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.
February 11th, 2003 9:30 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. Before we begin, any preliminary matters?

MR. HASHEY: Yes, Mr. Chairman, there are a few. As you will note we have added to the Panel this morning the two individuals requested. And they are here. And I don't know whether they are considered to be sworn or resworn.

CHAIRMAN: We will consider that you are under your -- still under your former oath.

MR. HASHEY: Thank you then. Then I have two answers to undertakings that we might as well deal with I think right up front.

The first one is yesterday -- and we have it listed as undertaking 53. And this was the one that came from the Board, Mr. Chairman, request that you file with us the specific interest rates that were used to calculate the short-term interest amount of half a million dollars for 2003, 2004.

CHAIRMAN: Right.

MR. HASHEY: And we do have that. And it comes by way of an attached table with a confirmation from the CIBC World Markets.

CHAIRMAN: Good.

MR. HASHEY: So that is ready to go.

CHAIRMAN: This will be A-53. Go ahead, Mr. Hashey.

MR. HASHEY: Thank you, Mr. Chairman. There is a second undertaking which is the one that was requested by Mr. Nettleton to Mr. Bishop which I believe was, could you undertake to provide me with the weighted average cost of capital that we could use for comparative purposes.

That document has been prepared. I think reference is to the transcript 2299 to 2300. And we have a response to that that we would table.

CHAIRMAN: Good. This will be A-54.

MR. HASHEY: That is the undertakings. Now the next issue we have --

CHAIRMAN: Could I just ask about what -- I think Commissioner Richardson and I and some of the other Commissioners thought was an undertaking is that, Ms. MacFarlane, you were going to share with us the advice that you got from the investment bankers dealing with --

MR. RICHARDSON: The bond issues.

CHAIRMAN: -- yes, bond issues.

MR. RICHARDSON: You had some meetings with CIBC World Markets. I believe you were going to have some more.

MS. MACFARLANE: Yes.

MR. RICHARDSON: And we are curious as to what indicated rates they were looking at and what kind of an equity position they were insisting upon.

MS. MACFARLANE: Right. The attention of the people in the province, as you might appreciate in the last little while has been on getting the legislation prepared and through. And treasury then very quickly turned their attention to this year's budget estimates.

The meeting with CIBC was postponed several times. And in fact it is happening as we speak. That was why I wasn't going to be available this morning. So the meeting is going on today. And CIBC will be here until Thursday.

So as far as I know there is no new information other than what I would have provided to you in December on the issues of cost of capital and return on equity and so on.

MR. RICHARDSON: If I recall your remarks indicated preliminary indications were a 60/40 that they were leaning to on the equity --

MS. MACFARLANE: Yes.

MR. RICHARDSON: -- debt equity?

MS. MACFARLANE: And that is what we were going into this morning's meeting with, as an understanding.

CHAIRMAN: Sorry. Go ahead, Mr. Hashey.

MR. MORRISON: I believe there is one other undertaking, Mr. Chairman. It came at the end of the day yesterday. It was a response from Mr. MacDougall. He wanted to know if the tariff included the revenue requirement for the proposed system operator.

And added to that was a request from Saint John Energy, being that since the legislation has a system operator proposed to be a non-profit corporation, are the costs that are allocated to the SO subject to return on equity, cost of capital and payment in lieu of taxes?

And I believe Mr. Snowdon is in a position to respond to that undertaking.

MR. SNOWDON: Yes. The first part of the question deals with the cost of the system operator being included in the

tariff submission.

And I believe it was Mr. Lavigne indicated that there was $500,000 put in the budget to cover the system operator anticipated costs. And they are what we consider to be sufficient to do that.

The second part of the question deals with the cost of capital. Most of the expenses that the system operator will incur are expense.

The only cost that would be subject to the cost of capital and return on equity would be the rental of the building that they are in, which would be part of the transmission costs. And that would be reflected in that. The rest is expensed only.

MR. HASHEY: Okay. I have no problem. If there is a questions that Mr. MacDougall might want to follow up on, obviously the Board wouldn't object if there is something that is not clear or clarified in the answers.

CHAIRMAN: Mr. MacDougall, did that clear up your questioning? Or do you want to question the Panel further on it?

MR. MACDOUGALL: That cleared it up, Mr. Chair. Thank you very much, Mr. Snowdon.

CHAIRMAN: Good. Thank you. Thank you, Mr. Hashey.

MR. HASHEY: Thank you, sir. Then to Mr. Bishop, you pointed out to me that there are a couple of corrections that you would like to make to the evidence you gave yesterday and referencing transcript 2299 -- at pages 2299 and pages 2300?

MR. BISHOP: That is correct.

MR. HASHEY: Would you deal with those?

MR. BISHOP: If I may please. On a request from Mr. Nettleton at and near the bottom third of the page, Mr. Nettleton suggests "And so on a before-tax basis it is 10.10 percent", talking about the average cost of capital.

And I responded by saying "You might phrase it that way. I would prefer to say that the before-tax basis on a rate of return on equity is 11 percent." That should be corrected to say on an after-tax basis the rate of return on equity is 11 percent.

And furthermore on page 2300 -- and again Mr. Nettleton questioned. And I quote "And, Mr. Bishop, it is fair to say from schedule 1, page 14 that the impact on the payment in lieu of taxes to this capital structure of 55 percent equity is that for every one dollar of equity there is 56.25 cents worth of payment in lieu of taxes that have to be included into the revenue requirement."

My mental math was not at all good. And I would correct the 56.25 cents to be 6.1875 cents.

That is the extent of my corrections. Thank you.

MR. HASHEY: I don't believe there are any other preliminary matters, Mr. Chairman.

MR. MACNUTT: Mr. Chairman, could the --

CHAIRMAN: Mr. MacNutt, Mr. Young had his hand up first, sir.

MR. CARR: If I could speak for Mr. Young. Just back to a little more clarity on Mr. Snowdon's comments on the system operator thing.

On the second part of the question our concern was that given the non-profit status of the system operator and the fact that when the application was filed is assumed it was not non-profit, does this change the revenue requirements in the application with respect to the system operator?

And in particular the question asked yesterday included the return on capital, which I think you have answered that that relates only to building.

But the other issue was the pseudo taxes, the payment in lieu of taxes. Is that a part of the revenue requirement of the system operator in the tariff as presently filed?

MS. MACFARLANE: The system operator will operate as a not for profit entity. It will buy most of its services at the outset from Transmission.

So let's say for example that Transmission incurs $100 worth of expense on behalf of the SO. The SO will be billed for that $100 on a before-tax straight cost basis. And the Transmission business unit will have a cost recovery.

So there will be a cost recovery directly offsetting the cost. Transmission will not have any tax impact. The SO will have paid that before-tax cost. It will have no tax impact either.

MR. CARR: And is that what was assumed in the tariff application?

MS. MACFARLANE: Yes.

CHAIRMAN: Mr. Zed, did you have question as well?

MR. ZED: I had a preliminary matter that is unrelated --

CHAIRMAN: We will go back to MacNutt then. I have kept him in abeyance here.

MR. MACNUTT: Yes. Mine is the simplest of questions, just a clarification of the correction made by the witness on page 23. He corrected 56.25 to a number which I read as 6.1875. What is the number?

CHAIRMAN: Would you repeat the number as you understood it, Mr. MacNutt?

MR. MACNUTT: 6.1875.

MR. BISHOP: That is correct.

MR. MACNUTT: Thank you.

CHAIRMAN: Preliminary matters, Mr. Zed?

MR. ZED: Yes, Mr. Chair. I just have a response to a request for information from the Chair. At one time you asked us to provide you with certain information regarding the Emera Energy Power contract with Maritime Electric, and Mr. Connors has advised that the contract expires December 31st 2004. The contract itself does not contain any further renewal rights. I think that was part of your question, although of course it's open to the parties to negotiate renewals. But the contract does not contain any automatic rights of renewal beyond the end of 2004.

CHAIRMAN: Thank you, Mr. Zed. Any other preliminary matters? If not, Mr. Nettleton.

<u>CROSS EXAMINATION BY MR. NETTLETON</u>:

Q. - Thank you, Mr. Chairman. Good morning, members, and good morning, Ms. MacFarlane and Mr. Snowdon. My clients wish to thank you for attending this morning.

I would like to start with trying to attain some clarity on the topic of the cost of capital that has been entered into this record, and there seems to be several different numbers floating about with respect to the various costs of capital. And what I would like to do is just to start with an understanding of what is on this record and what it applies to.

Mr. Chairman, for this purpose I have put together a document that I would treat as an aid to cross. I'm happy to have it marked as an exhibit. I have discussed this with my friend, Mr. Hashey, and he has told me he has no objection with that.

CHAIRMAN: Probably the best idea is to make it an exhibit, Mr. Nettleton.

MR. HASHEY: The only thing I could say, Mr. Chairman, we went through a whole rigamarole here earlier about marking things for identification. I don't see the necessity of that at this time, as long as it is understood that this is not evidence as come from a witness per se and would be given the weight as such.

CHAIRMAN: Mr. Hashey, I think I would treat it as Mr. Nettleton has introduced it. It's an aid to cross examination --

MR. HASHEY: Yes. And I think that --

CHAIRMAN: -- pure and simple. Not to the proof of the matters.

MR. HASHEY: I think that helps everyone to do that too, so I have no objection.

CHAIRMAN: So this will be JDI-32.

MR. HASHEY: It would be helpful for the Board -- or the witnesses could have a copy of this.

CHAIRMAN: If it's an aid to cross examination, yes. That's JDI-32, Panel.

Q. - Ms. MacFarlane, perhaps we can go through this document together. First, just so that we are absolutely clear, the cost of capital and the capital structures that have been discussed in this proceeding are in respect of rate making. It's intended for rate making purposes, is that right?

MS. MACFARLANE: That is one of the purposes, yes.

Q. - All right. But the cost of capital and the capital structure in particular which is included in your application is a deemed equity structure, is that correct?

MS. MACFARLANE: That's correct.

Q. - And so for the purposes of rate making we are talking about a deemed capital structure then, correct?

MS. MACFARLANE: Yes.

Q. - All right. Now under the heading Scenario One NBP Existing Capital Structure you can see that there is a 100 percent debt number in the capital structure column, do you see that?

MS. MACFARLANE: Yes.

Q. - And would you agree that that is in fact how New Brunswick Power Corporation in the past has been financed?

MS. MACFARLANE: I would agree with the 100 percent, yes.

Q. - And I'm sure we can debate, and I don't plan on debating what that rate is, but in any event whatever the rate is, that would be used to calculate the weighted average cost of capital?

MS. MACFARLANE: That's correct. I would just like to point out that the 7.5 percent, and I'm not sure where you got that reference, but it's similar to numbers that we would have used in the Coleson and Lepreau submissions for cost of capital. It is a forward looking number. It is not an embedded cost of debt. It's a forward looking cost of debt were we to be borrowing for future capital purposes.

Q. - And just for the record, the 7.5 percent number comes from the January 2000 study which I will discuss later with Mr. Bishop.

MS. MACFARLANE: Thank you.

Q. - Now with respect to scenario two, that is entitled the New Brunswick Power Applied for Transmission Revenue Requirement, and under the capital structure there we see a 60 percent long-term debt, a 5 percent short-term debt and 35 percent equity. Do you see that?

MS. MACFARLANE: I see it, yes.

Q. - And is that what this applicant -- what your application is intended to have this Board approve?

MS. MACFARLANE: Again when you look in the cost of capital rates you are dealing with an embedded cost of long-term debt there of 10.7. There is no representation here though it is in our application of the cost of debt -- new debt as the old debt attrits. But yes, that debt equity structure is -- I believe we also had a smaller amount of short-term. In the overall equity structure the short-term is 2.25 as opposed to 5 percent.

But your point being 65/35 is what we applied for.

Q. - And the 10.7 percent number is your long-term cost of debt derived from table 5, fair?

MS. MACFARLANE: No. It is the long-term cost of the existing debt. Over time that existing debt will attrit and be replaced with debt at a lower cost.

Q. - I understand that. But from your table 5 evidence the number 10.7 percent is what the output of table 5 is?

MS. MACFARLANE: That's correct.

Q. - Thank you. And that is what you are using for the purposes of the rates which have been applied for in this proceeding, correct?

MS. MACFARLANE: Only as it goes to the existing long-term debt. The compilation of the debt in the forward looking financial statements for transition start with the existing long-term debt but as issues mature they are replaced in the modelling by new long-term debt at lower rates because we happen to have lower prevailing rates in existence.

Q. - And so, Ms. MacFarlane, under the price -- or the performance base rate making proposal that you have applied for as well who takes the benefit of any reduction in that debt cost?

MS. MACFARLANE: The debt cost included in the application for new debt is approximately 7.5 percent, and it is therefore included in the revenue requirement. If we were to borrow at 8 percent instead of 7.5, or if we were to borrow at 7.1 as opposed to 7.5, as long as it fell within the band for the performance based rate making, the formulas there would apply as to whether it is shared, whether it stays with the utility, et cetera.

Q. - Ms. MacFarlane, is there any issues of debt coming due in the next two years?

MS. MACFARLANE: Yes, there are. Table 9 in my evidence goes back to the last audited financial statements which would be for the year ended March 31st 2002, and shows the attrition of debt over time. It is from that debt schedule and its attrition that the interest is calculated. And where it is based on existing debt it is 10.7 percent. Where existing debt attrits and new debt arises and ends up on the balance sheet of the transmission business unit the lower rate is applied in the application.

Q. - And what is the quantity of new debt that is going to be re-financed?

MS. MACFARLANE: I only have the debt table out until 2005. Between the period of time that we began which is 2000 -- we began this review which is in 2002, that is the period that the 10.7 percent would have been calculated on.

Q. - Right.

MS. MACFARLANE: Between that period -- the debt was 3.247. Between that period and the statement -- pardon me, the test year, some 900 million of debt in the corporation would have been re-financed and therefore included in the revenue requirement for transmission was an equivalent reduction in debt, and therefore an equivalent application of a new financing cost to new debt.

And you pointed to table 5. If you look on table 7 you can see that there is long-term debt of the -- long-term debt interest for the existing is 14.8 million in the application. Long-term debt interest for the new debt is 5.6 million in the application.

Q. - Right. And just to be clear, the long-term debt interest new relates to the re-financing activities that you will be doing during the period in which this application -- rates under this application would have effect?

MS. MACFARLANE: Yes. The reason I raise this, Mr. Nettleton, is that in scenario two you are indicating that this is the weighted average cost of capital we have applied for, and it is not, because you have missed one component of the capital, that being you have got long-term debt at 60 percent but some percentage of that debt is at embedded rates and some percentage of that is at forecasted rates.

I have a -- because this issue seemed to be expressed as a concern in the transcript yesterday when I was reading it, there seemed to be some misunderstanding between the weighted average cost of capital and this 10.7 percent which is merely the embedded cost of debt. I did prepare a table that might illustrate that a little more clearly, and I can certainly provide it if that would help in our understanding of this.

Q. - I think it would, but I would like -- and I will take up your offer, but --

MS. MACFARLANE: Okay.

Q. - -- I would like to just first start and finish with this document. And I'm still having trouble with understanding the notion that the 10.7 percent amount is or is not applicable to the 60 percent attributed portion of your capital structure?

MS. MACFARLANE: It is not. That 60 percent of the debt, some of it is old debt that has been carried forward, embedded debt, and the 10.7 percent is that embedded cost of debt. However, some of that debt is at re-financed rates which is in the vicinity of 7.5 percent. In fact 61 percent of that debt that you call existing is at the 10.7 percent. And 33 percent of it is at the lower rate of 7.5 percent.

Q. - Sorry. 60 percent is at the embedded cost and --

MS. MACFARLANE: If we were to take the total of long-term and short-term of 65 percent, the breakdown there is five percent of short-term, 33.2 percent is long-term debt under new rates that have been re-financed because of debt attrition of the old maturities, and 61.8 percent is long-term debt at the embedded cost. So it's that top line that is incorrect and needs to be broken apart.

Q. - I understand. And so the expectation then, Ms. MacFarlane, would be that the cost of debt going forward would be lower than the 10.7 percent?

MS. MACFARLANE: Based on what we understand to be forecast rates, that's correct.

Q. - Can you turn to page 18 of your evidence. That's table 10.

Q. - It's exhibit A-2, tab B, I believe.

MS. MACFARLANE: Yes.

CHAIRMAN: Could you give that citation again, Mr. Nettleton?

MR. NETTLETON: I believe it's exhibit A-2, tab B, Ms. MacFarlane's evidence for Panel C.

CHAIRMAN: And what page?

MR. NETTLETON: Page 18.

Q. - Ms. MacFarlane, do you see line 16?

MS. MACFARLANE: Yes.

Q. - And do you see the numbers between 2004 and 2005?

MS. MACFARLANE: Yes.

Q. - Would you agree that the cost of debt shown is increasing from 10.7 percent in 2004 to 10.98 percent in 2005?

MS. MACFARLANE: This is the embedded cost of debt. The embedded cost of debt is changing from 10.7 to 10.98. And were you to look at the columns, and look at the difference in the two, and what is leading to that is largely the growth in the sinking funds. And presumably the additional earnings from that growth in sinking funds would partially be included in the 10.98 percent but the bulk of it would be reflected in the following year, we are using averages here. This is -- when I said that the cost of debt is expected to go down, I mean the overall cost of debt. Because the new long term rates are expected to be lower than the historic long term rates. Table 10 is about existing long term debt, embedded cost of long term debt.

Q. - Ms. MacFarlane, is it not the case that you are using the 10.7 percent amount on the embedded cost of debt for the purposes of the starting point revenue requirement?

MS. MACFARLANE: That's correct. But the embedded debt or the existing debt is not the entire make up of the debt portion of the capital of the transmission business unit. There is existing debt. And we apply the 10.7 percent to that. But there is also new debt that has arisen as maturities have come into place.

Q. - And, Ms. MacFarlane, the portion of the, as you call it, the new long term debt, the quantity of that new long term debt, is that going to be increasing over the period of time in which these rates are intended to apply for?

MS. MACFARLANE: Perhaps if we looked at table 14(b) in exhibit A-2. It's on page 22 of my evidence. So if you look to lines -- this is the balance sheet. If you look to lines 13 and 14, you can see debentures and other loans existing. And you can see that that attrits over time, it reduces over time. And the test year is 164.4 million. And you can see on line 14 that as required, when those issues come due if there is not sufficient cash flow to extinguish them, they are refinanced. And we have a line called debentures and other loans, new issues.

So the long term debt included in the application has two components to it, some at embedded cost rates, which is this existing line. And another portion at forecast rates, which is the new issues line.

Q. - So that's very helpful. So the 66.5 million is the quantity of the new debt, fair, for 2003?

MS. MACFARLANE: Yes. The test year is 2004. It's 83.5 million.

Q. - And your .2 then is for 2005. The new debt is 98.5 million?

MS. MACFARLANE: That's right. You will notice in this instance there has been no attrition of the existing debt. But if we were to take this forward, eventually that existing debt would attrit down to zero, and the new debt would represent -- that plus short term would represent the 35 percent of the capital structure on an ongoing basis.

Q. - And just so it's clear then, how is the interest rate or the debt cost associated with the new debt included in the debt cost calculation for the purposes of the starting point revenue requirement?

MS. MACFARLANE: If you were to turn to table 7, which is on page 14, and this is where I do believe, Mr. Nettleton, the hand-out that I have would be very helpful.

Q. - Okay. If we could have it that would be great.

MS. MACFARLANE: It's the hand-out labelled table 7.

CHAIRMAN: That will be A-55.

MS. MACFARLANE: Table 7 on page 14 shows the calculation of the total finance charges. Line 1 is the long term debt interest existing. Line 2 is long term debt interest new. And line 5 is interest on short term debt, which is the subject of the undertaking number 53 that was delivered this morning.

