So the 234,898 is or is not inclusive of generation and distribution?

MR. PORTER: I can tell you that it's exclusive of distribution, this is a transmission customer, which would have no charges for use of the distribution system. And I can only say the contribution is to NB Power, so you could assume that some portion would be for transmission and some portion for generation. Beyond that I -- I don't have a breakdown because, as I say, it is a -- it is a bundled rate.

Q. - Can you tell me, Mr. Porter, how many self-generation facilities are there in New Brunswick, to your knowledge?

MR. PORTER: I don't know the specific number, but it's in the order of half a dozen.

Q. - And which of those half a dozen facilities, to your knowledge, were designed for the purpose of providing capacity based ancillary services?

MR. PORTER: I don't expect that any of those facilities were designed for that purpose. But I believe that in some cases, and this is a little bit outside my area of expertise. But I believe that in at least some instances the decision was based on an understanding that favourable rates could be realized through the purchase of interruptible product. And that that was taken into account in the decision.

And one of the reasons that the prices were favourable is because of the interruptibility of the associated loads and the availability of the generation.

Q. - Are you telling me, sir, that all of the self-generation loads in the province are interruptible?

MR. PORTER: I don't believe I said that.

Q. - You don't know that to be the case?

MR. PORTER: I don't know whether or not that is the case.

Q. - Thank you. Looking at page 2 of 5 of exhibit A-44, I think you told us that you noted when you looked at JDI-7 that certain assumptions had been made in the preparation of that document. And that A-44 represents a different analysis under different assumptions?

MR. PORTER: That's correct.

Q. - And one of those assumptions if I look at footnote 2 is this. "The difference between the total energy and the base energy less the energy delivered in the first hour of each trip is split 50/50 between on peak and off peak hourly services." Do you see that?

MR. PORTER: Yes, I do.

Q. - Is the assumption as to the split between on peak and off peak based on some sort of actual experience or data?

MR. PORTER: The assumption is based on the fact that there are 80 on peak hours in a week out of a total of 168 hours, which is roughly 50 percent. We did not have any more detailed data in the -- on the record with which to make any more detailed -- to do any more detailed analysis. So we wanted to do this analysis based on the data that was already on the record as introduced by JDI. And made the assumptions based on the data that we had.

Q. - So it was a pure assumption. It wasn't, for example, based on consultation with your customers?

MR. PORTER: We made the assumption using the data that we had and have put that forward. And Mr. Hashey has asked for a comment earlier from JDI on the -- on the calculations here in this analysis.

Q. - What was the split between on peak and off peak that you used in your tariff design, Mr. Porter? Subject to check, was it 71 percent?

MR. PORTER: Now you have -- now you are talking apples and oranges. The 71 -- I would ask you to clarify the question.

Q. - I will see if I can do that. Was the 71 percent used to discount the off peak load in your tariff design, whether it be an apple or an orange?

MR. PORTER: Under network service 71 percent factor is applied to the off peak load, and then that result is used as a billing determinant.

Q. - Thank you. The other -- excuse me?

MR. PORTER: Sorry. I have to add in for clarification here. The question originated, the discussion at page 2 of 5, and I believe we were talking about point-to-point reservations being on peak versus off peak.

Q. - I'm just trying to understand your assumptions.

MR. PORTER: Well the assumptions on page 2 on the split of 50/50 between on peak and off peak, I just want to clarify that that's pertaining to point-to-point service, on peak versus off peak.

Q. - The first assumption on the page, and I quote it again, it is assumed that there are two trips per month that require unscheduled transmission, do you see that?

MR. PORTER: Yes, I do.

Q. - That is an assumption that I am assuming and perhaps you can confirm it for me, is based on some sort of historical experience?

MR. PORTER: I believe it's the assumption that was included in the analysis of JDI, but unfortunately I don't have it before me to look that up, but I will have to assume you are familiar with it and could --

CHAIRMAN: What is the exhibit?

MR. PORTER: It's JDI-7.

Q. - I guess the first question arising from that, assuming that your assumption is as you stated, does that apply to all self-generators in the province?

MR. PORTER: If you don't mind, I'm going to confirm the --

Q. - That's fine. Take a minute.

MR. PORTER: I would need a copy -- I don't see it right off hand in the supplementary response but it may be in the original response --

Q. - All right. Well let's assume --

MR. PORTER: -- I presume supplemental to the original.

Q. - It seems to me, Mr. Porter, let me see if you and I can agree, that we are going forward into a future that has some uncertainties attached to it. And what concerned me about the assumption, whether it came from JDI or wherever, is that assuming in this scenario two trips a month is a matter of some speculation, is it not? It could be more, could be less.