We took the time yesterday, based on the discussion in the transcript, to expand table 7. And you see it here so that it's clear how those amounts of 14.8 million and 5.6 million were calculated. We take the opening and ending balances of existing long term debt, which would have come from table 6 in the evidence. There is the opening and ending balance of the new long term debt. We take the average of that and then we apply the embedded rate of 10.7, which is what we have been discussing, and the forecast rate of 7.5 on the new debt.

So the 19.5 million included in forecast total finance charges, you can see the calculation there is a combination of 10.7 percent on the embedded debt, 7 and a half percent on the new debt -- long term debt, and 5.06 percent on the short term debt.

Just below that, by the way, is IR 29 Nova Scotia Power Inc. And Mr. Bishop was referring to this yesterday. The breakdown for the 10.3 percent that was included in the ancillary services application for the weighted cost of debt in the proxy was 10.3 percent. And you can see there how that was calculated. We expanded that as well, that answer by two columns, so that we are simply looking at the weighted average cost of debt, not the weighted average cost of capital. And you can see that existing long term debt in the test year is 61.8 percent. New long term debt in the test year is 33.2 percent. Short term debt is 5 percent. For a total of 100. And the weighted average cost of debt is 9.35 percent.

Q. - Thank you, Ms. MacFarlane, that is useful.

MR. MACNUTT: Mr. Chairman? Mr. Chairman, I just wonder, the witness has referred to this document extensively but I do not believe I heard it being marked as an exhibit.

CHAIRMAN: I must be mumbling again, Mr. MacNutt. It's A-55.

MR. MACNUTT: My apologies to Mr. Nettleton.

Q. - Let's move on to scenario three, Ms. MacFarlane. And there -- with this explanation there will probably be an amendment as it relates to the cost of capital for the existing short term debt but I am -- based on what you indicated today and in this testimony. But that this scenario is simply the JDI CME transmission revenue requirement based on the evidence of Dr. Yatchew and I don't want to discuss this in any great detail, but it just simply points out the 70/30 structure that has been suggested in our evidence. And the cost of capital associated with it.

So we will move on to that next scenario on the second page.

MS. MACFARLANE: Could I just ask, Mr. Nettleton? I know you are supposed to ask the questions, but --

Q. - Yes.

MS. MACFARLANE: -- could you just provide us with the reference for the 8.2 percent on existing long term debt? I know the other two come from his evidence but --

Q. - Yes. That's the annual report stated coupon.

MS. MACFARLANE: That is the coupon rate?

Q. - Yes.

MS. MACFARLANE: Thank you.

Q. - Now with respect to scenario four, that is the NSPI IR 29 proxy unit capitalization. And this is simply a rehash of the response and it relates, Mr. Porter, to your proxy unit method of calculating ancillary services. And I am hoping that it comports with what exhibit A-55 now says?

MS. MACFARLANE: Yes, it does.

Q. - And the only point of difference then between the two is that there is a after tax cost of capital calculation included in scenario four causing the after tax cost of capital to be 13.66 percent. Do you see that?

MS. MACFARLANE: Yes.

Q. - Now with respect to scenario five that is from, Mr. Bishop, your evidence as it relates to the new ancillary service embedded cost study, that is the January 2003 cost study. And, sir, can you confirm that those numbers are accurate?

MS. MACFARLANE: If I may while Mr. Bishop is looking at it, I just wanted to indicate we looked at this this morning off a different document and the difference between the 9.35 percent weighted cost of debt that is in A-55 as I just handed out, IR 29, and what is here as 9 percent under the weighted average cost of debt is simply rounding. Mr. Bishop tells me that in his preparation of his embedded cost study he rounded down from 9.3 to 9.0, so they are intended to be the same. So example number 4 and example number 5 are intended to be the same with the exception of rounding.

MR. BISHOP: And my response, Mr. Nettleton, is that those numbers are correct.

Q. - All right. And then we move on to the last scenario, scenario six and it relates to, Mr. Bishop, the January 2000 ancillary service embedded cost study. And again, for rate making purposes as it related to the rates in which you sold power I believe to the Northern Maine ISA, you have included in that rate a debt equity structure of 60 percent debt, 40 percent equity and with cost of capital as 7.5 percent and 18 percent. Is that right?

MR. BISHOP: The 18 percent is before tax number.

Q. - And that then takes us to the undertaking that you have provided me with this morning --

MR. BISHOP: Yes.

Q. - -- undertaking 54.

MS. MACFARLANE: If I -- before you go to that undertaking if I could just indicate that Mr. Bishop was heading down the path that the 18 percent as a before tax number which means that you have doubled counted the tax here. You have added on 4.05 percent for payment in lieu of taxes. But the 18 percent is a before tax number, so that -- for in this scenario six your WAC is simply the 4.5 and the 7.2, which comes to 11.7.

Q. - So are you saying, Ms. MacFarlane, that to obtain the after tax cost of equity you would deduct the 4.05 from the 18 percent?

MS. MACFARLANE: You would either use 11 percent which is the after tax return on equity or you would -- and then deduct your payment in lieu of taxes or you would leave it as it is but you do not deduct the payment in lieu of taxes. You have double counted here is my point.

Q. - Well I understand your point, but I would like to -- I understand the words to your point of double counting but I would like to understand the calculation, is it not the case that you would be subtracting the 4.05 percent from the 18 percent and that product would then be the appropriate cost of equity?

MS. MACFARLANE: I don't think it's the subtraction. I don't believe the math would work that way.

Q. - Well could you undertake to provide us with that calculation since this is -- this scenario six is what is found in the cost -- embedded cost study for ancillary services in January 2000?

MR. BISHOP: Mr. Nettleton, I believe that A-54 in fact provides that calculation.

Q. - Okay. If we could turn --

MR. BISHOP: And it demonstrates that the rate of return on equity is 11.52 percent after taxes which equates to 18 percent before taxes. If you multiply the 18 percent by 64 percent because 36 percent is the tax rate, you will arrive at the 11.52 percent.

Q. - Well maybe we will take this and if we have questions we can look at this at the break. The calculators at the desk here are going in overtime. So we will just take that explanation. All right. Thank you.

Now, Mr. Bishop, you indicated this morning an apparent error in a question that I asked you yesterday at page 2300 of the transcript. And as I understand your corrected answer it is that for every one dollar of equity there is 6.187 cents provided for payment in lieu of taxes. Have I got that right?

MR. BISHOP: That's correct, yes.

Q. - Can you turn to schedule 2 of your -- of exhibit A-50, sir?

MR. BISHOP: I have it.

Q. - Now as I understand your new answer, sir, what we would expect to see is that for every one dollar of return on investment there would be only 6.1875 cents included in the payment in lieu of taxes line, is that correct?

MR. BISHOP: That is my calculation, yes.

Q. - Well let's just take a look at Belledune for a second. Do you see the return on investment amount being $47,312,271? Do you see that number?

MR. BISHOP: That is correct, yes. I see that.

Q. - And do you see the number below it being $26,613,152?

MR. BISHOP: Yes.

Q. - Subject to check, would you agree with me that the $26 million number is 56.25 percent of the return on investment?

MR. BISHOP: Subject to check -- excuse me, please. Yes. Subject to check, I do agree with that. However, the response that I corrected this morning was that you had indicated that every one dollar on equity there is 56 cents worth of payment. This is 56 percent on return. So your comparison is apples and oranges.

Q. - Okay. Thank you for that clarification. So for every $1 of return on equity there is 56.25 cents of payment in lieu of taxes that is required to be recovered in the revenue requirement from tax -- or from ratepayers --

MR. BISHOP: Are you asking --

Q. - -- is that fair?

MR. BISHOP: That is fair, yes.

Q. - Thank you. And is it also fair, Mr. Bishop, that a smaller ratio or percentage of the equity component in the capital structure would result in a lower amount required to be recovered in the revenue requirement for payment in lieu of taxes?

MR. BISHOP: Certainly the mathematical response would have to be yes.

Q. - Thank you. Now, Mr. Bishop, I would like to turn to exhibit A-52. Could you get that out, please?

MR. BISHOP: I have it.

Q. - Could you turn to page 5 of that document, sir?

MR. BISHOP: I have that.

Q. - Can you help me understand how that interest rate was derived for the purposes of this model? And the interest rate for the record is shown as 7.5 percent.

MR. BISHOP: My understanding is that that number was the current then interest rate available at the time when the study was completed.

Q. - The current available interest rate. You mean the interest rate that someone could go out and borrow at at that time?

MR. BISHOP: That is correct. That NB Power could have gone out and borrowed it at at that time.

Q. - And that is the rate that you have used for the purposes of calculating the return or the interest cost on existing generation plant, is that correct?

MR. BISHOP: For the purposes of this study that is correct.

Q. - And this study was used for the purposes of what, sir?

MR. BISHOP: This study was used for the purposes of setting rates for ancillary services in an interim period for a transmission tariff that was our ancillary service under a tariff that was applied for servicing Northern Maine and an interim basis before a tariff was restructured and applied for approval before this Board.

Q. - Mr. Bishop, your cost of financing for a return on equity before taxes is shown to be 18 percent, do you see that?

MR. BISHOP: That is correct. I see that.

Q. - How is the return on equity derived for the purposes of this model?

MR. BISHOP: That return was derived as our estimation or assumption of a reasonable amount of return before taxes given the debt equity capitalization structure that was assumed in the study --

Q. - Well what steps --

MR. BISHOP: -- for the generation unit I might add.

Q. - What steps did you take to determine that 18 percent rate of return?

MR. BISHOP: I wasn't particularly involved with the preparation of this study. If I might just confer with my colleague on that response please?

Q. - Please.

MR. PORTER: As Mr. Bishop has indicated, the number was based on what was expected to be a reasonable, allowable return on equity, the 60/40 debt/equity structure for a generation entity.

And I don't know the details behind the calculation other than I believe it came from the experience and knowledge of parties that were involved in negotiations on independent power projects in the province.

Q. - Independent power projects, not regulated power projects?

MR. PORTER: Well, the people involved would have had the combination of experience with the independent power projects and rate-making methodology with vertically integrated utility.

Q. - So Mr. Bishop, is the 18 percent return on equity the rate of return on equity which generation recovers from ratepayers in the standard offer service in the bundled rate?

MR. BISHOP: That rate has yet to be determined, sir. It is not necessarily.

Q. - But for the purposes of the year 2000, would that be the rate?

MS. MACFARLANE: For purposes of the year 2000, we are a vertically integrated utility financed through 100 percent debt. So there is no equity included -- return on equity component included in our rates at the current time.

Q. - Domestic rates?

MS. MACFARLANE: That is correct.

Q. - But in rates charged to export sales there is that embedded equity component?

MR. BISHOP: From a point of view of complying with the terms of the negotiated contract for the provision of these, that was an agreed-upon rate between the parties.

Q. - Right. Mr. Bishop, turning to the capitalization structure of 60/40, 60 percent debt, 40 percent equity, can you help me understand how that capitalization structure was determined?

MR. BISHOP: Do you want to do that?

MR. PORTER: I will take that question. It is the same issue. It was looking at what would be a reasonable, appropriate capital structure for a generation entity.

Q. - An integrated generation entity?

MR. PORTER: No. At that time it was looking at it as a generation-only entity. For rate-making purposes these ancillary services are clearly services provided by generation.

This capital structure was based on the picture at that time, the estimation of what would be appropriate capital structure for a generation-only entity.

Q. - So for the purposes of generation you have determined a different capital structure for ancillary service pricing than what you would expect for transmission services, for example?

MR. PORTER: Yes. That is correct. And the reason is with respect to the ancillary services that are provided by generation. We are talking about an entity which would have a different risk level and appropriately a different capital structure and potentially a different return on equity.

Q. - But at the time you were operating, New Brunswick Power was an integrated entity, correct?

MR. PORTER: That is correct. But as we say, this calculation was for rate-making purposes and was done to establish a reasonable rate for services provided by generation only.

Q. - Would you have looked at other regulatory decisions respecting the capitalization structure of similarly situated generation companies like Nova Scotia Power, for example?

MR. PORTER: I just want to point out the context of this, the usage of this document in these rates. My understanding is that Northern Maine came to NB Power and asked for rates for these services, fixed rates so that they could establish a market in Northern Maine. And this would mitigate their concerns about market power and ancillary services.

And so in response to the request from Northern Maine, NB Power put together this document, came up with these rates, submitted them not to any regulatory body, we submitted them to the Northern Maine Independent System Administrator and their board for their review. They approved the rates on that basis. They agreed to accept these rates as a contractual arrangement. And that was the basis and the type of detailed study. And the comparisons with other jurisdictions, et cetera that you are asking about, I don't believe that level of detailed study was undertaken at that time.

Q. - Mr. Porter, when we got down this road of ancillary services and embedded cost information, it all arose out of an undertaking that you provided to Saint John Energy, exhibit A-23, I believe.

And at that time you had provided by way of undertaking to JDI, information, background information to your calculations.

Do you remember that, sir? And that resulted in JDI -- the exhibit JDI-27, the exhibit.

MR. PORTER: Yes, I do. Saint John Energy had asked for a comparison of rates, being a page of generation in other jurisdictions in comparison with what we have in our study based on the proxy pricing.

And subsequently JDI undertook to perform due diligence on those numbers in our exhibit A' -- you said it was 20' --

Q. - I believe it was 23.

MR. PORTER: -- 23.

And then that -- one of those documents -- one of the supporting documents to those numbers was put into evidence by JDI. And Panel C was cross examined on that document.

Q. - And one of the exhibits or one of the documents, the background documents that wasn't provided due to its length, was a document concerning the cost of service and rate design for Bangor Hydro, which you had in your possession and provided to my expert Dr. Earle.

Do you remember that?

MR. PORTER: Yes, I do.

Q. - I have an excerpt that I would like to show you, Mr.

Porter, if I could.

CHAIRMAN: That certainly looks like a call for a break.

MR. NETTLETON: That is fine.

(Recess)

CHAIRMAN: Any preliminary matters? Mr. Nettleton, go ahead, sir.

Q. - Ms. MacFarlane, the calculators are still going here. But one question I have for you with respect to the calculations provided earlier is this. Is the applied for 11 percent return on equity that's included in your application calculated on a before or after tax basis?

MS. MACFARLANE: It's an after tax return.

Q. - Thank you. Now, Mr. Porter, just before the break we were going to talk a little bit about an excerpt from a document that you provided JDI and CME with, which did not form part of JDI-27.

Mr. Chairman, what I would like to do again is just have this marked as a separate exhibit. It is a document, or an excerpt of a document that Mr. Porter did provide to us with respect to background materials on the ancillary services that were included in the Saint John Energy undertaking, exhibit A-23. Could that be marked as an exhibit, sir.

CHAIRMAN: Yes. That's the six pages in front of me. The first page of which is headed, Cost of Service and Rate Design?

MR. NETTLETON: That's correct.

CHAIRMAN: Okay. Indicate that that is JDI-33.

Q. - Now, Mr. Porter, this was the cost and rate -- the cost of service and rate design document that you believe was prepared by Bangor Hydro for an application before the FERC when FERC Order 888 was first introduced. That was in 1995, correct?

MR. PORTER: Yes, that's correct in -- at the time that we undertook to respond to Saint John Energy's question on this hearing and the Panel C proceedings, we did not have the information from Bangor Hydro. And we sought that and received this document in response to that attempt to find information.

Q. - And that's the only purpose of the first page of the document.

The second page of the document entitled Schedule 5, Operating Reserves - Spinning Reserve Service, Mr. Porter, that would be one of the capacity based ancillary services, correct?

MR. PORTER: Yes, that is correct.

Q. - And with respect to the table that's provided, there is reference to line item 2, production capacity cost. Do you see that?

MR. PORTER: Yes, I do.

Q. - And that's the purpose of that page of the document. If we turn the page to Schedule 6, we again see a production capacity cost line item. Do you see that?

MR. PORTER: Yes, I do.

Q. - And this is for supplemental reserve service, do you see that?

MR. PORTER: Yes.

Q. - All right. And then if we turn over to the reference Schedule 7, which is the next page, we see the similar types of line items that have been used in the fixed charge embedded cost study, which we are now used to. And in column i there is a capital cost total, do you see that?

MR. PORTER: Yes, I do.

Q. - All right. And from that there is a reference also of a carrying charge, that is in column h. Do you see that?

MR. PORTER: Yes, I do.

Q. - And that references in the notes to Schedule 8. Do you see that?

MR. PORTER: Yes, I do.

Q. - And Schedule 8 is the next page. And with respect to Schedule 8 there is reference to a weighted cost of capital. Do you see that?

MR. PORTER: Yes, I do. At line item number 1?

Q. - Right. And that amount, sir, is 7.18 percent. Do you see that?

MR. PORTER: Yes, I see that.

Q. - And the source of that number is referenced in statement AV. Do you see that?

MR. PORTER: I see the source is Statement AV, yes.

Q. - And if we turn to the next page, we turn to Statement AV. And can you read into the record, sir, the type of capital and the ratio for the long-term debt capital?

MR. PORTER: You want the ratio?

Q. - Yes.

MR. PORTER: Long-term debt is 71.56 percent.

Q. - And then with respect to the types of equity, they have listed two types. The first is preferred stock. And what is the ratio of that, sir?

MR. PORTER: 4.77 percent.

Q. - And with respect to common stock, what is the ratio of that, sir?

MR. PORTER: 23.68 percent.

Q. - Thank you. Mr. Porter, the 60 percent debt, 40 percent equity amount that you have used in the embedded cost of service study for ancillary services provided to Northern

Maine ISA, this Bangor Hydro information was not taken into account in determining your 60/40 ratio. Is that fair?

MR. PORTER: I don't -- yes, that's fair. I don't believe anyone was in possession of this document at that time at NB Power.

Q. - Thank you. And, Mr. Porter, are you aware whether Nova Scotia Power Inc. provides ancillary services?

MR. BISHOP: I might answer that. Nova Scotia does not have a published rate. There are some negotiated rates for some reserve services that are provided by Nova Scotia to New Brunswick.

Q. - But they as an integrated utility would, as part of the service they offered, would have to include ancillary services, whether it be on a bundled basis or not, fair.

MR. BISHOP: On a bundled basis that's fair, yes.

Q. - And, Mr. Bishop, are you aware of the capital structure that has been approved by the Nova Scotia Public Utilities Board for Nova Scotia Power Inc.?

MR. BISHOP: I don't specifically recall that number. It's in their annual report.

Q. - Subject to check, would that be 65 percent debt, 35 percent equity?

MR. BISHOP: Subject to check, yes.

Q. - Thank you. Now, Mr. Porter, your proxy method, I would like to -- that's all that I am intending to refer to that document, Mr. Chairman.

I would like to refer back to, Mr. Porter, in particular the proxy methodology. Mr. Porter, the proxy methodology includes a different capital structure than the embedded cost study performed in the year 2000, fair?

MR. PORTER: Yes, that's correct.

Q. - And why was -- why was that choice made, sir?

MR. PORTER: The choice with respect to the capital structure for the proxy units was based on the best information available at the time that decision was made.

Q. - What information would that be, sir?

MR. PORTER: During one of the discussions with Dr. Morin during his consultation prior to the filing of this application, a discussion of typical -- or he had made a comment on typical capital structures for generation only entities. And he was quoting a Standard & Poors document. And I don't -- I don't have more detail than that. But he quoted a Standard & Poors document that indicated that 55 percent equity in a generation only entity is -- is reasonable and common.

Q. - So this was a recommendation from Dr. Morin?

MR. PORTER: No, it was not a recommendation from Dr. Morin.