MR. PORTER: My understanding on JDI's response was based on operational experience, not an assumption on their part.

Q. - Do you know whether JDI's experience includes trips in on peak or off peak hours?

MR. PORTER: I think the data shows trips or at the very least reduced generation in some of the off peak hours, and I just want to clarify that in the data that is shown her by JDI, and it shows up on each of the first three pages of this document under the heading "Monthly Demand", their on peak hours and off peak hours. And the analysis that JDI did, and rightly so -- well my assumption is that they used the definition of on and off peak that applies for network service, and there is a one hour difference, one hour shift, if we move from the definition of on and off peak for network versus point-to-point, just to put that on the record.

For the purpose of -- but it's not critical to this discussion, I just add the point that if I look across the peak demand and the off peak hours there are monthly peaks of 7,000 kilowatts, 16,000 kilowatts, as high as 20,000 kilowatts in the off peak hours.

Q. - All right, sir.

MR. HASHEY: Mr. Chairman, can I -- I apologize, Mr. Smellie. If we are going to deal with the response on IR-9 where the assumptions are set out, could I give the witness a copy of that to refer to.

CHAIRMAN: Certainly.

MR. HASHEY: I know we are asking questions --

Q. - Anything else you want to add, Mr. Porter?

MR. PORTER: Yes. Yes, I would like to. If I go back to that response, it's on page 16, so it's response to an interrogatory from NB Power to JDI on their evidence, and it's IR number 9, again page 16.

And if I look on that page under the -- the heading is "Indicative Example, NB Power open access transmission tariff". And the basis that is listed there, the third item, says, one to two trips per month of six hours duration.

Q. - So this of course is an indicative example and an indicative example is one that may not necessarily bear a good or bad relationship to reality, fair?

MR. PORTER: This particular document that we are studying, I believe -- I will take that back. I do agree with your statement, yes.

Q. - Thank you. Now you discussed with Mr. Hashey to some degree the notion of standard offer service. But if JDI for example was to exit standard offer service on April 1 of this year, for example, it's my understanding that it would face certain charges or penalties, is that correct, for leaving the system?

MR. PORTER: That potential exists but that's not an issue for this hearing is my understanding.

Q. - Well it's not an issue for this hearing save and except to say that exhibit A-44 doesn't reflect any of those penalties or charges, right?

MR. PORTER: Yes. I believe that that's because this is an analysis of the cost transmission and ancillaries under the scenario in which the customer would leave standard offer service.

Q. - And the exhibit, Mr. Porter, includes an analysis of point-to-point, correct?

MR. PORTER: That's correct.

Q. - And if you went point-to-point you would have to pay charges or penalties, right?

MR. PORTER: What charges or penalties are you referring to? Where is that shown on the record?

Q. - Charges, penalties related to stranded costs, for example?

MR. PORTER: What type of stranded costs?

Q. - Exiting standard offer for service?

MR. HASHEY: I don't believe we are here -- I think unfortunately that may be next time. But I don't believe that is relevant to this hearing particularly.

Q. - Well would you agree -- would you go this far with me, Mr. Porter, since we are in the realm of endeavouring to compare apples to apples that such charges, whatever their level, are an integral component of a fair comparison of the sort that I have just been describing to you from a customer's point of view?

MR. PORTER: I think what you would be talking about would be a much more extensive analysis than what we see here. I think this -- the original analysis as done by JDI had a focus and I think what you are talking about is going outside of that focus.

Q. - We can agree though, Mr. Porter, can we, that in order to compare in JDI's current situation with what might be available to it in the brave new world that one has to include all the relevant costs that are going to be payable in that brave new world, whatever option may be selected. Would you go that far with me in order to have a true comparison?

MR. PORTER: I have a lot of difficulty in going that far in that this is a hearing pertaining to the transmission tariff and the cost for transmission services and ancillary services. And what you are talking about goes beyond that.

Q. - All right. Mr. Porter, that's fine. Can I get you to turn to page 4 of exhibit A-44? And I'm just looking at the today bar in the graph and the point-to-point bar in the graph. And I would invite you to agree with me -- well as the narrative at the bottom of the page indicates that the point-to-point option is some 59 percent greater than the situation today, right?

MR. PORTER: That's correct in respect to this portion of the total bill.

Q. - Right. Comparing the fixed cost contributions under the two scenarios?

MR. PORTER: Yes.

Q. - Right. Is that rate shock, Mr. Porter?

MR. PORTER: If we isolate that one component I think by just about anyone's definition if it was a 59 percent change in -- if it occurred over a short time frame, I think by just about anyone's definition that would be rate shock.

Q. - And you would agree with me, would you, Mr. Porter, that a customer who under the new regime was thinking about choosing point-to-to point service that that customer would want to take into account and understand all of the cost impacts of doing that. Would you agree with that?

MR. PORTER: Certainly the customer would want to look at all of the cost impacts, the increases and any potential decreases.

Q. - Including any penalties it might have to pay in order to pursue that option, correct?

MR. PORTER: If we are back to talk about the same penalties that we talked about earlier, then we are back to talking about the bigger issue than just the transmission tariff and as I said that's all beyond the scope of this exhibit and I believe JDI's response to our interrogatory.

Q. - In any event, as you suggested to me, Mr. Porter, this page simply shows a portion of the total bill and in order to be comparable the customer has got to understand the total bill, right?

MR. PORTER: Yes. And we should go to the next page for that, page 5 of 5, where the total bill is noted, and the first two columns are as submitted by JDI and then the third and fourth columns we have added to show under the cases which I have spoken to what we perceive the total bill would be on a comparative basis.

Q. - Does page 5 of 5 include any stranded cost that might be payable by a customer who elects point to point, or do you know?

MR. PORTER: I'm going to ask for some assistance here because we are talking about stranded costs which in the majority of situations is referring to stranded generation costs, but in this case we are talking about a non-firm product. I guess I'm not so sure that I wouldn't have done -- made the same assumption that JDI made which was not to include any stranded cost calculation. That's not my area of expertise and that's not the issue here at this hearing, and we have no evidence on the record regarding generation stranded costs.

Q. - Indeed.

MR. PORTER: But I think it's important to put on the record that we are talking about a non-firm product here.

Q. - Were all self-generators in the Province of New Brunswick?

MR. PORTER: I believe this was an indicative example.

Q. - I see. Let's turn to the notion that you have raised in exhibit A-44 about a customer taking point-to-point service and self-supplying ancillary services. I take it that the message or one of the messages that you want us to take from this exhibit, Mr. Porter, is that it is reasonable to assume that a single self-supplier, such as J.D. Irving, can supply ancillary services for less money than New Brunswick Power Transmission, is that right?

MR. PORTER: That's certainly something if they would have -- the customer would have to look at is whether or not their cost of choosing to self-supply would be more or less than the posted approved rate.

Q. - And in your indicative example based on the assumptions of exhibit A-44, that is what you are telling us is going to be the case, correct? I am looking at total billing on page 5 of 5, 1.356 million today and 1.347 million under your point-to-point and self-supply scenario. One is cheaper than the other, right?

MR. PORTER: Yes. Your point being that under the point-to-point and self-supply scenario we have assumed that the customer would chose to self-supply the supplemental reserves and that they would only do so if they did not incur more costs somewhere within their business that was greater than what they would save by self-supplying. That's --

Q. - Why is that assumption practical, Mr. Porter?

MR. PORTER: We are talking about an interruptible load the customer that today is under a contract in which they receive apparently attractive rates to that customer and that they as part of that contract are willing to interrupt. And I would like to take the opportunity to expand on the explanation that I gave in response to the Chairman's question earlier. I was a little bit cautious in my response and I just wanted to clarify that we tend to give as much notice as we can. And it's -- I think it's often a day ahead that we give notice of the potential for interruption. But that we contractually have the right to interrupt on 10 minutes notice at any time.

And that is why we feel that it is reasonable to assume that that type of customer could self-supply such a service.

Q. - And indeed if you look back at page 3 of 5, Mr. Porter, in this exhibit your assumption is not only that a self-supplier can do it more cheaply, but if I look at the third shaded area reading down the page, the assumption is that this self-supplier can provide 10 and 30 minute reserves for nothing. Isn't that what this tells me?

MR. PORTER: Remember that we are doing a comparison here. And some of the costs that would be associated with self-supplying -- because they are interruptible today, they would already be incurring those costs, whatever they might have to do within their systems and their processes to be able to accommodate being interrupted on 10 minutes notice that is something that they have today. The frequency of interruption would be an issue. The assumption being that there is no -- in this analysis is that there is no increase in the frequency of interruption that would lead to significant increases in cost.

Q. - And if I --

MR. PORTER: I would have to agree with you in -- to wrap that up that we haven't -- we have not put any specific dollars in there associated with those costs.

Q. - And of course we need to keep remembering that not all self-suppliers in the province are necessarily interruptible, correct?

MR. PORTER: Could you repeat that question please?

Q. - Don't we have to keep in mind that not all self-suppliers or self-generators in the -- self-suppliers in the province are necessarily interruptible? Or if you like that they have an interruptible contract?

MR. PORTER: I guess I'm here to discuss the indicative example which was given in which that is not the case.