He did not undertake any study as to what would be appropriate structure for NB Power Generation Company or comment on what would be appropriate for rate-making purposes for ancillary services. He merely provided that information during a discussion that according to Standard & Poors a 55 percent equity component is normal or reasonable. And I don't know his exact wording. But reasonable for a generation entity.

Q. - Can you point to where that type of reference is in his evidence in this proceeding?

MR. PORTER: No, that is not in the evidence in this proceeding.

Q. - What evidence is in this proceeding that justifies the 55 percent debt -- 55 percent equity, 45 percent debt, other than the comment that you have just made, sir?

MR. PORTER: There is -- there was no such evidence in our direct evidence. And there have been no interrogatories on that issue to date.

Q. - Ms. MacFarlane, did you retain Dr. Morin to provide any -- was the scope of his mandate to include opinions or recommendations with respect to anything other than what is stated in the purpose of his testimony found in his direct evidence at question 6?

MS. MACFARLANE: No, we did not.

Q. - And will you agree with me, Ms. MacFarlane, that that purpose was not for a purpose to recommend a capital structure for generation assets?

MS. MACFARLANE: I agree. And I don't believe Mr. Porter implied that it was.

Q. - Thank you. Mr. Porter, other than the comment that was made to you by Dr. Morin, have you taken any steps to ascertain whether any electric generating utility, integrated or otherwise in Canada, has ever been approved a capital structure of the one that you are asking this Board to approve for the purposes of ancillary services?

MR. PORTER: No, I have not.

Q. - Thank you. Ms. MacFarlane, do you consider the difference between the applied for capital structure for transmission related facilities and the capital structure that is being implicitly applied for with respect to ancillary services to be an insignificant or a significant difference?

MS. MACFARLANE: I don't -- I don't believe I would characterize it either way. I believe that generation is a different business. It's in a different part of the industry and it faces different risks. And certainly we are comfortable post making the application with the 45/55 in the sense that that too is what is being recommended by bankers to the Province of New Brunswick as a reasonable debt equity structure for that entity. They would recommend a higher return than what we have applied for in the ancillary service application, but the 45/55 accords with advice that the Province has gotten from them as well. We did not have that advice when we made this application but it does confirm that it's reasonable.

Q. - What confirms that it's reasonable, ma'am?

MS. MACFARLANE: The fact that that accord -- the fact that what we have included accords with the recommendations that the Province's investment bankers are making to them to give the generation business unit in order for it to be able to get an investment grade credit rating. As I say, they have recommended 45/55. They have also recommended a rate of return that would be in excess of 13 percent where we have included 11 percent.

Q. - But, Ms. MacFarlane, I appreciate that these discussions are underway, but with respect to the significance or insignificance of the change in capital structure, and I take your point, it's a different business, but if it were the same business, if this were transmission, would a change to a 45 percent debt, 55 percent equity be a significant or insignificant change as it related to a 65 percent debt, 35 percent equity

MS. MACFARLANE: If this were applicable to a transmission business unit itself it would be a significant change I think.

Q. - And would that have any bearing, do you think, on the rate of return on equity that would be required from investors to attract new capital?

MS. MACFARLANE: It certainly would.

Q. - What would happen? Would it be -- would it cause the rate to increase or decrease?

MS. MACFARLANE: If you could provide me with what it is that -- what base we are moving from?

Q. - Well from the capital structure that we have today it's 65 percent debt, 35 percent equity, and moving to a capital structure of 45 percent debt, 55 percent equity, would that have the effect of increasing or decreasing the return on equity?

MS. MACFARLANE: It should, all things being equal, have the impact of reducing the required return on equity, in the same business, facing the same risks.

Q. - Mr. Porter, with respect to the return on equity that you have used in the proxy method calculation, am I right in thinking that that is 11 percent equity?

MR. PORTER: Yes. 11 percent return on equity, yes.

Q. - Thank you for that clarification. And have you obtained any opinions or third party recommendations with respect to the appropriateness of that return on equity for a 45 percent debt, 55 percent capital structure?

MR. PORTER: Are you asking for recommendations in addition to those that Ms. MacFarlane just spoke to? Perhaps you could repeat those.

Q. - Well at the time that you made this application, Mr. Porter, did you have anyone provide you with advice about the return on equity component?

MR. PORTER: The internal advice that I received was that if 11 percent is reasonable for transmission, then it would be conservative, if anything, to apply 11 percent on the generation side, and that was done on that basis.

Q. - I see.

MR. PORTER: We did not undertake a study or receive external advice to come up with a recommended number, but I expect if we had, the number would have been higher than 11 percent.

Q. - Now are you aware of the recent rate decision approved by the Nova Scotia Public Utilities Board in respect of Nova Scotia Power Inc.'s return on equity for its bundled rate?

MR. PORTER: I'm aware of the decision. I don't remember the specific number.

Q. - Subject to check, that number would be 10.15 percent on a bundled basis?

MR. PORTER: Subject to check, I will accept that.

Q. - Now turning to you, Mr. Bishop, in respect of exhibit A-50, that is the most recent embedded cost of service study, correct?

MR. BISHOP: That is correct.

Q. - And the most significant difference between the revenue requirement calculations for ancillaries as between the year 2000, that is exhibit A-52, and the 2003 study, is the capital cost assumptions, fair?

MR. BISHOP: I'm not really sure that is the most significant effect. There may be O&M charges and other effects involved. It is an effect.

Q. - I didn't have the opportunity last night to go through a line by line calculation, but it's -- certainly the cost of capital and capital structure are certainly different, fair?

MR. BISHOP: They are different. In fact if you refer to the exhibit, the undertaking that we provided this morning, exhibit 54, that the weighted average cost of capital in the year 2000 study is 9.1 percent. My recollection tells me that that for this embedded cost study as exhibit A-50 is 10.1 percent.

Q. - Mr. Bishop, that is based on what type of capital structure?

MR. BISHOP: I'm sorry. Which is based on what type of capital structure?

Q. - Well the 2000 embedded cost study is based on what capital structure?

MR. BISHOP: It's a capital structure of 60 percent debt and 40 percent of equity.

Q. - Why did you change that assumption as it relates to the 2003 embedded cost of service study?

MR. BISHOP: Very specifically it was changed to match what was provided to this Board in a proxy unit calculation so that there could be a direct comparison of one to the other.

Q. - Now, Mr. Porter, with respect to the proxy methodology is it fair to say that that methodology is based upon the construction of new plant?

MR. PORTER: Yes.

Q. - And, Mr. Bishop, is it fair to say that the embedded cost of service study that you have provided is based upon existing plant?

MR. BISHOP: That is correct.

Q. - And is it fair to say that the year 2000 embedded cost of service study is also based upon existing plant?

MR. BISHOP: That is correct.

Q. - So why did you not use the 60 percent debt, 40 percent equity capital structure in the most recent study?

MR. BISHOP: I think I have already answered that question, sir, for easy comparison of the Board from the proxy to the embedded cost study.

Q. - So you weren't --

MR. PORTER: I might add to that that Mr. Bishop has made the linkage to the proxy study and that I had already indicated in the proxy study the capital structure was based on more up-to-date information than what was used in the selection of the 60/40 in the study that was performed in 1999/2000.

Q. - Mr. Bishop, would you agree that the effect of altering this assumption, at least one of the effects of altering this assumption, is or causes an increase in the payment in lieu of taxes included in the revenue requirement?

MR. BISHOP: I would agree, yes.

Q. - Do you know how much of that -- how much of a change that is?

MR. BISHOP: No, I do not.

Q. - Subject to check, would you take the number $15 million to be accurate?

MR. BISHOP: I can't comment on that number, sir.

Q. - You can't. There is no way for you to check that?

MR. BISHOP: Well subject to check, yes. I will comment, yes.

Q. - Now, Mr. Bishop, with respect to your year 2000 interest rate assumption of 7.5 percent, why did you not use that interest rate assumption in the most recent 2003 study?

MR. BISHOP: Again, I chose to use an interest rate which was an interest rate similar to that which was used in the proxy study. Admittedly I did round it, but it is similar.

Q. - All right. And, Mr. Porter, yesterday I believe you referred us to IR response NSPI-29. Could you turn to that, please. That's exhibit A-4, page 251.

MR. PORTER: Yes. I have that.

Q. - And can you confirm with me, Mr. Porter, that the long-term debt existing is shown to reflect 10.7 percent?

MR. PORTER: Yes, it is.

Q. - And it is the long-term new debt that has a rate of 7.5 percent?

MR. PORTER: That is correct.

Q. - And Mr. Bishop, you can confirm with me that the year 2000 study assumed a 7.5 percent cost of debt?

MR. BISHOP: That is correct.

Q. - And that would be for the full 60 percent component?

MR. BISHOP: I believe that is correct.

Q. - Thank you.

MS. MACFARLANE: Mr. Nettleton, I would just like to add -- and I think Mr. Bishop would agree with me. I would just like to point out that this cost of service study was done in 2000 for a specific purpose, for purposes of negotiating a contract. It was not done with the rigor that would be required for a regulated rate as is happening here.

In retrospect, were we to do this again, we would be using a combination of embedded debt and forecast debt in that rate. But at the time, you see what the results are there. That does not mean that we believe that is the correct go-forward approach.

Q. - You appreciate, Ms. MacFarlane, the purpose of the year 2000 study and why it was obtained for this record?

MS. MACFARLANE: Yes.

Q. - And it is the fact that the proxy unit prices that are included in your evidence or in the evidence of Mr. Porter comport with the proxy unit prices found in the year 2000 study?

MS. MACFARLANE: All I'm suggesting is that the year 2000 study was not done for purposes of submitting to a regulator.

Had it been done, many of the points that you are making, that there was perhaps less rigor than one might normally expect to see behind some of these cost of capital issues, they weren't done, because this was a specific contract negotiation, as opposed to being done to apply broadly to New Brunswick ratepayers.

Q. - The Northern Maine Independent System Administrator doesn't afford the same level of scrutiny as this Board?

MS. MACFARLANE: These were negotiated rates. And they were accepted between the parties. And had they wished to challenge them, they would have.

Perhaps they did in getting to this particular structure. But they were negotiated rates.

Q. - Is this a negotiation, Ms. MacFarlane, this proceeding?

MS. MACFARLANE: This proceeding is not a negotiation, no.

Q. - The title of the study was the Embedded Cost Study in the year 2000 --

MS. MACFARLANE: Yes.

Q. - -- on the document?

MS. MACFARLANE: Yes.

Q. - Is it the position of New Brunswick Power that that in fact is not the case?

MS. MACFARLANE: I'm suggesting that were we to do it again we perhaps may have taken a different approach to what is represented here as an interest rate.

Q. - Hindsight is 20/20?

MS. MACFARLANE: That is right.

Q. - Ms. MacFarlane, have interest rates generally increased or decreased over the past three years?

MS. MACFARLANE: Incremental interest rates have decreased.

Q. - Thank you. And Ms. MacFarlane, I think this will be an easy one for you to agree with.

All of the new debt issues issued and included in your evidence subsequent to January 2000 have been issued at a rate less than 7.5 percent?

MS. MACFARLANE: Slightly less, yes.

Q. - 6.38 percent is the closest that I could find from table 9 of your evidence. If you want to turn to that, that is again page 17 of exhibit A-2, appendix B.

MS. MACFARLANE: I believe that particular table would not include the guarantee fee which is an additional .0689 nor would it include any debt issue cost related to those offerings.

What you are seeing in that table is a representation of the coupon rates.

Q. - And would the 7.5 percent rate that is included, Mr. Bishop, in your year 2000 study, include provision for the government guarantee fee?

MR. BISHOP: Again that was a negotiated rate at that point in time. And it was an approximated negotiated rate. It bore no relevance to the negotiation.

Q. - Back to table 9, Ms. MacFarlane, you will agree with me that since the year 2000 forward, the highest debt cost issue, the coupon rate is 6.38 percent?

MS. MACFARLANE: Yes.

Q. - And there are several issues that have been issued under that, correct?

MS. MACFARLANE: That is correct.

Q. - Thank you. Mr. Bishop, let's move on to this topic of cost of equity or return on equity.

Why did you change the 18 percent value for the purposes of the most recent study?

MR. BISHOP: Again the return on equity that was chosen for the most recent study, that was used in the most recent study, was the same or similar return on equity that was used by the proxy studies that was before this Board.

Q. - All right. So it is simply transposition of what was included in the proxy method calculation to be used in your embedded cost study?

MR. BISHOP: That is correct.

Q. - It has nothing to do with the actual cost of debt or return on equity that NB Power Generation earns in respect of its assets?

MR. BISHOP: Anymore than the proxy unit had that same relevance, no.

Q. - Thank you.

MR. BISHOP: I might point out that at the moment NB Power does not have a return on equity given the existing capital structure.

Q. - And it is also financed with 100 percent debt?

MR. BISHOP: That is correct, yes.

Q. - And that is on existing plant, correct?

MR. BISHOP: That is on existing plant.

Q. - That plant has been financed and is in service?

MR. BISHOP: Yes.

Q. - Now you are aware, sir, that the 11 percent ROE has been determined, that is the return on equity has been determined by taking into account the capital structure of 65 percent debt, 35 percent equity?

MR. BISHOP: I believe the number is 45 percent debt, 55 percent equity.

Q. - But the number 11 percent that has been used by Mr. Porter in his proxy method calculation was based upon the value for transmission?

MR. BISHOP: I understand that is correct, yes. And so we feel it is conservative or low for a generation return on equity.

Q. - Now Mr. Bishop, am I correct in thinking that the embedded cost study relates to the actual existing plant? It doesn't include forecast new capital requirement for new plant?

MR. BISHOP: That is correct. All of the net book values are as of the average of 2003, 2004 net book values.

Q. - And why is it again that you haven't assumed in the capital cost -- if the objective is to obtain your embedded cost, why is it that you haven't used the actual instrument that has financed existing plant, namely debt and debt alone?

MR. BISHOP: Again, repeating my previous answer, to compare the embedded cost of this study with the proxy study that had been presented to the Board, and on the understanding that legislation was pending which would restructure us to have a level of debt and equity financing different from the 100 percent debt financing that exists today. Our costs tomorrow will be different from those today at 100 percent debt financing.

Q. - Are you expecting, Mr. Bishop, an infusion of equity equal to 55 percent of your net book value?

MR. BISHOP: I'm not sure what to expect. And I think that is the ongoing discussions at the moment. But this is the best information that I had to do the study.

Q. - But one would think that if on an embedded cost basis one is assuming a 55 percent equity capital structure, and there is no equity component today, could one not reasonably expect that there would be an infusion of actual capital in the amount of 55 percent of your net book value of plant?

MR. BISHOP: That is correct. That is the only way that you can get to a 55 percent equity number.

Q. - An actual infusion?

MR. BISHOP: Yes. That is correct.

Q. - Mr. Bishop, was there any third party review of the assumptions in respect of the 2000 embedded cost study?

MR. BISHOP: No, there were not. Just to clarify, that is the 2000 cost study that you were asking?

Q. - Yes. I'm sorry. Yes. Exhibit A-52.

MR. BISHOP: I'm sorry. I have consulted that we did have a consultant that provided some level of input on that study.

Q. - Mr. Porter, you seem to be helping Mr. Bishop out with this. Who might that consultant be?

MR. PORTER: Dr. Eric Hirst, a well-recognized expert an ancillary services had reviewed our study, and his area of expertise is not in the finance side, so with respect to the issues we have been speaking of today, the capital structure, return on equity and interest rates, he would not have reviewed that. His review would have been with respect to our determination as to allocating the capacity and to ancillary services versus capacity that is used to produce energy and those types of issues. I just wanted to clarify the record that there was a level of consultation.

Q. - And, Mr. Bishop, was there any third party consultant that has reviewed the current embedded cost study?

MR. BISHOP: No, there was not.

Q. - Sorry. The mike wasn't on.

MR. BISHOP: No, there is not.

Q. - Thank you. Now, Mr. Bishop, are you aware or familiar with the Point Lepreau refurbishment proceedings that took place before this Board?

MR. BISHOP: I am somewhat aware, yes.

Q. - That matter related to new generation plant requirement, is that fair?

MR. BISHOP: I believe it related to refurbishment of the existing plant so that we were not including any additional plant capacity.

Q. - And that would require the investment or the need for new capital for that refurbishment purpose, correct?

MR. BISHOP: That is correct.

Q. - Are you aware whether the 9.33 percent discount rate that was based on a 65/35 percent debt equity structure was used in that proceeding?

MR. BISHOP: I'm afraid I'm not aware of that.

Q. - But that proceeding did relate to the requirement for new capital?

MR. BISHOP: That is correct.

MS. MACFARLANE: And those proceedings took place before NB Power was aware that our capital structure would change. The cost of capital therefore was assumed to be for those projects the cost of -- the incremental cost of debt, and the incremental cost of debt too, the issue that we are facing here in terms of a deemed structure of having to ensure that there is equity between in-province users and out of province users was not an issue in those proceedings either.

Q. - Sorry. If I could have a moment. I'm just marking off questions left, right and centre here. Mr. Bishop, are you aware the actual weighted average cost of debt reported in the New Brunswick Power annual report, the coupon rate -- the weighted average coupon rate is 8.2 percent?

MR. BISHOP: Subject to check, yes.

Q. - And that -- you made the decision not to include that in your embedded cost study?

MR. BISHOP: That is correct.

Q. - Mr. Bishop, before we leave the topic of capital structure, I provided your counsel with a two page undertaking concerning changes in the modelling that we would like you to perform. Mr. Chairman, I have copies made of that as well for the Board, but it is -- and for the court reporter, but it is intended to be addressing the point I raised yesterday about the various scenarios that we would like taken. I propose two options. One would be to simply mark it as an exhibit and save the time and effort of having to read the individual undertakings into the record and just rather have the exhibit be the undertaking, if you will.

MR. HASHEY: We could save a whole lot of time and trouble here. We don't agree to this undertaking. We think it's just too late in these proceedings to be handed a document and be asked to do a whole lot of calculations.

Mr. Nettleton and his people, if they want to do calculations can do the calculations, I have no problem with that. But to require this panel or these people at this point in the proceedings to go through a large number of assumptions and calculations I think is asking too much.

MR. NETTLETON: Mr. Chairman, maybe before we get into this debate I could distribute to you and to the other members --

MR. HASHEY: That's fair.

MR. NETTLETON: -- the document in question so we can understand and we are working off the same --

CHAIRMAN: All right. And I -- you know, does this harken back to yesterday when you asked a series of questions about -- to take and have the study redone on this basis and that basis?

MR. NETTLETON: Yes, it is.

CHAIRMAN: Okay. Could you hand that out then, please.

MR. NETTLETON: Yes. Mr. Chairman, the nature of the undertaking is based upon the late filing of both the most recent embedded cost study, which is the exhibit A-52, January 2000 study, which we only received yesterday, and also the embedded cost study that was filed with the Board on January 31st, the 2003 study, which is A-50.

Now, Mr. Chairman, one would have expected this type of information to have been filed with the application and that evidence could then have been the subject matter of information requests. And indeed this undertaking very much resembles a typical information request that would be asked by an intervening party.

The point of the exercise, Mr. Chairman, is to determine what the resulting proxy -- sorry, what the resulting ancillary costs would be with changes to the capital structure using the 2000 model, which we know is the most proximate to the proxy cost methodology, and also the most recent updated embedded cost study conducted for the year 2003.

We submit that there are significant anomalies, shall we say, as between the assumptions found in each of those studies and what is on this record, and the only way that we can test and understand what the impact is to the ancillary service charges is to request this information.

Mr. Hashey has indicated that we would have the ability to conduct the analysis. Mr. Chairman, we don't. We don't have the studies. We have looked at the information and the output. It is inappropriate for us to be making mistakes or errors in the assumptions that are included in those studies, which we don't know about. The best way to have this type of information produced is by the author of the initial reports, and that is Mr. Bishop and New Brunswick Power as it relates to the January 2000 study.