Q. - Well it is an indicative example, Mr. Porter, but as I made clear I'm here on behalf of a number of companies. And if they are all interruptible then what you are telling me holds and I'm simply asking you to tell -- to agree with me that it may well be that not all self-suppliers in the province have interruptible contracts, right?

MR. PORTER: Yes. I think if we looked at other examples or other specific loads we would have to make a completely different set of assumptions and it would be a different set of data.

Q. - Thank you. Now as I understood your evidence, when you were talking about page 3 of 5 with Mr. Hashey, I understood you to say that -- dealing with this particular example, that JDI with respect to this interruptible load could make -- and I noted down -- "modifications to certain practices in order to provide ancillary services." Did I note that down accurately?

MR. PORTER: Yes. I believe I made that statement.

Q. - What sorts of practices were you thinking about?

MR. PORTER: The main difference between how the interruption occurs today versus how it would have to -- how it would need to occur if the customer was self-supplying the reserves.

The answer lies in the NPCC, the Northeast Power Coordinating Council documentation which indicates that the interruptible load needs to be under the control of the system operator. That is not the specific case today with interruptible loads.

Today my understanding -- and this is getting a bit to the edge of my area of expertise but -- knowledge. But the system operator I believe makes a phone call to the load, asks the plant operator to reduce their load.

And under NPCC's criteria that is not sufficient for them to accept that as the provision of operating reserve. Obviously NPCC is concerned that when the system operator deems that reserve needs to be activated, that it will be activated and that there is very, very little risk there of anything occurring that would stop that.

And a simple phone call to a plant operator has some inherent risks in it, in that the plant operator may very well decide that his priorities are different than that of the system operator.

So to wrap that up, the difference would be that the direct control would have to be enhanced. The control of the system operator would have to be enhanced above and beyond what it is today.

Q. - Thank you. What you said, Mr. Porter, as I noted it down, is that modifications to practices could be undertaken in order that JDI in this instance could itself provide ancillary services and therefore not incur the tariff costs.

In other words it could avoid the costs of acquiring ancillary services under the tariff, right? That would be the point of those practice modifications?

MR. PORTER: Yes.

Q. - And I heard what you said. But would for example a company such as JDI have to hire employees to monitor and to support the undertaking to self supply ancillary services?

MR. PORTER: No. I think it would be to the advantage certainly of the system operator. And if it would -- it sounds like you are saying it would be advantageous to the customer to have an automatic control.

Ideally the system operator would push a button or dial up a number on a control system. And the signal would be sent to the plant, the mill, whatever it might be. And the loads would be tripped automatically or maybe with some delay to allow the operator at the plant to make preparations.

I don't think there would be additional human resources required. If anything there would be some up-front costs to establish the circuitry and control and communications to allow that control to take place.

Q. - Have you or has New Brunswick Power had discussions with any of the potential self suppliers in the province about these practice modifications that you are suggesting might have to be undertaken in order to avoid incurring tariff costs for ancillary services?

MR. PORTER: I believe such conversations have taken place.

Q. - Do you know?

MR. PORTER: Yes.

Q. - With JDI?

MR. PORTER: Yes.

Q. - When?

MR. PORTER: I'm trying to pick out the best example. The best example would be to go back to the market design committee discussions. As Mr. Mosher indicated earlier, he was a participant in those discussions. And I would think that that would have been discussed at that time.

Q. - So the -- just so I'm clear, the consultation that you say has taken place between New Brunswick Power and JDI with respect to the notion of modifying its practices so as to avoid ancillary service costs under your tariff, it took place at some point over the course of the life of the market design committee. Have I understood your evidence correctly?

MR. PORTER: There have been discussions over the past few weeks since the point at which the Chairman -- this is in addition to my previous statement about the market design committee discussions -- but since the Chairman has indicated that he was in favor of some of the outstanding issues being clarified outside of this room.

And it's my understanding that some of our people -- and I have been involved in at least one discussion with customers on this matter. I can't remember the level of detail we went into about the types of mechanisms. But that issue was discussed.

And I believe that even before this tariff -- I believe in the past there have been -- because I know it has been -- this has been an issue in the past, this issue of the existing arrangement being problematic in that a simple phone call to this plant operator doesn't always result in the intended change in operations.

And I would be shocked if there haven't been discussions over the past few years with customers on this issue.

Q. - All right, sir. Could you get before you a copy of exhibit JDI-30, the chart that Dr. Earle introduced? Do you have a copy there?

MR. PORTER: Yes, I do.

Q. - Now it is my understanding, Mr. Porter, that constraints on the New Brunswick Power Transmission system or congestion on the New Brunswick Power Transmission system are today unlikely. Constraints are or congestion is unlikely on the New Brunswick Power Transmission system, correct?

MR. PORTER: Yes, in that they are very rare.

Q. - That means to me that there is sufficient capacity to handle all or virtually all transactions on the system?

MR. PORTER: Yes. Within New Brunswick that is the case and has been the case historically.

Q. - So just looking at the JDI-30 exhibit, which I think you said you found instructive or helpful, the spike if I can call it that, that represents a transmission that a self generator might have to go out and acquire, that that capacity exists at the present time?

MR. PORTER: The capacity exists to allow the full load to be served off of the transmission system.

Q. - And is there assurance -- or what assurance is there, I suppose I should say, Mr. Porter, that that capacity that currently exists on the New Brunswick Power Transmission system today will continue to exist in the future or be available in the future?

MR. PORTER: That depends very much on load growth and additional generation added to the system.

Q. - And if in the scenario -- let's look at the scenario described by Dr. Earle in this exhibit. Who is it, Mr. Porter, when a unit goes off-line that has to organize or go out and reserve the transmission piece that is necessary to tie this customer over until a unit goes back on line?

MR. PORTER: The end responsibility lies with the transmission customer. But the transmission customer could choose to have that function performed internally, for instance by someone in their plant operations or perhaps to have that performed by an external marketer.

It is all done via the internet. It could potentially be someone as far away as Texas or as close by as Nova Scotia or someone within the province of New Brunswick.

Q. - Presumably there is a cost attached to such functions, whether it is inhouse or external?

MR. PORTER: Yes. The function -- let's clarify. The function we are talking about is for someone to (a) identify that the additional transmission is required. (b) is to go to their computer. (c) is to go to the OASIS -- NB Power OASIS website, fill out an electronic form indicating that they require -- the quantity of transmission they require, the duration, the time, start time and end time, and submit that to the system operator electronically.

Q. - Well, let me put it to you this way. I certainly couldn't conduct such a function, Mr. Porter. It is certainly something that strikes me as requiring a degree of expertise and familiarity with the transmission system and how it operates?

MR. PORTER: I could train you to do that, sir.

Q. - How much would it cost, Mr. Porter? Never mind.

MR. PORTER: I just -- I would just say that it is clearly less than -- fewer dollars than what we are talking about when we compare the total cost for network service versus the cost for point-to-point service.

Q. - Just a couple more questions, Mr. Porter. Are you -- have you ever operated a pulp mill?

MR. PORTER: No, I have not.

Q. - Are you aware, sir, that on December the 24th of last year the Irving pulp mill tripped?

MR. PORTER: No, I'm not.

Q. - Would you agree with me when a large industrial customer of that sort trips, that there may be considerable consequences in terms of cost of such an event?

MR. PORTER: Could you be specific about what has tripped in this scenario?

Q. - The generator went off line.

MR. PORTER: The customer's generator went off line?

Q. - Yes. And I simply -- I'm looking for some -- for you to agree with me that in such a scenario there may well be significant consequences attached to that kind of an event.

And we can make it even more general if that troubles you. Interruption of power supply carries with it potentially significant cost consequences. Would you agree with me on that?

MR. PORTER: Okay. I'm clear now. You are talking about internal costs --

Q. - Yes, indeed.

MR. PORTER: -- the impact on process?

Q. - Indeed.

MR. PORTER: Certainly. That could be the case.

Q. - And just looking --

MR. PORTER: In some types of processes.

Q. - -- and just looking finally at page 4 of 5 for one last question, Mr. Porter. Notwithstanding the fact that this is an indicative example we are looking to compare apples to apples and I want to invite you to agree with me that the only apples to apples comparison today in that scenario vis-a-vis contribution to fixed costs are the first two columns, the today column at 234,898 and the network column at $616,772. Do you agree with me?

MR. PORTER: No. I don't agree with you there, no.

Q. - You better explain that to me.

MR. PORTER: In going from column 1 to column 2 there are several changes, (a) what we talked about is that that involves the customer leaving standard offer service. So they have gone from buying a bundle product. They have gone to well, taking network service directly from the transmission provider and buying their energy from I don't know where. There are other differences in the other two columns.

Q. - Well I just want to focus on the first two, today versus network. That's the difference that you wish to highlight for me?

MR. PORTER: I believe it was your question that highlighted those two columns.

Q. - Yes. And you have identified leaving SOS as one difference and getting their energy from whoever I think you said. Are there any other differences?

MR. PORTER: As a network service customer they may incur energy imbalance charges. They may choose -- those are the differences. My point was that the -- there are those differences between what they have today versus what they would have under network. And there is differences between what they have today versus point-to-point and all the different combinations there. There are differences in each of the scenarios, otherwise we wouldn't have run the different scenarios.