Those are my submissions on that point.

CHAIRMAN: Mr. Hashey?

MR. HASHEY: Thank you, Mr. Chairman. My response to that would be simply, we are still relying on the proxy and that is the study that we are relying on. We were requested by the Board and did conduct an embedded cost study and that has been filed and that has been questioned here. There was no request for the earlier study that I know of, which we question its relevance in any event, until yesterday. I think to put this much work on these people that are engaged in many, many activities at this time will not really gain that much for this Board, and certainly we would object to this large exercise that arises from this request.

CHAIRMAN: Thank you, Mr. Hashey. Just before I ask the other intervenors, my recollection of yesterday simply was that whatever questions were put to you yesterday, Mr. Bishop, it wasn't a big effort to rerun the model. That was my recollection of it. But are you saying now that to do what Mr. Nettleton is asking be done is a lot of work?

MR. BISHOP: It's -- Mr. Chairman, it's just simply multiplied by the number of different cases that he has wanted to run. So it -- I had anticipated yesterday one case of making comparable numbers with all the fixed charges comparable to the latest embedded cost study. Simply multiplies that effort by the number of cases there. It will take some time.

CHAIRMAN: When you say some time, what would you anticipate?

MR. BISHOP: Probably half a day to a day's work.

CHAIRMAN: Half a day to a day?

MR. BISHOP: Yes.

CHAIRMAN: Any other intervenors have anything they would like to say?

MR. NETTLETON: Before you -- I should point out ---

CHAIRMAN: Yes, Mr. Nettleton.

MR. NETTLETON: -- that I was short on copies, Mr. Chairman, and I haven't been able to provide other parties with this. I note that it's close to the noon hour. I would be happy to provide those copies and perhaps upon our return comments could be provided then.

CHAIRMAN: All right. That's certainly fair enough. We will reconvene at 1:30. But any idea how much longer your cross will take, sir?

MR. NETTLETON: I expect at least two hours, sir.

CHAIRMAN: And just canvassing the room again, are there any other intervenors who will have questions for this panel? You are not an intervenor, Mr. MacNutt.

MR. MACNUTT: I waited for an appropriate length of time for intervenors to respond and then I thought I would jump in.

CHAIRMAN: Fair enough.

MR. MACNUTT: We will have in my grand estimate half an hour.

CHAIRMAN: I guess we are here tomorrow. All right. We will break to 1:30 then. Thank you.

(Recess - 12:00 p.m. - 1:30 p.m.)

PANEL CONSISTS OF:

Sharon MacFarlane

Darrell Bishop

Wayne Snowdon

CHAIRMAN: I apologize to Mr. MacDougall and the other intervenors. The Board made a premature decision. We will hear what you have to say concerning Mr. Nettleton's request that the six scenarios be produced. So, Mr. MacDougall?

MR. MACDOUGALL: We do have some comments which I would have made at the end of the break. But as you had indicated, the document needed to be handed around, and would hear from us after that. So I will make the comments now on behalf of WPS Canada.

Our comments, Mr. Chair, go generally to A-52. And some of these comments would have been made in final argument. But I think they have to be made at this stage now because of the nature of the extra information that's being asked to be put on the record.

We have a concern with how A-52 may be being used, or how other scenarios arising out of it may get on the record. Particularly because the only reason it's now before this Board is because yesterday there was a statement made that Mr. Marshall had said the proxy units were similar or consistent with some embedded cost study. So therefore, Mr. Nettleton asked to have that produced. It was only produced yesterday. It was then put on the record. But to date we have not seen anything from the Panel or from NB Power that states that the proxy unit approach was based on that document. There was one statement that said it is similar to and consistent with that document.

The document is some three years old. There is now in front of the Board a new embedded cost study, which appears to be an appropriate form of embedded cost study to be done NB Power, which they did on the basis of a ruling by this Board.

And if there is anything on the record that may have to be compared, and certainly we will argue this, it's the proxy approach or the embedded cost approach.

But to go back now and to do all the scenarios in question 1, which is to put a whole bunch of numbers to a three year old study that was done, and which was said by the NB Power Panel to be done for the specific purposes of a contracted negotiation with Northern Maine, we just find that highly unusual. We believe it will complicate the record. We believe it will put a lot of information on the record that isn't necessary. It's not a position -- that study isn't being supported by anyone or for any purposes in front of this Board. It was done three years ago for a specific purpose. We are very concerned that it's going to start complicating the issues by having a whole bunch of scenarios dealing with a study that no one is supporting for any purpose at this proceeding.

And the proxy unit approach, from everything we have heard today, isn't based on that study. There is one statement that says the proxy numbers ended up being similar and consistent with an old out of date study done for a purpose that's not the purpose of the ancillary services before this Board.

So we really think it's quite unusual to try and get all of this information in question 1 in front of the Board at this time.

With respect to question 2, that does deal with a new form of study. If Mr. Nettleton is seeking some views on how that may be changed by various scenarios, I guess that's open to him to look for that and then to argue around that.

But question 1, we have some serious difficulty as to how that provides any value to this Board.

CHAIRMAN: Thank you, Mr. MacDougall. Now I jumped. Does Emera or Nova Scotia Power have any comments, Mr. Zed?

MR. ZED: No, we don't have, Mr. Chair.

CHAIRMAN: Saint John Energy?

MR. YOUNG: No, Mr. Chairman.

CHAIRMAN: Mr. Nettleton, what do you say to Mr. MacDougall's comments in reference to Question 1?

MR. NETTLETON: Well, Mr. Chairman, first I find it somewhat surprising that an intervenor is objecting to another intervenor's request for information from the applicant. I would think that if there was any objection to be raised, it would be from Mr. Hashey, not from another intervenor in this proceeding. It's not Mr. MacDougall who is requesting this information. It is JDI and CME.

Now the second point, Mr. Chairman, is that Mr. MacDougall's argument seems to have a logical disconnect. Mr. Chairman, the evidence so far on this record about proxy cost is that this exhibit A-52 is the only evidence that is similar to or consistent with embedded costs.

If he is asking me not to produce or have produced the information with respect to exhibit A-52, but then says it's okay for exhibit A-50, well, we also have on the record, Mr. Chairman, that A-50 has absolutely nothing to do with proxy cost methodology of pricing. Notwithstanding the order and direction that you have asked this applicant to provide in respect of embedded cost of service.

So in summary, Mr. Chairman, a), I don't think it's appropriate for Mr. MacDougall and his client who may very well be wanting a very embedded cost for the purposes of commercial gain, to be wanting on this record that which might cause or show the embedded cost of ancillary services to be lower.

Secondly, and in conclusion, the information and the need for the information is to demonstrate what and how the embedded costs of ancillary services -- the best information that we have, albeit cluttered and albeit in strange places, the best information that we can have on the record to find out what these various scenarios will cause and generate in terms of pricing.

CHAIRMAN: Mr. Hashey, I feel duty bound to give you an opportunity to comment as well, sir.

MR. HASHEY: Well, Mr. Chairman, I certainly tried to make the points, but not as effectively as Mr. MacDougall did earlier. However, all being said, you will note that there is a gentleman missing from the Panel. And at this very moment work is going on in relation to these things. If the Board feels that they want them, we obviously provide the Board everything we can.

CHAIRMAN: We will take a two minute recess.

(Recess)

CHAIRMAN: Well, we have taken the opportunity to consider your comments, Mr. MacDougall. And we certainly agree with you that there are definitely unorthodox things that are occurring during this hearing. But why break the pattern, I guess. So we will go ahead.

And we had made an improper ruling to begin with. But we now confirm that, having given the opportunity of the interveners to address the Board. We indicated that the witness who was on the panel is now back working and can do so as long as it takes to produce the various scenarios.

If there are questions, Mr. Nettleton, that are best answered by him, then once you have finished all the available questions, we will adjourn until he is able to come back again.

Mr. Hashey?

MR. HASHEY: Mr. Chairman, I have requested from Mr.

Nettleton that -- and he has graciously I think agreed -- that questions that have to be directed to Ms. MacFarlane for certain would be best directed this afternoon. She is under a fine line.

And maybe if there are questions from other interveners or from Mr. MacNutt, that they might oblige. And that would apply to Mr. Snowdon as well possibly. And if need be, the embedded costs stuff could be discussed further tomorrow, if we run out of time.

CHAIRMAN: All right. Well, I --

MR. HASHEY: If that is possible, I would make that request.

CHAIRMAN: Well, I'm sure counsel opposite will try and go along with you.

MR. NETTLETON: Just so that you have a roadmap of where I'm going, Mr. Chairman, I intend to cover three last areas. There is one area relating to Bill 30 which I would like to discuss with Ms. MacFarlane, a second area with respect to the other items of the embedded costs found in exhibit A-50, which I will discuss with Mr. Bishop, and then thirdly with Mr. Snowdon.

But the good news is I expect it to be done by the break, if possible. So I heed to Mr. Hashey's comments. But I'm trying to rock and roll here as best I can.

CHAIRMAN: Okay. Carry on, sir.

Q. - Mr. Bishop, with respect to one of the last questions I have concerning the cost of capital or the return on equity on your exhibit A-50 study, which was 18 percent, you will recall, sir, the reference to before taxes.

Do you recall that?

MR. BISHOP: That is correct.

Q. - And sir, what taxes were you liable to pay in the year 2000?

MR. BISHOP: The only taxes that we referenced -- and I think in fact, to a small correction, the number is slightly less than 18 percent before taxes. The calculation I think will show somewhat less than that, 17.5 roughly.

And the tax actually is in payment in lieu of taxes, that we might anticipate paying our owner. In fact it is more than anticipated now. It is legislated.

Q. - No. I understand that. But in the year 2000, you will confirm with me, that there was no tax obligation to be paid by New Brunswick Power in respect of these services?

MR. BISHOP: In year 2000?

Q. - Yes.

MR. BISHOP: That is correct. Yes.

Q. - And I'm sorry. I gave you the wrong reference. It is exhibit A-52, the year 2000 study, which is where the 18 percent number is shown on a before tax basis?

MR. BISHOP: Okay. That is helpful. Yes. I confirm that is the correct.

Q. - And that was shown on a before tax basis. But if you just confirm with me, there were no tax obligations required to be paid?

MR. BISHOP: No. In fact there were not. And that number, as we have pointed out, had come at a point of negotiation with Northern Maine utilities, actually in a market or approaching a market, recognized that it was unreasonable for them to expect to receive services at the embedded cost of capital from a Crown-backed corporation -- yes, embedded cost of capital or debt from a Crown corporation, a Crown corporation backed by government --

Q. - The only point, Mr. Bishop, is that the 18 percent number on an after-tax basis would be 18 percent?

MR. BISHOP: Yes. That is correct.

Q. - Thank you. Ms. MacFarlane, heeding the request of Mr. Hashey, let's begin with some discussion on Bill 30 if we could.

What I would like to do is just first talk about legacy or existing debt and how this legacy debt gets into the new or soon to be new corporation, New Brunswick Transmission Corporation.

As I understand it, we have one dot called today New Brunswick Power Corporation. And in the future, the very near future, we will have a corporation called New Brunswick Electric Finance Corporation.

Can you help me, now that the bill has been passed or is tabled, can you help me understand how the dots get connected with the flow of the debt?

MS. MACFARLANE: I will just preface it by the fact that, as I say, there are meetings this week to finalize this issue. Because there are two ways that this can be done. And we are just finalizing that this week.

But let me mention -- let me start by saying that under the Act -- the first dot you mention, NB Power Corporation becomes continued under the Business Corporations Act as New Brunswick Power Holding Corporation.

And then there is provision in the Act for transfer orders to allow the assets of NB Power to be -- under those transfer orders the assets, the liabilities, et cetera to then be moved to subsidiaries that NB Power creates.

So if we start with NB Power Holding Corporation which now is the same as the previous NB Power, the --

CHAIRMAN: I don't mean to interrupt, Ms. MacFarlane.

Excuse me. But it will create five corporations, will it not? Because the SO, as I read the legislation, is a separate corporate entity.

MS. MACFARLANE: That is correct.

CHAIRMAN: So there would be five plus Holdco?

MS. MACFARLANE: That is correct. But the SO will not be created by New Brunswick Power Holding Corporation. It will be created by government, as will the Electric Finance Corporation.

CHAIRMAN: Oh, I see. All right. I'm sorry.

MS. MACFARLANE: They are not any longer part of the NB Power family. It will be two separate corporations.

CHAIRMAN: Okay. Are they both -- I'm sorry, Mr. Nettleton. It is your cross.

MR. NETTLETON: I'm intrigued by these questions as much as anyone, Mr. Chairman.

CHAIRMAN: All right. What I call Debtco which is Financial corporation, Debtco remains a Crown Corp. and an agent of the Crown?

MS. MACFARLANE: I don't believe it is an agent of the Crown. Yes, it is. It is the SO that isn't. You are right. It remains an agent of the Crown.

CHAIRMAN: Is that the same for the system operator?

MS. MACFARLANE: The system operator is not an agent of the

Crown. It is a Crown Corp. It is not an agent.

CHAIRMAN: But a Crown Corp.?

MS. MACFARLANE: Yes.

CHAIRMAN: And then there are the four butterflies as we referred to them previously?

MS. MACFARLANE: That is right.

CHAIRMAN: And they are all -- they are spawned by Holdco under the Business Corporations Act?

MS. MACFARLANE: That is correct.

CHAIRMAN: Thank you.

MS. MACFARLANE: So we now have a collection where we have New Brunswick Power Holding Corporation which is essentially what New Brunswick Power was, has all of the assets and liabilities and so on. It creates these four corporations under the Business Corporations Act.

And at the same time the government creates the SO, as you pointed out. But they also create this Electric Finance Corporation which is a Crown Corporation owned by government.

So the next step would be that NB Power Holding Corporation and EFC, the Electric Finance Company undertake a debt equity swap. In fact it is a debt for debt swap and a debt for equity swap.

All of the debt of NB Power and all of the, shall we say, related accounts are sent over to EFC. And when I say related accounts I mean the deferred debt cost, the accrued interest cost, the accompanying sinking funds, the U.S. dollar hedges that we have in place, everything that accompanies that pool of debt moves over to Electric Finance Corporation.

And then Electric Finance Corporation sends back to the holding company a combination of debt and equity. And the combination that it is sending will be roughly 55/45. But what it is sending -- or how that amount is determined is based on what capitalization is required in each of these four subsidiary companies.

So in the case of Nuclear for example, it will continue to be 100 percent debt. The other companies will have market-based capital structures. So the blend of debt that comes back to the holding company is based on what ultimately will end up in the subs.

So the first step is simply a debt equity swap between Holdco and EFC and in fact is a debt for debt swap and a debt for equity swap. Because the debt that comes back is, shall we say, less complex because it does not have all of these things attached to it like sinking funds and hedges and so on and so forth.

Once it is in the holding company, now the holding corporation has assets and it has debt and equity, then the transfer orders allowed under the legislation come into place.

And holding company transfers to each of the subs the assets that are needed for its operation. And it transfers -- at least this is the approach we are looking at now -- it transfers debt to those subsidiary companies.

And it either transfers or causes the subs to reissue some sort of non-voting equity in order to take the equity from Holdco down into the subsidiary corporations. And the non-voting equity carries rights to dividends with it that non-voting equity has come from EFC.

So the voting shares are held by Holdco. But the non-voting equity, the equity that attracts the dividends, is sitting over with EFC.

Q. - Okay. This is very helpful and I think somewhat different from what we discussed it earlier in the proceeding?

MS. MACFARLANE: It shouldn't be. I believe that is what our understanding has been throughout.

Q. - So to be clear, Electric Finance Corporation does not have any security, whether it be debt issued or other forms of security such as a non-voting share.

Electric Finance Corporation will not have any type of security in New Brunswick Transmission Company?

MS. MACFARLANE: Yes, it will, in the following sense. The initial debt for equity swap occurs between EFC and Holdco. And in exchange for EFC taking a portion of the debt, it receives consideration in the form of a non-voting -- a series of non-voting shares in Holdco.

Then when the transfer of assets and obligations moves from Holdco down to the subs, that non-voting equity from EFC is either transferred down or in fact the non-voting equity is reissued from the subsidiary to EFC and the non-voting share left at Holdco is canceled.

We are just working out the mechanics of that now.

But ultimately the relationship with a non-voting equity will be between Transco and EFC.

Q. - But Transco -- will Transco then have any opportunity to -- as the holder or ultimate holder of the security, will Transco have any ability to determine the prudency or the reasonableness of the cost of the non-voting equity share?

MS. MACFARLANE: Those non-voting equity shares will be variable rate shares. And they will be noncumulative shares. All of that to say that it is the board of

Transco that will have to declare dividends in order for them to be issued to EFC.

So that decision will be made by that board based on the earnings and then overall cash and balance sheet position of the company.

Now there is an expectation on behalf of the ultimate owner that Transmission will earn a rate of return and will declare dividends in an amount equal to what a comparable commercial operation would issue. There is an expectation. But it still requires an act of the board of directors to make those dividends payable.

Q. - And let's be clear, Ms. MacFarlane. The return on equity that this Board approves in respect -- if any, in respect of your application, there is an approval for you to earn that return through rates charged to customers, correct?

MS. MACFARLANE: That is correct.

Q. - And so are you saying that the dividend amount associated with the non-voting equity stock is the equity or the return on equity that this Board will be establishing?

MS. MACFARLANE: No, I'm not suggesting that. Dividends are paid out of return on equity, but they are not equal to return on equity. It would be difficult to sustain your operation is you were paying out all your earnings as dividends.

Q. - So it is going to be paid out in the form of a dividend?

MS. MACFARLANE: That is correct.

Q. - Ms. MacFarlane, you are a Chartered Accountant?

MS. MACFARLANE: Yes.

Q. - Are you aware of any tax implications of a intercorporate dividend?

MS. MACFARLANE: Dividends paid between --

Q. - Corporations?

MS. MACFARLANE: -- Canadian corporations --

Q. - Yes.

MS. MACFARLANE: -- are not taxable.

Q. - They are not taxable?

MS. MACFARLANE: Right.

Q. - And so the return on equity that you have applied for in this proceeding is an after tax rate of return on equity, correct?

MS. MACFARLANE: That's correct.

Q. - Ms. MacFarlane, help me because I'm obviously not as well schooled as I should be on finance matters, but it strikes me that right now New Brunswick Power Corporation has its assets financed with 100 percent debt. Correct?

MS. MACFARLANE: Yes.

Q. - And debt is a taxable -- or is a tax deduction for the purposes of calculating income tax, correct?

MS. MACFARLANE: Correct.

Q. - So it has -- it is an efficient method of financing from a tax perspective?

MS. MACFARLANE: Correct.

Q. - Ms. MacFarlane, if there is a debt equity swap why would a corporation exchange a tax efficient financing tool such as debt for a security or financing tool that doesn't have that tax efficiency?

MS. MACFARLANE: Because tax efficiency is not the primary driver here. The primary driver is being able to borrow in the markets. And a balance sheet that consists of 100 percent debt, though that is efficient for NB Power as it exists today, being able to borrow with government -- the government's credit rating, it is not efficient in an era when in fact NB Power is trying to borrow on its own credit. We simply would not be able to borrow on our own credit with 100 percent debt as our capital structure.

Q. - I understand that for the purposes of attracting new capital that that is your position. But, Ms. MacFarlane, as it relates to the cost of obtaining the equity, why would you as a corporation, as an officer of a corporation desire or wish to replace a tax efficient method of financing when you now know that you are going to be obligated to pay taxes unlike the past? Why would you exchange that for equity if the cost of that equity financing device is higher?