Q. - And under standard offer service isn't it the case, Mr. Porter, that what is going to be offered is in fact network service?

MR. PORTER: No. Under standard offer service -- sorry, I thought I had made that clear, that under standard offer service -- this comes back to what Mr. Mosher had taken issue with earlier, was the fact that the White Paper energy policy says that customers who do not choose to leave standard offer can continue to receive service under the -- I think it's prices and conditions that they receive service today. And --

Q. - But can you --

MR. PORTER: I just want to complete that.

Q. - Sorry.

MR. PORTER: The -- that customer on standard offer service is not a direct transmission customer. We responded to that in at least one interrogatory. That customer is buying a bundled product from NB Power Customer Service. They do not sign a network service agreement. They are a direct customer. Their supplier is NB Power Customer Service. They continue to take standard offer service. If it's an interruptible product they continue to take the interruptible product.

So your statement that by being on standard offer they are a network customer is not correct.

Q. - But the terms and conditions of transmission service will be similar, won't they? And it's not just a question of prices. It's a question of the terms and conditions of service and it's my understanding that the terms and conditions of transmission service for a network -- for an NIS customer will be similar to those that are available today. Am I incorrect?

MR. PORTER: I don't know why -- I did actually read that question. I don't -- it's not clear to me.

MR. SMELLIE: Just one minute, Mr. Chairman, I'm almost finished.

Q. - Let's come at it this way, Mr. Porter, if we can. Today if I want to be a customer of New Brunswick Power I don't have to designate a particular generator, do I?

MR. PORTER: No.

Q. - Under point-to-point on April 1st of this year for example I would have to designate a generator, is that right?

MR. PORTER: If you are talking about being on point-to-point then you are -- I believe you are talking about leaving standard offer service --

Q. - Yes.

MR. PORTER: -- and taking point-to-point service. So you are saying I'm not buying the bundled standard offer service product but I'm going to take point-to-point service from NB Power Transmission. At that point you would have to deem -- when you made your -- you had to make reservations to be able to allow your load to be supplied from a particular generator.

That is also the case with network service in that you would have to -- at the time that you signed your network operating agreement, you would have to say, these are my supplies or supply. It could be -- as we have seen in the diagram it could be multiple sources of generation that would be used to meet the load. You would designate where those supplies exist. And when it comes down to time to schedule the energy you would need to schedule the energy -- the source of the energy whether you take network service or point-to-point service.

Q. - So under -- they were throwing things at me, Mr. Chairman. Under network service as I understand it the number of suppliers is multiple whereas in point-to-point it is one generator per transmission contract, is that not the case?

MR. PORTER: Not one generator. One transmission system interface. So it could be the Hydro Quebec interface, it could be the Nova Scotia interface, it could be the NB grid interface. And the -- we should also keep in mind the flexibility of point-to-point service, that if the reservation was from Hydro Quebec to the New Brunswick grid and there was a problem with that supply, that reservation could be modified -- the point of receipt could be modified to say well, for this particular time frame we are not going to take service from Hydro Quebec, we want to take it from Nova Scotia.

And the other point I want to make is that the transmission customer taking point-to-point service can have any combination of paths and durations of product. So they could have a 10 megawatt path reserved from Hydro Quebec to New Brunswick and then as required additional paths from again Nova Scotia or the NB grid or whatever the case might be.

So I hope that clarifies a bit about the options that the customer has under both of those services.

Q. - Well it certainly points out the complexities. What about under standard offer service, Mr. Porter, what price would the JDI Pulp and Paper Mill pay for transmission?

MR. PORTER: Under standard offer JDI would continue to pay a bundled rate and as had been indicated earlier by Mr. Mosher that the bill -- as recommended by a market design committee, the bill would indicate what their charges might be if they were taking service directly from the transmission provider, but that will be there for their information only. The true bill part, the invoice, the line items upon which they will pay will be a bundled rate. So I cannot tell you what -- I cannot separate out a charge for transmission on that bill.

MR. SMELLIE: Thank you, Mr. Porter. Thank you, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Smellie. Mr. Zed, do you have any questions?

MR. ZED: No questions, Mr. Chairman.

CHAIRMAN: Saint John Energy?

MR. YOUNG: No questions.

CHAIRMAN: Board counsel?

MR. MACNUTT: Nothing to add, Mr. Chairman.

MR. SOLLOWS: I just have one question. I want to thank you for the explanation. It's -- this discussion has made things very much clearer in my mind as to what the issues are with respect to alternative service or self-generators. And as I was looking at the example and as I see it based on the example that we have here in exhibit A-44, I think I took the numbers from page 2 of 5, and I see the average total energy works out to about four and a half megawatts average over the year, and I took that number and divided it by the charges for 10-minute and 30-minute operating reserves and got a number that works out to about $32.60 per kilowatt year. Is that sort -- I understand is sort of the value of having an interruptible customer to the transmission system? Is that sort of a rough reasonable calculation?