MS. MACFARLANE: I think in Mr. -- in Dr. Morin's testimony he went through the issue of the cost effectiveness or cost efficiency of the debt equity arrangement and there is a most efficient point on the curve where you look at the higher cost of equity versus the lower cost of debt, but you have to balance that against the strength of the capital structure and therefore the credit rating that would be available to you and your ability to attract that low cost debt in the markets.

It is a matter of public policy, it is a matter of legislation that NB Power's capital structure will be changed. The government has determined they no longer want to guarantee NB Power's debt on a go-forward basis. That's not a matter for us to debate, it's done.

Since it's done we have to be competitive in the commercial -- or in the financial markets in order to be able to attract capital. And that requires a certain capital structure on a go-forward basis.

Q. - Ms. MacFarlane, the debt that will be assigned from New Brunswick Power Corporation, soon to be New Brunswick Power Holding Corporation to New Brunswick Electric Finance Corporation, we are talking about the existing -- what we have called in this proceeding legacy debt, correct?

MS. MACFARLANE: That's correct.

Q. - And New Brunswick Power -- sorry, New Brunswick Electric Finance Corporation is an agent of the province?

MS. MACFARLANE: That's correct.

Q. - It's a crown corporation?

MS. MACFARLANE: Yes.

Q. - And New Brunswick Holding Corporation will remain a crown corporation?

MS. MACFARLANE: A crown corporation but not an agent of the crown.

Q. - And so as between the obligation to pay the existing debt that obligation will be and remain with the province?

MS. MACFARLANE: Yes. The intent though is as the debt attrits over time as issues mature, the portion of the debt represented by -- the portion of the debt that remains in the subsidiary company as it matures, if there is not sufficient cash to retire that obligation, the entity will refinance it in their own name on their own credit. So the government guarantee over time as the debt attrits will disappear.

Q. - Over time?

MS. MACFARLANE: Over time.

Q. - And so over time the expectation, as I understand your explanation here, Ms. MacFarlane, is that New Brunswick

Transmission Corporation over time will be refinancing the obligation in its own name to bond holders?

MS. MACFARLANE: That's correct.

Q. - And, Ms. MacFarlane, when the assets of New Brunswick Power -- New Brunswick Transmission Corporation are transferred under the transfer order, they won't be encumbered or there won't be security taken in the specific assets, will there?

MS. MACFARLANE: The debt obligations that will exist on April 1st and that will be transferred from Holdco down to NB Power are government guaranteed issues, so there are no calls on the assets of the organization at that time.

I expect that with new debt there will be such covenants but for the debt that will exist on April 1st they are on the government guaranteed credit.

Q. - Okay. So to be clear, the government guarantee remains in effect and applies to the existing legacy debt?

MS. MACFARLANE: That's correct.

Q. - So there is -- we have used this term lifeline, there is this lifeline that remains in the form of a government guaranteed form of debt security in respect of the existing legacy debt?

MS. MACFARLANE: That's correct. It would be very difficult for the government to escape that obligation.

Q. - Quite so. Quite so. Now, Ms. MacFarlane, how much new debt is New Brunswick Transmission Corporation going to be refinancing over the course of the period in which this application applies, namely 2004 and 2005?

MS. MACFARLANE: In exhibit A-2, which is the evidence page 22, table 14-B, is the forecast balance sheet. So by the -- in the test year of the long-term debt 164 million will be existing debt, what you were referring to as legacy debt, and 83 million of that will be new issues. The -- no legacy debt expires in 2005 and I'm sorry I don't have 2006 with me.

Q. - All right. So just to be clear then. The government guarantee the lifeline on the existing debt exists and will remain in place for -- I'm sorry -- the number is again -- I'm trying to scramble for the table?

MS. MACFARLANE: Table 14-B on page 22 in exhibit A-2, and that's in direct evidence of Sharon MacFarlane.

Q. - So for 2004 the 164.4 million will have a government guarantee associated with it?

MS. MACFARLANE: That's correct. And the embedded cost of debt, the 10.7 percent includes an assumed guarantee fee on that -- well it assumes a credit spread adjustment fee, shall we say, on that amount.

Q. - I don't mean to -- I'm not planning to get back into our debate --

MS. MACFARLANE: Okay.

Q. - -- on the applicability of table 5.

MS. MACFARLANE: I might just add in response to your earlier questions, Mr. Nicholson, about the way the debt equity swap will work. I mentioned early on that what we are determining this week is whether it will be a debt equity swap or a debt for debt and debt for equity swap. You notice on this forecasted balance sheet we were looking at merely a debt equity swap and therefore you continue to see on the balance sheet deferred debt costs, sinking funds, et cetera, and that may be where we end up.

What we are hoping to do is re-engineer the debt at the same time that we do the debt equity swap, so that what comes back, though it is the same weighted average cost, the same weighted average term as the pool that goes over, when it comes back it looks more like corporate debt in the sense that there aren't sinking funds, there aren't some of these other items with them. So we should be able to determine that this week, what the ultimate structure will be.

Q. - Ms. MacFarlane, are you saying that you are going to have all of these issues resolved prior to April 1 in terms of your financing structure?

MS. MACFARLANE: Yes.

Q. - But that won't happen before the record in this proceeding closes, correct?

MS. MACFARLANE: That's correct. I suspect that the cabinet document that will direct the debt equity swap to happen will be put before the Lieutenant-Governor-in-Council some time mid March. That's the schedule that's underway right now.

Q. - Ms. MacFarlane, Electric Finance Corporations' interest in New Brunswick Transmission Corporation, I'm curious, will New Brunswick Electric Finance Corporation hold all of the equity in New Brunswick Transmission Corporation?

MS. MACFARLANE: No, it will not. New Brunswick Holding -- New Brunswick Power Holding Corporation will hold the voting equity, though as it is currently contemplated that voting equity will be at nominal value. It is the non-voting equity that EFC will hold in the transmission company.

Q. - And I believe also there is contemplation that after one year that the legislation has come into force and effect, that that voting equity held by New Brunswick Holding Corporation will be transferred to the Crown?

MS. MACFARLANE: That's correct. One year after that particular section is proclaimed.

Q. - So in that respect, the debt that is held or taken by New Brunswick Transmission Corporation, and now I'm talking about new debt, New Brunswick Transmission Corporation will be -- will have all of its equity held by the Crown?

MS. MACFARLANE: That's correct, unless the Crown chooses to do something with that share.

Q. - I understand. But that's mere speculation at this point. All that we know is what the Bill says --

MS. MACFARLANE: That's right.

Q. - -- and that is that at least for one year Holdco will hold --

MS. MACFARLANE: We don't -- there is nothing in the legislation though that would indicate that Transco will not continue to be, shall we say, a non-agent of the Crown, and therefore expected to be able to maintain that investment grade credit rating and borrow on its own name. The legislation suggests that that will carry on regardless of who owns the voting equity. That's our understanding.

Q. - But that will be confirmed at some point a year from now?

MS. MACFARLANE: That's correct.

Q. - Ms. MacFarlane, on day one after this structure takes effect, who does New Brunswick Transmission Corporation owe its debt obligation to?

MS. MACFARLANE: On April 1st, 2003, once the debt equity swap at the restructuring has taken place, the debt will be -- again there is two approaches we are taking to this. And under one approach the debt would be owed to Holdco. Holdco would then have a back-to-back with EFC and EFC owes the debt to the province. Under another model the debt obligation would be transferred from Holdco directly to the subsidiary and therefore the relationship would be the subsidiary with EFC and EFC with the province. There is two possibilities that will be sorted out this week.

Q. - Than you. And in respect of the proceeding before us today, the cost of debt that you have applied for for recovery in rates, how does that cost of debt decision, not the applied for amount, but the decision of this Board, how does that factor into this structure?

MS. MACFARLANE: I think it was in Dr. Morin's presentation he made to us early on that a utility needs to be able to attract capital and cover its cost. The embedded cost of debt for the portion of the debt that is being allocated back to Transco will not change regardless of whether it's owed to Holdco, whether it's owed to EFC or whether it's owed to the province directly. The embedded cost of debt will not change and the utility needs to be able to recover that. If it doesn't it's obviously earning a lower rate of return on equity which ultimately weakens its balance sheet and makes it less able to attract capital.

Q. - Okay. Give me one minute. There is one -- I think we have covered this, but I want to be absolutely clear. The new debt amount that is shown in your forecast on table 14-B of 83.5 million, when that new debt is financed it will be New Brunswick Transmission Corporation that is issuing that debt to bondholders?

MS. MACFARLANE: That's correct.

Q. - And that debt will not be in any way held by New Brunswick Electric Finance Corporation?

A. That's correct.

Q. - Thank you. Now, Ms. MacFarlane, when the new debt gets issued, is there some contemplation that that new finance obligation would come from any other source other than debt? Would there be any type of equity component, actual equity component that would be used to finance that obligation?

MS. MACFARLANE: That's not contemplated at this time.

Q. - It's not?

MS. MACFARLANE: It's not.

Q. - So there will not be any actual equity infusion in the form of additional new capital that is required by New

Brunswick Transmission Corporation?

MS. MACFARLANE: There may be new equity infusions required. As an example, were the transmission organization to participate in the Neptune project, obviously a significant amount of capital would be required and the utility would only be able to get a certain portion of that from the debt market. So an equity infusion would be required in a circumstance like that. But it is not contemplated that that equity infusion would come from the market at this time.

Q. - Where would it come from then if it wasn't the market?

MS. MACFARLANE: The Act allows the Province of New Brunswick, where there are major capital projects that it determines are in the interest of the Province itself, to make further equity infusions.

Q. - And how would the Province then finance that equity infusion?

MS. MACFARLANE: It may finance it through EFC issuing further debt, and again that is allowed for in the Act. It may do it through accumulation of retained earnings in EFC from Transco over a period of time. It may choose to, and I think again there is provision in the Act to look for private equity for the Province to choose to enter into joint ventures or other arrangements in order to do that.

Q. - And is it fair, Ms. MacFarlane, that that type of project there is -- that type of project is not contemplated in the years in which this tariff application is intended to be in force and effect?

MS. MACFARLANE: That's correct. The major outstanding projects that are being contemplated are the second tie-line into the U.S. and the Neptune project. In both of those the investment would -- the significant portion of the investment would be outside of the tariff.

Q. - Ms. MacFarlane, just so that I can understand the default risk on the debt that New Brunswick Transmission Corporation has, as it relates to the existing legacy debt, that is guaranteed by the Province, fair?

MS. MACFARLANE: That's correct.

Q. - And the default risk then lies with the newly financed debt, fair? The -- what we have called the new issues?

MS. MACFARLANE: Well yes, that's correct, but I believe there would certainly be an impact on Transmission's future ability to borrow if it defaulted on the legacy debt regardless of the fact that it's guaranteed by the Province. I think it would certainly have an impact on how the credit rating agencies viewed the corporation.

Q. - Quite so. And having a regulated rate of return and a revenue requirement approved by the Board allowing you to recover your cost of legacy debt, would certainly provide the corporation with some sense of security, correct?

MS. MACFARLANE: Yes.

Q. - And that would be something that is not found in the commercial world, correct? Not every corporation has a guaranteed source of revenue?

MS. MACFARLANE: It's correct that not every corporation has a guaranteed source of revenue. It's also the case that many corporations do have guarantees of some nature standing behind their debt, whether it's a subsidiary corporation with a parental guarantee from a larger corporation, that's quite a common arrangement.

Q. - And will there be a parental guarantee issued on the new issues when that gets financed?

MS. MACFARLANE: No, there won't be. It wouldn't be of any interest to a bondholder in any event because Holdco will have no assets other than the shares in these companies, and the covenants we expect to see attached to the debt will not allow transfer of value between the companies. So there would be no value to a parental guarantee.

Q. - And would there be any type of guarantee with any crown agent such as Electric Finance Corporation?

MS. MACFARLANE: That's not the intent. The intent is to have capital structure that allows these companies to borrow in their own name.

Q. - Now we touched briefly on the topic of the assets and any encumbrances which those assets would have. My understanding, Ms. MacFarlane, is that there are no encumbrances on the assets for financing today but that would -- but that potential ability to encumber the assets for new financing would be available in the future, is that fair?

MS. MACFARLANE: That's correct.

Q. - And the encumbrance -- the transfer order of the assets to New Brunswick Transmission Company would not have any type of encumbrances on those assets?

MS. MACFARLANE: That's correct.

MR. NETTLETON: Thank you. Thank you, Ms. MacFarlane. I am through with this witness. I know she has other engagements. I'm happy to stand down, Mr. Chairman, if there are others that would like to proceed.

CHAIRMAN: All right. Mr. Zed, do you have any questions of Ms. MacFarlane?

MR. ZED: No, sir.

CHAIRMAN: Saint John Energy?

MR. YOUNG: No.

CHAIRMAN: Mr. MacDougall?

MR. MACDOUGALL: No.

CHAIRMAN: Mr. MacNutt?

MR. MACNUTT: Yes. Our questions will require the presence of Ms. MacFarlane.

CHAIRMAN: Well if there are questions of Ms. MacFarlane I would hope she would be here. Sorry. You didn't understand what I said, Mr. MacNutt. We are just going to do any questions that may be required of Ms. MacFarlane right now. So you may have some others as well for the panel, but what we are doing is trying to get the questioning for Ms. MacFarlane over so that she can go back to Fredericton, and put this all to bed, I hope.

MR. MACNUTT: Well that's my point, Mr. Chairman. The line of questioning I have would require the presence of Ms. MacFarlane.

CHAIRMAN: Okay. Well would you like to come up and ask those questions.

MR. MACNUTT: We will, Mr. Chairman, right now.

CHAIRMAN: I apologize, Mr. MacNutt, if you couldn't hear me before. I sometimes mumble I'm told.

MR. MACNUTT: Yes, we each seem to do that, Mr. Chairman. And I will try to avoid hitting the mike with the book.

MR. NETTLETON: Mr. Chairman, there is one question that I did miss that I would like to ask before Ms. MacFarlane --

before Mr. MacNutt, if I could.

Q. - Ms. MacFarlane, when the new loans are issued, will they be issued to the Province?

MS. MACFARLANE: No, they will be issued to bondholders. We anticipate that the size of the issues will be such that they will be private placements in all likelihood. But nonetheless they will be issued to third party investors.

Q. - So that there is no contemplation the Province will be the ultimate financier of this debt?

MS. MACFARLANE: No. That's the primary objective of the restructuring is to get the government out of providing that financial guarantee.

CHAIRMAN: Go ahead, Mr. MacNutt.

CROSS EXAMINATION BY MR. MACNUTT:

Q. - Thank you, Mr. Chairman. These questions are directed to the panel generally. But we have expectation that a number of them will be answerable -- or Ms. MacFarlane would be the most appropriate person to answer them.

The first question is, is it correct that the generating facilities of NB Power are expected to provide virtually all of the ancillary services in 2003 and 2004?

MR. BISHOP: That is correct.

Q. - Is it also correct that the generating facilities are capable of supplying more ancillary services than the system operator will require, assuming we are a year, you know, post April 1?

MR. BISHOP: The provision of ancillary services was one that was discussed yesterday. And I would like to take this opportunity to clarify for the Board that the provision of services, if I might use the analogy, it might be similar to the fire hall. That there -- while there is a minimum requirement that NERC requires the system operator to have at all point in time, all of the generation services, everything that the generator is there is, in fact, continuously provided. And that the system operator has a call on those facilities to the maximum extent. It's not limited at the extent that NERC says that you must have sufficient capacity to cover your -- or sufficient reserve capacity to cover your largest single contingency.

But statistically larger contingencies can occur. And in fact the contract between generation and transmission for the provision of ancillaries will allow for total call on those as nominated at any point in time by the transmission company requiring those reserves.

If the question is -- and I -- excuse me. I apologize if I'm rephrasing. But there are more ancillary capabilities on the New Brunswick system than will be required by NERC criteria and other criteria -- minimum criteria established by the system operators.

Q. - Will you have greater -- will the SO have greater capabilities than the number -- will the generator have greater capability than the number of units forecast -- that will be forecasted as being required?

MR. BISHOP: Again, yes, it will be greater than the minimum requirements that the system operator will have.

MR. PORTER: I might add -- add to that, that Mr. Bishop's statement applies in many hours, but not in all hours. Particularly -- particularly at the time of system peak it may very well be that at that point in time the generation available to provide the service basically just meets the requirement and does not exceed it.

MR. BISHOP: Yes. In fact just -- Mr. Porter reminds me that we have in the past from time to time actually had to purchase from outside entities some value of ancillaries. Particularly spinning or 10 minute reserve.

Q. - Now again assuming we are in the post April 1st and in the system operator role, who will decide which facility is used to provide each specific ancillary service, the system operator or the generating company?

MR. SNOWDON: The system operator will make that decision.

Q. - And in peak times we would just identify there are several times during the year it peaks when all available ancillary services are fully utilized. Who will make the decision at those peak times?

MR. SNOWDON: That responsibility still rests with the system operator.

Q. - Now who will determine how many units of each ancillary service are required, the system operator or the generating company?

MR. SNOWDON: The system operator who makes that decision.

Q. - Will the number of units of ancillary services that are required to be determined, will it be done on an hourly, daily or weekly basis?

MR. SNOWDON: The whole issue of how ancillary services will be dealt with is -- is over a span of time. The heritage vesting contracts provide, through a power purchase agreement, the capacity available to the load to make -- to meet their load obligation and their ancillary service obligations.

Keeping in mind that when this market opens in April, there will not be an ancillary service market. They will be supplied exclusively through these heritage pool assets. The capacity off of those assets will be made available a year ahead to the system operator. So he will have call rights to that capacity for various periods during that year.

And as you get closer to a capability period, and we have defined two capability periods. Basically a five month winter period, and a seven month summer period whereby the capacity required to provide those ancillary services will be determined. And as you get closer to real time in the dispatch of those ancillary services, capacity may be released to the generator to use for other purposes. When that is done, then the savings, if you will, from the capacity release will be then put back into the -- in the form of a discount on what those ancillary service costs are. Because you are no longer tying up that capacity that the generator cannot make external sales with.

And when you get into the real time on dispatching which ancillary services will be supplied from which generator, it will strictly be dispatched on cost when, in fact, the reserve is required.

That's in a nut shell how you go from a long-term capacity obligation right through to real time dispatch of those services.

Q. - What is the current status of the heritage vesting contracts?

MR. BISHOP: They are presently being negotiated between a generator -- to my knowledge, between generation and transmission for services, and generation and the Disco or customer service corporation for provision of energy.

Q. - So just for the purposes of clarifying the matter for the Board, there are no contracts equivalent in existence now. These are being negotiated in anticipation of the creation of the butterflies in the reorganization of NB Power. Is that not correct?

MR. BISHOP: That is correct.

MR. SNOWDON: And they are to be finalized before the market opens in April.

I might -- might just add one other thing that I forgot when I was talking about how the load is actually responsible for the capacity obligation and the ancillary service component of that. Once they have nominated that, then the system operator actually enters into an ancillary service contract with the generator.

So for the example of Point Lepreau, even though it was under a different ownership arrangement, the -- the distribution company would have the rights to that capacity. Once that is nominated to -- for the system operator to have call rights for it, then the system operator would then enter into a contract with Lepreau to provide those ancillary services, or Coleson Cove, if it were a separate ownership.

So that it's -- it's the ownership becomes a secondary matter as far as the system operator concern. They are concerned with a contract with a generator to supply these ancillary services directly with the system operator after it has been nominated by the load that they have that capacity lined up to provide those ancillary services.

Q. - Now what happens if a customer decides to self-supply certain ancillary services?

MR. SNOWDON: The customer that nominates that they will self-supply the ancillary services, that load ratio share of their responsibility will be removed from the total obligation on the system.

And consequently the capacity obligation that falls back to the distribution company or to the generators, the remaining heritage generators will be lessened by that same amount.

Q. - How will the quantity of ancillary services that the system operator requires be adjusted as a result of that self-supply?

MR. SNOWDON: By this load ratio share of what their obligation is of that particular load.

Q. - Now will the system operator pay only the actual quantity of ancillary services that were necessary to operate the system? Or will the system operator be required to pay for predetermined quantities? It is almost -- the latter is almost a take or pay.

MR. SNOWDON: The system operator would pay for the amount of ancillary services that are -- there is two components to it.

There would be the capacity component that they would be paying for for the rights to call that capacity. And then they would also pay the dispatch cost if they are actually called upon during the hour or the day that they are nominated for use.

There is really two components to that, a capacity payment for the rights to recall, and then the actual execution of the ancillary services.

Q. - And how do those two components match up with the charges for the specific services? Yes, for the ancillary services, the system operator will charge its customers?

MR. PORTER: I'm sorry. You are referring to the specific services that are in the tariff application? I will assume that you are referring to the --

Q. - It answers yes --

MR. PORTER: -- charge to the transmission customers?

Q. - Yes.

MR. PORTER: That is really -- that is the fixed component of the contract between the system operator and the generation, provision of the ancillary services.

The variable components would be the out of order dispatch cost adders that we have in the schedules in the tariff and have talked about in the past at this hearing.

Q. - Does the fixed charge remain constant? Or will it -- if there is a reduction in the amount of ancillary services provided -- you say the variable portion will reduce.

Will a fixed portion also be a concomitant change in it as well? Or will it remain constant?

MR. SNOWDON: It would be fixed unless the system operator deemed that he could release that capacity. And then they would be reduced by that much during a particular period of time.

MR. PORTER: If I could just add to Mr. Snowdon's comment, just to repeat what we have talked about before, the general principle that if and when the system operator's cost to procurement of the ancillary services decreases from that which is assumed in the application, the rates charged to the transmission customers will be discounted accordingly, to ensure that the -- it is purely a pass-through of cost.

MR. SOLLOWS: Just to follow up on that point, would those lower costs be then available to your load-serving entity, to your customers or to the third party generators?

The concern in my mind at this stage is how would a customer know whether or not they should take the trouble to invest in plant to self-supply or to do demand side management or any other thing that might be effectively competing with this generation-based auxiliary service if they don't know what the cost is?

MR. PORTER: The changes associated with discounting I would see happening in probably a downward trend but over a longer period of time, because of the quantities required and the lack of liquidity in the market. There is a small number of potential suppliers in the area.

So just saying that any lower cost of procurement would be reflected. But I don't see there being a rapid change or a volatility of that price going up and down.

MR. SOLLOWS: Yes, I think I understand. I guess the concern I'm sort of still grappling with in this whole thing is if the price is set high it might encourage people to make non-economic investments in other plant to supply auxiliary services when in fact -- and after those investments are made, it is essentially non-economic. Because the actual cost was lower than the price that was set initially.

So how do we deal with that in terms of trying to get an economically optimum result out of this?

MR. PORTER: Well, that is one of the main reasons we have put forward the proxy approach, is because it does set the rates at a rate that we believe would send adequate signal but not provide a false sense or over incent to building of facilities to provide ancillary services.

That certainly is our intent is to send that right signal but that that price could decrease probably slowly over time as other suppliers are introduced. And by decreasing, that is assuming that the new supplies are at lower cost, which -- they may not be significantly lower costs.

MR. MACNUTT: Thank you, Commissioner Sollows.

Q. - Just to come at this, restate my point of view, it is my understanding that the system operator will pay fixed costs to the generator, is that correct? That is Genco.

MR. BISHOP: Yes, that is correct, for a nominated amount of reserves.

Q. - Now the SO -- in turn the SO charges customers based on the price times the number of units consumed or used, is that correct?

MR. SNOWDON: To provide ancillary services.

Q. - Yes. It is just simply price times the number of units. And that is per your forecast, is that correct?

MR. PORTER: I just want to clarify. The charge to the customer is based on the customer's usage of the transmission system which --

Q. - So you have a forecast of the number of units. And the tariff-approved price would be applied to those for the consumption during the period in question?

MR. PORTER: Yes. That is correct.

Q. - Now is the system operator revenue, from that which we just described, the price times quantity, supposed to equal the fixed cost payment that we talked about at the opening of this --

MR. PORTER: Yes.

Q. - -- series of questions?

MR. PORTER: Yes.

Q. - Now what assurance can you give us that the generator company, Genco is not going to increase prices arbitrarily over what his actual cost to produce and provide the ancillary services are?

MR. PORTER: That is the point of the vesting contract is to protect the system operator and likewise the transmission customers.

Q. - What happens if Genco charges more for an ancillary service, unit of ancillary service than is in the tariff approved by this Board for the SO?

MR. PORTER: Generation does not have the opportunity to arbitrarily or unilaterally establish that price. Remember that this application is by a vertically integrated utility.

And the application is based on a proxy methodology that has come up with a price, and that that will be taken into account in the creation of the vesting contract.

So -- and the system operator would be imprudent to sign onto a contract that would cause him to incur expenses beyond what they are going to be collecting from the transmission customers.

Q. - What happens if Genco simply refuses to provide except at the price Genco wishes to charge?

MR. BISHOP: I think the answer to that, at least in the early stages, is -- I can speak for definitely, is that that is not a decision that Genco, because Genco is not at this point in time a corporation, is allowed to make on its own.

Again the very fact that New Brunswick Power is now a vertically integrated utility and will continue to be when these contracts are negotiated and put in place, the charge that Genco will make for these ancillary services will be the charge that this Board approves -- or discounts.

The generation may discount these for particular purposes. In the longer term you can -- it's quite easy to envision the fact that these services -- prices may be discounted in order to compete with other potential suppliers. That's one of the issues that might have -- just add in response to your earlier question, that the -- any entity wishing to self serve has to scan the market as well to determine if there are other potential suppliers out there who may in fact come in to actually lower the price of these ancillary services.

MR. SOLLOWS: But there is no market --

MR. BISHOP: At the moment there is not, no. And in the early stages, that is correct.

Q. - So what you are saying -- would you confirm for me that my understanding is correct from what you have just said that Genco will accept the amount for ancillary services that's in the tariff approved by this Board for the SO, regardless of which specific generating facility is used to provide the ancillary service?

MR. BISHOP: That is correct.

Q. - Now in the application there is revenue forecast for Transco -- payments for ancillary services to be, we think it is 38.7 million, subject to check. Am I correct in assuming that the payments to the generating company will not exceed that amount?

MR. BISHOP: That is correct.

MR. MACNUTT: No further questions, Mr. Chairman.

CHAIRMAN: Go ahead.

BY MR. RICHARDSON:

Q. - Thank you, Mr. Chairman. My question is to Ms. MacFarlane. Very brief and it is on our favourite subject debt equity. A lot has happened in the last six months in the electricity industry. And at the time of your filing the application for the tariff you requested a 65/35 debt equity split. If you were filing that today, would that be the same or would you have a different one?

MS. MACFARLANE: If we were filing today we would look for a stronger equity weighting on the balance sheet. I believe Dr. Morin said the same thing.

Q. - Yes, I believe he did also. So basically through all the jigs and the reels we come down to the fact that what's going to work in the marketplace as of February the 10th 2003 is going to be your debt equity split, roughly?

MS. MACFARLANE: Roughly, yes.

Q. - You will be meeting with CIBC World Markets tomorrow and the next couple of days at which time this will all be resolved up to a point or for the most part resolved. Would it be possible to have an undertaking from you that you would advise the Board as to what the results and what debt equity split that they -- that you negotiate with that organization?

MS. MACFARLANE: Yes. Obviously it is subject to final approval by Cabinet but --

Q. - Yes, I understand.

MS. MACFARLANE: -- we certainly will. We will provide you with that.

MR. RICHARDSON: Thank you very much. No further questions, Mr. Chairman.

BY MR. SOLLOWS:

Q. - Yes. If I may I have just one question. I don't know if you are aware, yesterday we had our presentations from informal intervenors and we had a gentleman who came and expressed some concern that I think the Chair properly characterized as being mainly policy concerns as opposed to what we are trying to deal with in this hearing.

But it did remind me of -- a question I think I asked you earlier in the hearings, and I know a lot of work has been done since so I will reask the question. We just heard that the debt placements from Transco or the butterflies will be basically private placements. Traditionally small investors have a hard time getting at those kinds of issues. Will there be any provisions for citizens -- interested citizens in buying -- say walking into King Street and buying your bonds or walking into one of the district offices and plunking down 3', or 4' or $5,000 and getting some bonds?

MS. MACFARLANE: Although it --

Q. - To give people an opportunity to participate.

MS. MACFARLANE: That's very attractive. I would like to do it myself, but that's not contemplated.

MR. SOLLOWS: No. Okay. Thank you.

BY MR. BREMNER:

Q. - Just ask Ms. MacFarlane again. You said some time ago there will be no increase in employees for all of this?

MS. MACFARLANE: Yes. That's the intention that there will be no increase in employees. Now that may require some redistribution of skills. Obviously these corporations -- NB Power does not have shall we say a plethora of people with investor relation skills or skills in the finance area. There may be other areas, marketing, that need more strength than they have today. But that would hope to be accommodated through normal attrition and reassignment of duties.

Q. - For example, you are a capable lady in your field, are you going to be spread in four ways or five ways? Are you going to be spread at each one of these butterflies?

MS. MACFARLANE: No.

Q. - What is that --

MS. MACFARLANE: In January of 1998 we moved finance people into the business unit so there is a corporate group. I'm in the corporate group and the corporate group will continue to provide support probably most especially in treasury and investor relations. But there have been for three or four years now senior finance people in those business units who have gradually been taking on more and more responsibility for budget development for month end, quarter end production of financial information, et cetera.

Now they are going to be on a very steep learning curve here in the next few months because the ante is up significantly. But nonetheless we have confidence that with the systems we have put in place, with the governance we have put in place and with support from Holdco they will be able to meet the objectives.

Q. - And there will be a board for each one of these butterflies?

MS. MACFARLANE: That's correct.

Q. - With a chairman of course and --

MS. MACFARLANE: That's correct.

Q. - -- the expenses incurred with all of those?

MS. MACFARLANE: That's correct.

Q. - And you still don't expect to spend anymore money?

MS. MACFARLANE: I believe I worded that very carefully.

MR. BREMNER: Yes, I thought you did. I asked you to get back to me on that and you didn't. And I can understand why. That's okay. Thank you.

BY THE CHAIRMAN:

Q. - Just a couple, Ms. MacFarlane. There are a number of things that you did your best when filing the evidence to estimate what was going to happen?

MS. MACFARLANE: Yes.

Q. - And I hear you today and I read the legislation and I'm just wondering if you have any sense of when the public/the Board will know about whether or not your estimates were bang on or if they weren't. I.e. for instance the transfer order in reference to assets, the transfer order in reference to debt. All of those things. Do you have any sense of when those are going to be a) finalized and b) when they in fact might be made public? My recollection dimly of the Act is that the government can take upwards of a year to make those known in the public forum, i.e., the Royal Gazette?

MS. MACFARLANE: Mmmm. The provision I think is two years. The two years is there really for clean up in the event that something is missed or in the event that something inadvertently is put in the wrong business. The time line is such that the transfer orders for assets are to be completed by February 28th. And they are virtually complete now because we have records that allow us to do that and we have been operating that way for some time. So the transfer order for assets, for contracts, for land rights, easements all of those things are well under way and should finalized in the next couple of weeks.

The transfer orders -- they all by the way -- you notice in the Act it says that they will be transferred for consideration which means there has to be a price attached to them. The price attached to them -- or the cost attached to them will all be whatever the net book value is based on the audited financial statements for March 31st 2003. So the amount will not be stated in the transfer order.

The debt -- obviously we have to work out whether this is simply a debt equity swap for some portion of the debt and the rest of it stays where it is and gets moved to the subsidiaries or whether in fact it is also a re-engineering of the debt.

So the transfer orders related to the debt I expect will be closer to the middle of March. But the expectation is that this will all be done for April 1st.

Q. - Do you have any idea whether it will be made public at that time or --

MS. MACFARLANE: I don't believe there is any intention not to make it public. I believe that once the documents are approved by Cabinet or the Lieutenant Governor-in-Council. I don't think there is any reason why -- I certainly haven't heard anybody making any statement that they want to keep this private for any period of time.

CHAIRMAN: Mr. Hashey, do you have any questions as a result of our questions of Ms. MacFarlane?

MR. HASHEY: There might be some redirect, Mr. Chairman. But possibly we could take a short break and have that solved. And I could inform --

CHAIRMAN: We will take our break, sir, and come back.

MR. HASHEY: Thank you. But I would also before you leave possibly and maybe the reference should be to Mr. Speaker rather than Mr. Chairman this afternoon at times. But anyway, the undertaking is done apparently and will be available. And I think what we should try to do is circulate that or get it to Mr. Nettleton and see what he -- his pleasure is with respect to it.

CHAIRMAN: Okay. And then when we come back why you can let us know.

MR. HASHEY: Yes. Thank you.

(Recess)

CHAIRMAN: Mr. Hashey, you have something -- the completion of the undertaking, I guess.

MR. HASHEY: We have two issues here to deal with right quickly. First of all is the undertaking that you ruled on at noon. Our half day estimate wasn't far off because they started working on it over the lunch hour and we do have it. It's undertaking 55 and it's the requested information for Mr. Nettleton all in a form. Mr. Nettleton has a copy of it and we would like to have that marked I guess at this point.

CHAIRMAN: Wonderful. So this will be A-56. Go ahead, Mr. Hashey.

MR. HASHEY: The next issue, Mr. Chairman, is the issue addressed concerning the tariff amendments that we had agreed on. And as you will remember, when we started yesterday there was some comment by Saint John Energy and there was an agreement that there would be an attempt to work out a wording for their request.

CHAIRMAN: Yes.

MR. HASHEY: Now over the lunch hour that wording has been worked out and we would like to offer that as attachment H, and it's in the form of the amended wording and then the red line version. It's a two page document.

CHAIRMAN: Great. We will distribute that. Do you want me to mark that as an exhibit or how should we proceed? What do you suggest? Might as well, I guess.

MR. HASHEY: I think so, just to keep it straight.

CHAIRMAN: This is a two page exhibit. The first page is headed Attachment H as in Henry and is red lined. The second page is not red line. So presumably that's the -- A-57. Anything else, Mr. Hashey?

MR. HASHEY: No. That's it. Thank you, Mr. Chairman.

CHAIRMAN: Back to you, Mr. Nettleton.

MR. NETTLETON: Thank you, Mr. Chairman.

CROSS EXAMINATION BY MR. NETTLETON:

Q. - Mr. Bishop, you were discussing with my friend, Mr. MacNutt, the incentive which the integrated utility would have to offer services at a rate that was effectively fair, and that there would be no incentive to offer a rate that was greater than the amount stated, fair?

MR. BISHOP: That's fair, certainly fair during the time that we continue to be vertically integrated.

Q. - And in the world that we are about to move into, the unbundled world, what do you think the incentives are then, Mr. Bishop?

MR. BISHOP: Certainly a profit motivated corporation is incented to charge a rate that will bring it profit.

Q. - And one of the objectives that we have learned about in several different sources is ensuring correct pricing signals. Do you think that's an objective that is appropriate and applicable to the prices that are established at the outset for ancillary services, that correct pricing signals are put in place?

MR. BISHOP: I think it's appropriate that correct pricing signals be put in place, yes.

Q. - And pricing signals based on the cost of the service to be provided?

MR. BISHOP: In this case, recognizing the amount of ancillaries, the proportion of which the generation company will supply, that's correct.

Q. - Based on their actual cost?

MR. BISHOP: Based on the actual costs or based on a proxy cost, whichever, in this case the application for the proxy.

MR. PORTER: I might add to that the question was about the appropriate signal and I repeat what we have said in the past several times is that we believe the proxy approach leads to prices that does send the correct economic signal.

Q. - But that's not one based on cost, correct, Mr. Porter?

MR. PORTER: It is one based on the cost of the proxy unit, the long run marginal cost.

Q. - We are back there. Now, Mr. Bishop, you indicated that there would be the opportunity to discount the ancillary services once we move to the brave new world, fair?

MR. BISHOP: That's correct.

Q. - Right. And Mr. Sallows indicated in a line of questions that he had about the signal that would be sent to the marketplace, that the incumbent provider of ancillary services, the monopoly provider of those ancillary services, also having the ability to discount off of the proxy price, how that would provide incentive to third party generators. I want to suggest to you, Mr. Bishop, this. If you were a potential electric generating entity looking to invest in the Province of New Brunswick, why do you think it would make sense to make that significant capital cost investment if you know that the incumbent has the ability to discount off of a price that is not based on actual cost?

MR. BISHOP: I think the real answer to that question is that a new electricity generator in New Brunswick or who choose to invest in New Brunswick would invest on a basis of not only provision of ancillary services but I think more importantly where most of the revenue is available in the energy and capacity services.

Q. - And what percentage would that be vis-a-vis energy versus ancillaries?

MR. BISHOP: I guess if you look -- all I'm going to do is relate you to our income statement and looking forward if you look at a 40 or $50 million of revenue from ancillary services compared to at least a requirement of over 500 for total fixed cost recovery, that puts in some ratio, some reasonable ratio of -- the ratio I have just used is ten percent or less comes from the generation of ancillary services.

Q. - But your plant, Mr. Bishop, is significantly amortized, correct?

MR. BISHOP: That is correct.

Q. - A lot has changed in the way in which electric generation can be provided with new forms of technology, correct?

MR. BISHOP: Yes.

Q. - And so if you were today to make an investment in plant that had the opportunity to take a market niche or an opportunity to provide service, specifically ancillary service, can we agree that the uncertainty created by the incumbent having the ability to discount off of a proxy price gives a new investor very little comfort on making that investment decision?

MR. BISHOP: If in fact the investment decision was based on a provision of ancillary services and all or a significant portion of the return is based on that niche product, I would suggest you are correct.

Q. - Thank you. Now, Mr. Bishop, I want you to turn to schedule 2 of exhibit A-50, please.

MR. BISHOP: I'm sorry. I missed the --

Q. - Schedule 2 found on page 15 of exhibit A-50.

MR. BISHOP: Thank you. Yes, I have it.

Q. - All right. Now, Mr. Bishop, we discussed the interest return on investment and payment in lieu of tax figures. I want to focus on the other two items, namely OM&A and amortization and decommissioning, those two line items that comprise your fixed charge revenue requirement and ultimately that are used to calculate the fixed charge rate.

Now can we agree, sir, that since all of the ancillary services and the calculation of those ancillary services use this fixed charge rate, it's important to get that rate correct?

MR. BISHOP: The fixed charge rate correct?

Q. - Yes.

MR. BISHOP: It is important in the embedded cost study, that's correct, yes.

Q. - That's one of the foremost variables used to calculate the cost for the --

MR. BISHOP: That is correct.

Q. - Now just some anomalies that we have found with respect to this schedule. If you would look at the column Grand Lake, do you see that?

MR. BISHOP: I see that, yes.

Q. - And if you look to the column OM&A there is expressed as a percentage 85.22 percent, do you see that?

MR. BISHOP: Yes, I do.

Q. - And the formula indicates that you take the OM&A amount of 5.292 million and you divide it by $347,000, do you see that?

MR. BISHOP: That's correct. It's row F divided by row D.

Q. - Well you might want to check the math on that one, Mr. Bishop. I don't think 5 million is 85 percent of 347,000, agreed?