MR. PORTER: Sorry. Can you take me through the calculation again just to make sure I have the right --

MR. SOLLOWS: I went to your -- on page 2 of 5, I went to the operating reserve 10 minute and operating reserve 30 minute totals of 89,000 and 57,5', summed them and divided them by the four and a half megawatts average load. And then in terms of kilowatts in converting it from -- using years I got -- it works out to about $32.60 per kilowatt year. And what I seem to be seeing here is that a lot of this discussion rests around value to the transmission system operator of having an interruptible customer.

I guess where I am coming from is you seem to be assuming that only the large industrial customers could be interruptible. Have you investigated trying to acquire the same services from your distribution utility or their customers, residential and general service customers?

MR. PORTER: I think that's an issue for our customer services group going forward that they would as they are starting to see charges from NB Power Transmission that they would be looking at those options and it would be the incentive for them to talk to the customers about the potential to supply those services, yes.

MR. SOLLOWS: So the assumption here is these charges are just going to go through Debtco and the other customers of Transco and they will have to deal with them as they see fit is that --

MR. PORTER: I think the potential exists for NB Power Customer Services to deal directly with some of their loads, self-generators and other loads. And if they could identify loads that could qualify for the provision of this services -- service, in my opinion, they should be able to self-supply, or at the very least offer those up to the system operator and say this is an alternative to you paying the generators for the provision of this service.

MR. SOLLOWS: So the fundamental criteria here is though it has to be under the system operator's direct control?

MR. PORTER: Yes.

MR. SOLLOWS: Yes. Thank you.

CHAIRMAN: Mr. Porter, you can't tell us how much -- everything else being equal, JDI would pay for its electric power and all the services provided in this year -- or sorry, of last year, next year, can you, as we sit here?

MR. PORTER: No, I cannot.

CHAIRMAN: Why not?

MR. PORTER: I just want to clarify here. The question is based on them taking standard offer service?

CHAIRMAN: That's right. Staying with you for everything. Staying with NB Power for everything?

MR. PORTER: (A), that's outside my area of expertise. But I will say that I don't know that any final decision has been made on what the rates would be in that time frame.

CHAIRMAN: Thank you, Mr. Porter. Any questions, Mr. Hashey?

MR. HASHEY: No, Mr. Chairman.

CHAIRMAN: Okay. You are excused. Thank you for your clarification. Those are all the witnesses for JDI and rebuttal.

This morning when we started out we talked about -- I believe it is the 10th of February as being an appropriate date to adjourn to.

And also I think, Mr. Smellie, you were alluding to let's talk about if the legislation is not in so many days ahead of February the 10th then we are going to have to set a further date.

I have chatted a bit about that. And the consensus that I hear is that if it is introduced a week in advance of February 10th, that should be sufficient time for us to be able to discuss properly its implications if necessary on the 10th of February.

Anybody any comments on that? Mr. Hashey?

MR. HASHEY: Seems very reasonable.

CHAIRMAN: Mr. Smellie?

MR. SMELLIE: Fine over here, Mr. Chairman. That is fine.

CHAIRMAN: Okay. Mr. Zed?

MR. ZED: That is fine, Mr. Chairman.

CHAIRMAN: Saint John Energy?

MR. YOUNG: That is fine, Mr. Chairman.

CHAIRMAN: And I have already spoken with Mr. MacNutt. So that is fine too. All right. The Board has had a good deal of opportunity to discuss a number of matters that have come up. And I do have a preliminary ruling that I want to read and will explain. And if you have any questions on it, why by all means ask questions.

Ancillary services are an essential aspect to providing open and equal access to New Brunswick Power Transmission's network. There has been considerable discussion over how these services will be provided and how they are to be priced. The Board however considers that it would be very useful to have further information concerning the provision and pricing of ancillary services. It is our understanding that currently and for the foreseeable future, all necessary ancillary services will be provided by NB Power. So first, for this reason it would be beneficial to know which generating facilities will actually provide each of the necessary ancillary services. Secondly it will also be helpful to know the estimated costs of providing the actual ancillary services based on using the generating facilities that will actually be used to provide ancillary services. The Board requires that NB Power prepare this information by February 10, 2003. Now we understand that NB Power may have concern over providing some or all of this information. If so NB Power will be given the opportunity to provide detailed written reasons as to why the provision of and the making public of such information would not be in the public interest.