MR. BISHOP: I would. Agreed.

Q. - And similarly, sir, when we looked at this and put it on our own spread sheet there appears to be errors with respect St. Rose in respect of the total fixed charge rate, Grand Manan same problem, and with Milltown same problem.

MR. BISHOP: Thank you. And we will re-check those numbers.

Q. - If we can talk about OM&A first. Mr. Bishop, what is the source documentation that has been used to provide the numbers, the dollar figure amounts?

MR. BISHOP: For OM&A?

Q. - Yes, sir.

MR. BISHOP: These are the budget numbers -- the budget numbers for the 2003 and 2004 forecasts for operation of our generating system.

Q. - You haven't used historic actuals?

MR. BISHOP: No, we have not.

Q. - You haven't. Mr. Bishop, are you aware that the evidence in this proceeding as it relates to transmission is that OM&A costs have been based upon actual historic OM&A costs?

MR. BISHOP: I'm -- it is my understanding that the OM&A rates for transmission were in fact based on a projection which is derived from historic information, similar to the way that I have prepared this.

Q. - So to be clear, these are based on historics but projected out?

MR. BISHOP: They are based on a projection of next years recognizing a history of cost and any anomalies that may occur in the upcoming year. for example, if we know that a unit is scheduled to be out on maintenance that tends to drive OM&A costs, they would be included in this next years forecast. It is the budget number.

Q. - And the budget is based on actual?

MR. BISHOP: The budget is based on -- yes, a basis of budget is on actual.

Q. - And then there is a projection out.

MR. BISHOP: There is a projection forward, yes.

Q. - And, Mr. Bishop, when was the last time these OM&A costs have been viewed by a third party?

MR. BISHOP: I believe the OM&A costs are reviewed annually by our auditor, and in fact yes, they are.

Q. - But would the auditor be concerned with the prudency of how those dollars have been incurred?

MR. BISHOP: I'm not sure I know the answer to that question. I expect the answer may be no.

Q. - What line items or cost components does the OM&A amount relate to, do you know?

MR. BISHOP: It amounts to -- if I understand your question, it amounts to the direct OM&A costs of operating the station, it amounts to any common costs that are involved in setting the OM&A, and it amounts to head office costs that are allocated to each particular plant in the generation business unit.

Q. - And that level of detail hasn't been included in this study?

MR. BISHOP: All of the -- the roll up of that detail is included in this study. In other words, we have gone to our actual budget preparation documents and rolled up the numbers to sum for each of these generating stations the sum of each of those line items.

Q. - But the actual numbers haven't been included in the form of a study, correct?

MR. BISHOP: Actual being numbers from history?

Q. - Yes.

MR. BISHOP: That's correct.

Q. - And the individual components that you refer to haven't been specified anywhere else in this study, have they?

MR. BISHOP: From history or any of the individual components --

Q. - Any of them.

MR. BISHOP: -- are not listed in here. No, we have not taken that level of detail.

Q. - Mr. Bishop, when was the last time a cost allocation study was completed in respect of those allocable OM&A costs in respect of generation?

MR. BISHOP: I believe those studies have been done within the past year.

Q. - The past year?

MR. BISHOP: Yes.

Q. - Now did those allocable -- allocation studies consider the reasonableness of the cost?

MR. BISHOP: I don't think that there was a reasonableness audit by -- certainly not by a third party.

Q. - And what was your basis to forecast the amount included in these totals over actuals?

MR. BISHOP: I'm not sure I understand your question, sir. The amount over actuals?

Q. - Let me try this again. You have an actual OM&A cost and --

MR. BISHOP: I have records of actual OM&A costs incurred in previous years, yes.

Q. - And then as I understand it, part of your forecasting process, you are forecasting out into the period ending March 31st 2004.

MR. BISHOP: That's correct.

Q. - What I'm asking, sir, is what basis or what factors did you consider in that forecast exercise.

MR. BISHOP: Well certainly we considered a history of expenses. We know what the labour force at the plants are, so we know salaries. We know from experience the materials that are required. We know from experience the inventory levels and other items that go to make up some reasonably fixed costs. And then we add or subtract, whatever is the case, from the experience of the previous year, any additional costs that may be incurred either because a unit will be out on maintenance in this coming year and wasn't last, or in fact vice-versa.

Q. - Now, Mr. Bishop, the evidence in this proceeding is that there is a difference of 9.8 million dollars between the proxy method and the study, correct?

MR. BISHOP: That is correct.

Q. - Approximately what portion of that 9.8 million dollar difference would be attributed to OM&A? Have you considered that?

MR. BISHOP: I'm sure I don't know the answer to that question.

Q. - What basis, Mr. Bishop, would you expect ratepayers of ancillary services to find these OM&A costs to be reasonable and prudent?

MR. BISHOP: I think the basis of OM&A costs that are reported annually in the annual report at the consistency of those costs, and perhaps the competitiveness of the rates, would be basis for that assurance.

Q. - And, Mr. Bishop, can you help me understand what significant variances in the OM&A cost line item that appears in schedule 2 -- what would be the reasons for such variations in say 2000, in the 2000 study? You indicated that there may be plant outages or maintenance costs. Would that explain the differences?

MR. BISHOP: It may not explain all of the differences. For example, I can point you to the Mactaquac OM&A cost of 11.7 million dollars.

Q. - Yes.

MR. BISHOP: And that number is -- I believe that number is somewhere in the order of $9 million in the year 2000.

Q. - Yes.

MR. BISHOP: Some of that change comes from the fact that the Mactaquac plant has been undergoing for a number of years an aggregate reaction program and it has been capitalized in portion -- or portions of those has been capitalized up to a point at which our auditors have deemed that those costs can no longer be capitalized or a portion cannot be longer capitalized, and they are subsequently expensed. So that has driven OM&A costs in that particular plant up from the numbers you would have seen in the 2000 study.

Q. - All right. Mr. Bishop, I'm wondering if you could turn to exhibit A-5, tab 4, which is the New Brunswick Power 2001/2002 annual report. And the particular page reference that I will be referring you to is page 37. Do you have that, sir?

MR. BISHOP: Yes, I have that.

Q. - Now on the right-hand column of that page there are average estimated service lives for plant operating equipment listed. Do you see that?

MR. BISHOP: I see that, yes.

Q. - And from that list can you tell me what the average estimated service life for hydro generation stations are or is?

MR. BISHOP: The average estimated is noted here as 70 years, 70.

Q. - And subject to check that estimated service life, when expressed as a percentage, is 1.43 percent?

MR. BISHOP: If you are talking about the amortization --

Q. - Yes.

MR. BISHOP: -- percentage?

Q. - Yes.

MR. BISHOP: Yes. It is 1.4, subject to check.

Q. - Now if we return to schedule 2. And looking at Mactaquac, when I applied this rate to the installed cost calculation subject to check, the amount is 3.172 -- $3,172,118, a difference of over $1.8 million.

Is there a reason for that differential in the level of amortization?

MR. BISHOP: I'm not sure I know all of the reasons. But certainly I referred a few moments ago to the fact that we have been capitalizing some of the elements in the alkaline -- or involved with the fixing of the alkaline aggregate reaction program.

The differences that you would see -- and although I'm not aware of all of the additions -- would be in the form of capital additions which have actually increased the net book value, that tend to increase the net book value.

Q. - All right. And Mr. Bishop, if you could turn to exhibit A-52, page 5. That is the year 2000 study. Do you have that, sir?

MR. BISHOP: Yes, I do.

Q. - And if we look at the column "Courtenay Bay" in the 2000 study --

MR. BISHOP: Yes.

Q. - -- will you agree that the amount of depreciation shown is 2.2 million?

MR. BISHOP: That is correct.

Q. - And it is actually a greater number. But just for ease it is 2.2 million?

MR. BISHOP: It is 2.201, yes.

Q. - And sir, if we go to schedule 2 of your exhibit 50, do you see that, with respect to the Courtenay Bay column?

MR. BISHOP: Yes.

Q. - The amortization is reported as 867,000?

MR. BISHOP: That is correct.

Q. - Do you have any explanation for that difference?

MR. BISHOP: No. I will have to check on that difference. It may be that some revenue was applied in the sale of a portion of that asset. I quite frankly do not know.

Q. - Have these amortization amounts or rates been the subject of any sort of third party depreciation study?

MR. BISHOP: I'm not aware that they have.

Q. - And what basis, sir, would you expect ratepayers to find these amounts, that is the recovery of these amortization amounts, to be reasonable and prudent?

MR. BISHOP: I'm afraid I don't know details. It is unfortunate Ms. MacFarlane was not here to answer some of these. She probably could have better answered them.

I'm not aware of whether there has been third party reviews other than audited reviews. And I subsequently am unable to answer.

Q. - That is fine. I assume that because this was your evidence that you would be the best party to speak to it. But I didn't realize that Ms. MacFarlane would have had some input in it. We will move on.

Mr. Snowdon, you have been awfully quiet. Let's see if we can fix that record. I would like to ask you a number of questions about the provision of ancillaries from the point of view of the system operator.

And I think you have confirmed this with Mr. MacNutt, that it is the system operator that will acquire ancillary services on behalf of Transmission customers?

MR. SNOWDON: That is correct.

Q. - And I believe you indicated that at some point in time the actual acquisition of these services will be done on a least cost basis?

MR. SNOWDON: You are referring to when there is an ancillary service market?

Q. - No. I mean, as the system operator, when there is requirement for ancillary services, that they will be acquired on a least cost basis?

MR. SNOWDON: The method that they will be acquired, I explained before that they will come out of the vesting or the heritage vesting contracts and supplied by Generation initially, and that the only provision that the system operator will have to procure those at a lower cost would be when a competitive market comes into play.

Q. - Well, I thought I heard you discuss with Mr. MacNutt that at the point where there is actual dispatch and requirement that you would, at that point in time, acquire the ancillary service on a least cost basis.

Am I wrong?

MR. SNOWDON: I think you are perhaps confusing the difference between the actual calling on the reserves as opposed to paying the fixed cost of the capacity component of these ancillary services.

What I was trying to explain to Mr. MacNutt is when the operator actually activates the reserve they would do an out of order dispatch to determine which of the assets would actually, real time, provide those ancillary services. And they would be the assets that would be dispatched to provide the ancillary services, real time.

Q. - And you would have records of that with respect to which units actually provide the ancillary service, correct?

MR. SNOWDON: Yes. That is correct.

Q. - And do you have those records now, sir?

MR. SNOWDON: We do not have records of specifically which units provided the ancillary service. We do not do a two-step dispatch today. We do one step.

And this is one of the issues that we have been dealing with with the market rules, that the system changes that are required at the centre -- there are system changes that are required in order to do this two order of dispatch.

And that is why initially we will continue to do the dispatch the way we do today. And then as the systems get developed then we will dispatch the in-province load first, the firm export contracts, and then do an out of order dispatch to determine which of the generators that are made available will supply those ancillary services.

Q. - And so as I understand it the first order of dispatch is for energy requirement, correct?

MR. SNOWDON: That is correct. I might add that we have had audits done by NPCC where they have come in on peak days and said okay, during these peak hours where was your reserve? Demonstrate to us that you had sufficient operating reserve during those periods of time.

And we would go through a history of our generation. It is called the PIE system where it is data that is downloaded from the generator data that we receive on an instantaneous basis which is held in the historical files, where we could demonstrate where we had that surplus capacity to meet those reserve commitments that day.

So in answer to your question, we have the records. But we do not have them in an easily obtained format.

Q. - And so, Mr. Bishop, back to the discussion we had yesterday, it is for that reason why your embedded cost study has not actually included the cost of the actual facilities providing ancillary services? That level of detailed study hasn't been conducted?

MR. BISHOP: No. That is not correct. Again what Mr. Snowdon is referring to is the minimum quantity of services that he requires at any point in time.

I can suggest that the tariff allows a call on all of the facilities that New Brunswick Generation has to provide ancillary services.

So I can -- like the fire hall, we are providing those services 24 hours around the clock from all the units that are available there to serve. And it is only when they are called upon do they get activated.

Now NERC, as I point out, has a minimum criteria which says you must have this amount. But I continue to suggest that we provide those services in excess of those amounts continually.

Q. - And so, Mr. Bishop, as I understand your fire hall analogy, the real issue is how we allocate the costs of the fire hall to the users of the service, fair?

MR. BISHOP: That is correct. That is how the embedded cost study is done.

Q. - And you are basing it on your capability of the fire trucks in the fire hall?

MR. BISHOP: I'm basing it on the demonstrated capability or demonstrated provision from two and three years of history as the schedules note.

Q. - Let's, Mr. Snowdon, talk about what happens once we move to this competitive world that Mr. Bishop indicated that we are moving to.

When the system operator acquires ancillary services under Bill 30, the intent is that it would be acquiring those at arm's length, correct?

MR. SNOWDON: I'm not sure what you mean by arm's length.

Q. - Well, that is, Mr. Snowdon, the system operator is going to be a separate corporation independent of Generation?

MR. SNOWDON: Yes. That is true.

Q. - And independent of New Brunswick Generation Corporation, as well as New Brunswick Nuclear Corporation, correct?

MR. SNOWDON: That is correct.

Q. - And given the choice of two providers, you won't -- is your evidence, sir, that you won't be purchasing from the least cost provider?

MR. SNOWDON: Again the heritage assets, and Lepreau is a heritage asset, that total capacity will be made available for call by the system operator to provide ancillary services.

And once that is -- those call rights have been established with the system operator, then he will enter into contract with the individual generator to provide those on demand.

So it is the fixed cost capacity provision that he is under contract to provide. And then when they are activated they will be paid their variable cost.

Q. - So it does sound like it is a bit of a take or pay. No matter what your requirement is you are paying for it in any event?

MR. SNOWDON: I would like you to clarify that.

Q. - Sure. There is no incentive for the system operator to choose the least cost unit that can provide the service, because ultimately you are paying the same amount regardless of the unit, fair?

MR. SNOWDON: The cost that is being provided or paid by the system operators, an average cost across the full spectrum of generation that's made available to them to recall is the fixed component of that.

Q. - And that bears no relationship to the actual unit that provides the service?

MR. SNOWDON: Only upon activation of that ancillary service. Then you would do the economic dispatches to which one would be activated at that point in time.

Q. - And you indicated at that point in time there would be release and the opportunity for a reduction in the cost that you would incur?

MR. SNOWDON: What I was referring to is under the tariff we have said that 500 megawatts is the largest contingency that's on the system. When we make our yearly payment, if you will, for the fixed component, we would base it on the average cost of the spectrum of generation on a dollars per kilowatt year basis for 500 megawatts. We wouldn't pay all of the generation, all their capacity for that provision. We would pay for the 500 megawatts of reserve.

And what I was referring to earlier was that -- and that's basically on the basis that Lepreau would be running year around. But if Lepreau was off line for a month and the next contingency were 450 megawatts, then the system operator could reduce the obligation for that month and -- to 450. And therefore release that 50 megawatts of capacity that then could be used for sale elsewhere. And --

Q. - As -- sorry, continue please.

MR. SNOWDON: And then that discount would then be provided back through the -- to the market participants that we would only be charging for 450 megawatts of capacity for that period of time.

Q. - But that discount wouldn't find its way back to the ratepayers who have --

MR. SNOWDON: Yes, it would.

Q. - It would?

MR. SNOWDON: Because the obligation is only 450, therefore they are only going to be required to pay for that obligation, because we have released that capacity to the generator to do something else with in terms of a sale.

Q. - And that sale could include export sales, correct?

MR. SNOWDON: Possibly.

Q. - Mr. Snowdon, you indicated your expectation as system operator that Point Lepreau would be on line all year. Would that mean that Point Lepreau would not be available for reserve?

MR. SNOWDON: No, that's not correct.

Q. - Why not?

MR. SNOWDON: I think it's outlined in this study how capacity can be used for reserve. There is really two ways to provide reserve. One is that you have capacity that hasn't been dispatched for the period of time that the reserve would be called for 10 minutes.

The other way is that you have a contract that's in place that really in net effect reduces the size of that contingency by the amount of energy that's coming off that unit providing that reserve. For any example, if there were a contract of 200 megawatts on the New England tie and that was designated as being recalled should Point Lepreau trip, we would designate that 2000 megawatts as providing 10 minute reserve.

Q. - Right. But, Mr. Snowdon, the recallable energy would be recallable for another purpose potentially, correct?

MR. SNOWDON: It could be recallable for another generator, that's correct.

Q. - Energy production?

MR. SNOWDON: I'm not sure what --

Q. - It could be recallable for that purpose?

MR. SNOWDON: For a reserve?

Q. - No. For energy. For actual energy production for use in a different load -- or for a different load?

MR. SNOWDON: No, it cannot. The terms and conditions that the sale can be recalled would be tied to very specific units being available.

The present rules in New England restrict that to three generators or is it five? Sorry, I stand corrected, it's five. And there is some thought that it will be reduced to one. So if it were only tied to one generator, it could only be recalled if that generator would be to go off line.

Q. - I see. Now if we change the assumption that there is now a firm other than New Brunswick Power Generation or

Nuclear that offers to provide ancillary services at a rate lower than New Brunswick Power Generation, would you be purchasing that lower cost ancillary service?

MR. SNOWDON: That is when we start getting into a competitive market for ancillary services. And the intent would be that if those products are available to be made available for call by the system operator, then he would go in contract with that generator or load to provide those services, that's correct.

Q. - Well, let's make another assumption. Let's assume this Board approves proxy unit prices based on the actual embedded cost of ancillary services based on schedule 50. All right. And let's assume that a party having generation capability in the province today offers to provide ancillary service at $1 less than the proxy -- or sorry, the embedded cost. As system operator, what would you do?

MR. SNOWDON: That's a good question.

Q. - It's a very important question for my client, sir.

MR. SNOWDON: The system operator would enter into a contract with that generator and then therefore reduce the obligation to NB Power Generation for the equivalent amount, provided the supplier of that particular ancillary service met all the requirements that would be associated with that particular ancillary service.

I think at that point you get into the beginning of a competitive market.

MR. NETTLETON: I see it's nearing the 4:30 mark. Just to be clear, Mr. Chairman, I'm almost done. I should be done in 20 minutes no more.

Q. - So from your answer, Mr. Snowdon, I take it that you would be acquiring the lower cost or the lowest cost offered ancillary services assuming the terms and conditions could be met?

MR. SNOWDON: That's correct. That's the mandate of the system operator clearly defined.

Q. - And would you be offering the incumbent providers of ancillary service the opportunity to discount from that rate?

MR. SNOWDON: As I said before, I think that's the beginning of a competitive market. And I'm sure that there would be discussions between NB Power Generation and the system operator in that regard.

Q. - Why would you expect a party who can provide ancillary services at an embedded cost to be allowed to offer a service less than embedded cost?

MR. SNOWDON: Because the -- as an independent system operator, they are procuring those total ancillary services at least cost. And if by having competition in the market drives the overall price down and forces competition, then that's the role of the operator to procure those at the least cost. Because those costs are in turn charged out to the users of those services.

Q. - Aren't you forgetting one important quality, market power? How does market power factor into that decision if it's the incumbent provider that is continually discounting off of that which the other party, independent party is offering?

MR. SNOWDON: I'm not sure if market power is really an issue. The generation company has the obligation to supply it all. That might be to their detriment of being able to sell that capacity into a higher priced market from day one. So that would actually be a limitation on them. As you get into a competitive market it may be to their advantage that frees up capacity that they could sell into other markets. So, you know, it might be an anchor on generation, as much as a market power issue.

Maybe Darrell could add to that or --

MR. BISHOP: No, I think you have covered it adequately.