Now we would reconvene on -- sorry, let me just make sure I have got my dates right here. Now that detailed written reasons as to why NB Power might believe that it should not be made public shall be provided to all parties by February the 3rd. That will be a week in advance of the 10th when we would -- if in fact NB Power did not want to disclose some or all of the information, we would have oral argument. That would give the parties an opportunity to be heard on that.

The Board will further require NB Power to make available a witness who would be available on February the 10th to answer any questions that Intervenors or the Board may have with respect to the information which the Board will rule and will be put on the public record at that time.

Now are there any questions, Mr. Hashey, on that? Or am I clear?

MR. HASHEY: No. That is clear. I assume -- one thing though I would say, Mr. Chairman -- obviously we will give the direction to the appropriate people and see that this information is gathered.

I don't know, and I can't speak and say that this is something that is possible to be done within the time frame. It obviously can be done and will be done as a result of your ruling.

But what -- I would like the opportunity to come back if there is a problem with time frame. That is the only thing that I can't really address at this moment.

CHAIRMAN: And frankly I have just looked at my notes, which are not very clear. But I think that we had indicated that -- or sorry, when I spoke with staff about it, what I would like to have happen is that the information that I suggested be available on February the 3rd, the best way to go would be to have that available in written form on January 27th. That is the week before.

Then we would come back here on February the 3rd to argue, if you have objections, and have that witness.

MR. HASHEY: I have a real problem on February the 3rd. I'm in a trial in Moncton. And Mr. Morrison is out of the province. That is one of our problems that week.

CHAIRMAN: Gracious sakes. I thought we had reserved all those weeks.

MR. HASHEY: Not that one, I didn't think.

CHAIRMAN: All right. I will go back to the original dates that we talked about then. The written report that I talked about would be available on February the 3rd. And then we would reconvene on the 10th of February.

And Madam Secretary, would you look in your folder and see how many days we have in that week of February 10th?

MRS. LEGERE: February 10th to the 13th.

CHAIRMAN: Well, just thinking about it with the possibility of what might ensue, I think what we better do is see what arrangements we can also make to have some days in the week following that next week as well, which would be the

17th I guess. So we will check with the hotel and go from there.

MR. HASHEY: What would you be anticipating the second week, Mr. Chairman?

CHAIRMAN: Yes. We would be -- perhaps the greatest time-consuming scenario would be as follows, that the Board would rule, after extensive argument, that certain or all of the information that we have requested that you prepare be put on the public record with a witness there whom you would presumably lead the evidence.

And then it would be the opportunity for the Intervenors to cross examine on that. And who knows how long that will take, Mr. Hashey? You know, you could be --

MR. HASHEY: Yes. I know. I hear you.

CHAIRMAN: -- two or three days. And then we have got the legislation itself too.

MR. HASHEY: I can hear you.

CHAIRMAN: Okay. Mr. MacNutt?

MR. HASHEY: But that is submission time as well.

CHAIRMAN: Yes. Mr. MacNutt? Bring your mike in, sir.

MR. MACNUTT: Informal Intervenors?

CHAIRMAN: Pardon?

MR. MACNUTT: Informal Intervenors?

CHAIRMAN: All right. The Informal Intervenors, we had -- there were two, as I understand it, of the Informal Intervenors who did not receive the communication that went out before Christmas.

Those are the only two who have given any indication that they would like to make a presentation to the Board. And one said certainly they would go ahead tomorrow afternoon. And the other one said they wanted more time.

So my suggestion is going to be that we put them at 10:00 a.m. on Monday, February the 10th. And then we will start the rest of the process of the hearing after the two Informal Intervenors have had their presentation made to us, unless counsel or the parties have some objection to that.

MR. SMELLIE: Mr. Chairman, just a minor point. If -- I don't know how to express this. But if the applicant is putting in evidence on an issue, what I would like to do is just reserve a placeholder for the potential for Intervenor evidence on that issue.

CHAIRMAN: Yes.

MR. SMELLIE: I don't have any view on the matter right at the moment, Mr. Chairman.

CHAIRMAN: No. And we can only move along one step at a time, Mr. Smellie. But certainly I had anticipated that you might have that concern. And it is a legitimate concern. And we will just have to deal with it when the time comes.

MR. SMELLIE: That is fine, sir. Thank you.

CHAIRMAN: Thank you. Any other matters? If not we will -- again I want to thank the panel for the last two days of their participation. And I hope you are able to get out of town. I say that in jest.

And we will adjourn to reconvene on the 10th of February at 10:00 a.m. in the morning.

(Adjourned 4:23 p.m.)

Certified to be a true transcript of the proceedings of this hearing as recorded by me, to the best of my ability.

Reporter