Q. - Now in terms of quantity purchases, Mr. Snowdon, suppose the other independent firm other than New Brunswick Power Generation offers to provide ancillary services at the exact same rate as New Brunswick Power Generation. And assume that that rate is the same as whatever rate is established in the tariff. But that the firm can only provide one-tenth of the ancillary service requirements. The price is the same but the smaller firm can only provide a fraction, whereas New Brunswick Power Generation can supply them all. How would you buy from -- how much would you buy from the smaller supplier, if any?

MR. SNOWDON: I guess we really haven't thought that one through. I guess there is various options. One would be you would prorate, the other one is you would buy up to the quantity that the generator has available. Again, it comes back to the reliability of the units and their ability to meet the requirements of the -- of what that ancillary service is.

Q. - But if those assumptions are met, how would you ensure that you would not be expressing favouritism to the incumbent?

MR. SNOWDON: I would think that the market rules would define how that is done and clearly that is something that would have to be worked out through the market advisory committee.

Q. - Let me try another hypothetical. Suppose a firm facing no competition has costs of $10 for every unit of something that it produces, but only charges $5. Would that make sense to you?

MR. SNOWDON: And they would plan on staying in business?

Q. - Yes.

MR. SNOWDON: I would think it wouldn't make a whole lot of sense.

Q. - Now suppose that original firm now faces competition but from a new very small supplier, and suppose that supplier has costs of $10 as well. If the original dominant firm discounts its price temporarily to drive the small firm out of business, would that raise concerns for you as system operator?

MR. PORTER: I just wanted to add to some of Mr. Snowdon's comment with respect to market power mitigation, one discussion is whether or not market power exists under the scenario which you have discussed, the second aspect is what is a system operator's role with respect to market power mitigation. And it's my recollection from the market design committee's recommendations, and I believe it's made its way into the legislation, that the system operator has the responsibility of gathering data and making that data available to this Board, and that one of the roles of this Board will be to address issues of market power.

Q. - But surely the intent, Mr. Porter, isn't to have this Board make rulings on market power issues. You don't want to get into trouble in the first place. My question is to Mr. Snowdon, how are you going to stay away from this Board? How are you going to guard against that market power issue?

MR. SNOWDON: The issue is that this system operator is independent and would be making decisions that provide the least cost, most reliable supply of ancillary service to the market participants. And they have a Board that they would answer to and the market rules would be developed and refined to ensure that they reflect that intent.

Q. - Well let's test that for a minute, Mr. Snowdon. The system operator -- is it your understanding the system operator will be in fact a corporation incorporated under the Business Corporations Act?

MR. SNOWDON: Yes, that's my understanding.

Q. - It is. A wholly owned corporation that remains as a crown corporation?

MR. SNOWDON: It's my understanding that it is a crown corporation.

Q. - And as a crown corporation that means that it is owned by the crown, right?

MR. SNOWDON: Yes.

Q. - Mr. Bishop, I take it that after the butterflies have been formed, you will be part of New Brunswick Generation Company?

MR. BISHOP: I may be, yes.

Q. - I take it that decision hasn't been made yet?

MR. BISHOP: That's correct.

Q. - Well let's assume for this that you are. Is it your understanding that New Brunswick Generation will also be a crown corporation?

MR. BISHOP: Yes, it will.

Q. - And that means it's owned by the Crown?

MR. BISHOP: Yes.

Q. - So, Mr. Snowdon, help me understand the independence between two crown corporations?

MR. HASHEY: I really wonder if we are not getting into some legal discussions, some interpretation of the Act. I really -- I mean this gentleman is not the system operator as was set out, and how that is to work -- it's in the Act. I think some of these questions were -- in sections 40, 41 of the Act it has been pointed out to me there might be some answers that might differ, and I think maybe this line of questioning is a little bit unfair.

CHAIRMAN: Don't know where we are going with it, Mr. Nettleton. I'm not saying they are not good questions.

MR. NETTLETON: All I am wondering, Mr. Chairman, is the choice of use -- the word that was used by Mr. Snowdon was independent, and I want to understand what he means by independent system operator, because no where in the legislation could I find the word independent in reference to system operator. So, Mr. Snowdon --

MR. SNOWDON: The reference was that it's independent, not tied to generation, not tied to load. Not affiliated in any way.

Q. - It's not affiliated in your view. Okay. Now, Mr. Snowdon, we have before this Board three documents with various calculations, all purporting to show the cost of ancillary services provided by New Brunswick Power. We have the tariff design document that describes the proxy unit pricing, the embedded cost document sponsored by Mr. Bishop and the recently admitted embedded cost study of January 2000. In your opinion, as currently I take it in the role of director of the energy control centre, which of these studies that result in widely different costs represent the best methodology for determining New Brunswick Power's actual cost of providing ancillary services?

MR. PORTER: Before Mr. Snowdon answers, I just wanted to make a comment on your question. You indicated that those three documents -- all three of them purported to represent the costs the provision of ancillary services, and I would like to submit that the latter, the one that is stale from the year 2000, is just that, a stale document and I don't think anyone has put that forward -- no one at NB Power has put that forward as reflecting the current scenario or the current costs of ancillaries as provided by NB Power.

Q. - Well I take it then, Mr. Porter answering for Mr. Snowdon, Mr. Snowdon, you wouldn't accept the January 2000 document?

MR. SNOWDON: I have not seen the 2000 document.

Q. - I see. So which of the studies of the -- I guess the two studies that you are familiar with do you believe to be reflective of the actual cost of providing ancillaries?

MR. SNOWDON: The first one you referred to, the proxy unit, is a proxy unit pricing, and the second one is the embedded cost on a prospective basis for supplying those services. So I would have to say the second one reflects the costs.

Q. - Sorry. Just to be clear. Which one? The tariff design or the embedded cost of ancillary services?

MR. SNOWDON: By definition the embedded cost ones are reflective of what the cost of providing those services are, but that is not the application that we put before this Board. So it's going to be up to this Board to decide which of those two methodologies they rule or deem to be the one that we should move forward with.

Q. - And you are familiar, sir, that the embedded cost is based on capability, not actual service?

MR. SNOWDON: I don't agree with that statement.

MR. NETTLETON: Thank you. Those are my questions, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Nettleton. Just go around the room here again. I know Mr. MacDougall will be leaving tonight, but are there any other questions of the intervenors of any member of this panel? Mr. MacNutt, you have asked all your questions I presume?

MR. MACNUTT: Yes, I have, Mr. Chairman. There is no further questions.

BY MR. SOLLOWS:

Q. - Yes, if I may. Just a few questions arising out of what we have been hearing, and also maybe blame the new legislation that's in the house. I guess the legislature is taking the advice of Mr. Hashey and throwing out the rules of evidence. And so it tells us we can look every where and any where to base our decision.

One of the things that I did stumble upon is a report that's the -- marked final draft report of the New England Pool Tie Reliability Benefit Study. And to summarize it very quickly it says that for ISO New England, it counts the link with New Brunswick as a reliability benefit of 250 megawatts during the summer and 12 megawatts during the winter.

What's the corresponding benefit of the tie line to New Brunswick in terms of reliability? I guess -- generally do -- is a report similar to this prepared by NB Power to determine these things?

MR. BISHOP: It has been sometime since we -- we do a tri-annual report, I believe that's correct. Every three years we do a planning report on reliability, and we do credit some value of capacity to New Brunswick, the numbers are relatively low. And the reason the numbers are relatively low is that the import capability of that tie is in fact low itself.

Q. - Yes.

MR. BISHOP: So it's --

Q. - So it's quite a bit lower than the 250?

MR. BISHOP: And I am afraid I don't have the numbers. Very much lower than 250.

Q. - No, I was just curious, because I know -- I had the impression from earlier testimony that there was not any benefit given to it in terms of reliability in a quantified sense. So there is, but it tends to be small?

MR. BISHOP: That's correct.

Q. - The other question that just occurred to me as I listened to the example you gave of the situation with 500 megawatts of capacity-based ancillary services with Point Lepreau on line, versus 450 megawatts with it off line. When I think about costs in an incremental basis, then that tells me that the extra 50 megawatts is really not charge to the system, it should be charged back to Nuco in this case, because the fact that they are bringing their plant on line to the system increases the reserve requirements. So really shouldn't they absorb all of that extra cost?

MR. SNOWDON: When we determined the 500 megawatt, we looked at what a reasonable size generator on the Maritime system would be, and we used a rule of 10 percent as what we would accept as a generator for this 5,000 megawatt system that we have in the Maritimes.

Lepreau is going to be responsible for the delta between 500 and 630, whatever that net output of that plant is. So that is going to be assigned to Lepreau to cover that. And the reason we put that limit on there is if another generator were to establish in the province, then they would be faced with that same obligation. If it were larger than 500, they would have to cover that delta reserve. But we felt that it's more incumbent on what is a reasonable size generator on the system, because if Lepreau were not to be refurbished, then you could go to Belledune and say, okay, it's 450, the next lowest is 300, well why don't they supply 150 megawatts.

Q. - So you are doing that based on the whole Maritime system?

MR. SNOWDON: That's right.

Q. - Fair enough. Final question I guess relates to some of the other stuff that I was able to find on the ISO New England website. It lists the loads hour by hour on the MEPCO tie line. And it also lists the total imports into New England. When I look at those since the market opened in about three years now or so, almost three years, it shows a remarkable decline in the total imports into New England, to the point that in the last month of two, it was a net exporter, and it shows a fairly significant decline in exports along the MEPCO tie line over the last say year.

Now I guess my concern is that are those declining exports significant in terms of transmission companies' revenue, and are they fully reflected in your filing before this Board?

MR. SNOWDON: The long-term commitments that Generation has made on the MEPCO tie is for the capacity availability of it. Generation in fact take the risk on not using that -- they pay for the capacity on that line.

Q. - So it's been bought and paid for and there is no risk to Transmission?

A. On that particular interface there is no risk to Transmission.

Q. - Fair enough.

A. The risk rests with Generation to have the opportunity take advantage of that capacity.

MR. SOLLOWS: Thank you.

MR. HASHEY: Mr. Chairman, we have two short redirect questions. Can we pose those now?

CHAIRMAN: Yes, please.

MR. HASHEY: Thank you.

CHAIRMAN: You didn't give me a chance to ask my question, but that's all right, Mr. Hashey. I have no questions.

MR. HASHEY: You probably have some follow-ups on --

CHAIRMAN: No, I don't. Go ahead.

<u>REDIRECT EXAMINATION BY MR. MORRISON</u>:

Q. - Mr. Chairman, the first question on redirect goes to exhibit JDI-31, and I will put the question to well either Mr. Porter or Mr. Bishop. With respect to that exhibit, Mr. Nettleton, cross --

CHAIRMAN: Just wait.

MR. MORRISON: Sorry.

MR. SOLLOWS: How long ago did we get it?

MR. MORRISON: It would have been yesterday afternoon I believe. JDI-31.

CHAIRMAN: Go ahead.

Q. - Perhaps, Mr. Porter, I direct the question to you, but under cross examination yesterday by Mr. Nettleton, and it's concerning the ancillary service cost determination in JDI-31. I believe Mr. Nettleton asked you, Mr. Porter, whether you agreed with the particular calculation. And you agreed with the calculation, but you began to express some disagreement with the methodology and you didn't get a chance to explain that. Would you please explain why you disagree with the methodology?

MR. PORTER: Yes, thank you. It comes back to the point that was made in the Panel C presentation by Mr. Marshall that there are really four distinctly different approaches to pricing that were considered. And two of those approaches, the proxy-based pricing and embedded cost pricing are really based on distinct sets of economic principles. And therefore doing a direct comparison between the two, or taking parts of one type of study and using them in another would be inappropriate.

As we had talked about yesterday, the proxy pricing looks at a single investment in sending the right economic signal for new investment so that the required ancillary services will be available. And on that study we did indeed subtract off from the total revenue requirement contributions to fixed costs that were anticipated for the provision of reactor supply and voltage control, installed capacity and energy production.

And that really -- in that study we did not do an allocation of capacity to say that 100 megawatts of new capacity that X percent would be used for energy production and Y percent would be used for ancillaries. We merely took the total revenue requirement and made an estimate as to what contributions to fixed costs would be received from these other sources, and the remainder we deemed to be necessary for that to be collected through the provision of ancillary services.

So in contrast with that on the embedded cost study, the embedded cost study looks at the costs on the existing system and tries to come up with the fixed costs or the costs of capacity associated with the capacity that is ancillary-based capacity. And in such studies, and you can look at both of the studies that are now on the record, we have allocated capacity into the two components, either ancillaries or energy production and any contributions to fixed costs from the sale of energy, either exports or inprovince, those would appropriately be attributed to the capacity that was deemed to be available for the provision of energy, not to be netted off with the revenue requirement of the capacity associated with ancillary services.

So on that basis, I would say that what is done here on this JDI-31 is inappropriate in that these total fixed costs in column two, which are derived from the embedded cost study should not have these other components in columns 4, 5 and 6, subtracted off to create a net revenue requirement to be associated with ancillary services. This is a case of mixing and matching components from two different pricing approaches and I would say that that is inappropriate.

MR. BISHOP: If I might just add and this will be very brief, a corollary to that is that there was a suggestion as well that in this that the revenues from exports or gross margins from exports be subtracted as inasmuch as they will apply towards the fixed costs of capital, be subtracted from this. It's important for the Board to note that the total gross margin from revenues -- or from exports have gone to the customers of the Province of New Brunswick. If some of those were subtracted to effectively reduce the ancillary rates, that cost gets distributed to everybody who uses the transmission tariff and those are folks outside of New Brunswick, as well as, New Brunswick customers. So it does dilute the value of the exports if such were carried out.

Q. - My second to last question, Mr. Chairman, goes to Mr. Bishop. A few minutes ago you had a discussion with Mr. Nettleton about discounting and Mr. Nettleton suggested to you that if there was a generator who wanted to enter the market and could provide say 10 megawatts of ancillary services that you would be discounting -- at a lower cost that Generation would discount its rates to compete with that market entrant. And Mr. Nettleton suggested to you that whether you believe that this would discourage market entrants, and I believe you agreed with him. Could you explain, Mr. Bishop, how the discounting -- exactly how it would occur? Would you discount just 10 megawatts or would you be required to discount all of the capacity that you provide the ancillary services? I just want to be clear as to how the discounting would occur?

MR. BISHOP: I think one of the things that will discourage the market power activity is as the point that you have just noted that our discount -- or NB Power Generation discount would have to be applied against total quantity. So it might fairly well be that the discount -- that to leave the rate and pick up say 90 percent of that ancillary service at a nondiscounted rate with 10 percent coming from a competitor supplier is very much -- can very well be the most economic approach for us to use.

Q. - And I don't know whether maybe Mr. Snowdon should answer this question or not, but -- and there was some question of who would you buy the ancillary service from, and would the system operator purchase the ancillary service from the first, from the lowest cost provider or vice versa or how would that occur for this 10 megawatts, for example?

MR. SNOWDON: The system operator would purchase the ancillary service from the least cost provider. So in that case there would -- purchase the 10 megawatts if it were provided at a cost lower than what the remainder of Generation's price for that ancillary service was.

MR. MORRISON: Thanks, Mr. Chairman. Those are all the questions I have.

CHAIRMAN: Mr. Sollows has one further question just to clear something up. Go ahead.

BY MR. SOLLOWS:

Q. - Yes. Again just in reference to this JDI-31, and since you brought it up, and clearly you don't feel that the numbers are truly representative. In that -- can I infer from that that the numbers that I see here, 20 or $25 per -- or million dollars per year, you would never discount to that level? It's at the bottom -- it's listed as a total on the bottom of that document. Rate for ancillary services vary between on column 8, vary from 21, 31 for regulation down to 40 to 19 for supplemental. You are saying that since these costs really are not a fair reflection, I am inferring from that that in the Genco or Nuco would never discount to that level, is that a fair inference?

MR. BISHOP: I think it's -- being a profit motive driven company, I think unless there was some incentive to discount to that level, it would be unexpected that it would be discounted. In the fact of competition, or maybe other things that I am not thinking of may in fact be reason for discounting.

MR. SOLLOWS: Thanks.

CHAIRMAN: I believe subject to what the parties have to say that that concludes the evidence in reference to this hearing. It does. I can tell. Oh, Mr. Nettleton. Yes.

MR. NETTLETON: Mr. Chairman, I was just wondering if Mr. Porter won the pool?

MR. PORTER: No pool. No pool.

CHAIRMAN: So we are looking at summation. I will go around the room and see what -- we sent out in our Board letter on Friday of last week that we would not have summation sooner than next Monday and I just wonder what the parties' preferences are? And I will start with you, Mr. Nettleton.

MR. NETTLETON: Thank you, Mr. Chairman, the expected time for summation will be one day. We as Mr. Smellie indicated are prepared to commence on the no sooner date but we have considerable flexibility during the first part of that week. Our only concern, sir, is that we in fact complete argument that week. We are not so much so concerned about the start date or starting time but we really do need to have this hearing wrap up before the end of next week.

CHAIRMAN: Well certainly the Board has a concern that it be concluded and the earlier the better simply --

MR. NETTLETON: Yes.

CHAIRMAN: -- because we have no break out room next week which is just fine. But this room is only available up until Thursday, that includes Thursday, so we too want to -- I just want to let everybody know that. Mr. Zed?

MR. ZED: Next week is fine, Mr. Chair.

CHAIRMAN: It doesn't matter when we start?

MR. ZED: Not to me it doesn't, no.

CHAIRMAN: Okay. How about the municipals? I don't know if Mr. Dionne and crew will be here as well, Mr. Young, but what is your preference?

MR. YOUNG: Mr. Chairman, Mr. Dionne and Mr. Martin from Edmundston Energy will be here. The preference is Monday and Tuesday next week, beyond that quite a few of us from this group will be preoccupied with other issues. The preference I guess is Monday and Tuesday.

CHAIRMAN: Okay. Mr. MacDougall?

MR. MACDOUGALL: Yes, Mr. Chair. We are pretty flexible next week. We will probably be an hour or so in our argument. Preference is the beginning of the week. My only issue is Thursday from about 8:30 to 12:30 is very difficult for me next week.

CHAIRMAN: Well from 12:00 noon on is for me, so --

MR. MACDOUGALL: it's just I really have another commitment. I have already structured it to do it by phone so I can be here but I probably can't do those hours here, so that's my only difficulty.

CHAIRMAN: Mr. Hashey?

MR. HASHEY: We would like to start early in the week. Our preference would have been the Tuesday. I would expect that we would be probably no more than half a day in making our presentation. I'm sitting here wondering after the submissions there would obviously -- I think in the procedure that you have established in the previous hearings is that we would -- the applicant would proceed first?

CHAIRMAN: Yes.

MR. HASHEY: And then we would have an opportunity to answer?

CHAIRMAN: Yes.

MR. HASHEY: And probably would need a bit of time to prepare our answer or to get our thoughts around it, particularly if Mr. Nettleton and Smellie will be a full day or so, which will be fairly extensive. We obviously don't need a lot of time but we might need a half say if we get down to that or --

CHAIRMAN: Yes. I --

MR. HASHEY: I'm just trying to work back too, you know.

CHAIRMAN: Well I understand. I --

MR. HASHEY: Can I come up with another suggestion? Why don't we do ours Monday afternoon and then the following day we could have the Intervenors or most of them. And that would --

CHAIRMAN: Well, Mr. Smellie has indicated that he is going to take a full day.

MR. HASHEY: Well then --

CHAIRMAN: And if Mr. Smellie does that he probably will.

MR. HASHEY: Well that's right. But then the others would have Wednesday morning and then if we needed to we could come back on Thursday morning and give our final bleep or Wednesday afternoon.

CHAIRMAN: Well, Mr. Hashey, it would just be a question of two hours less on Monday. Because my intention would be we would reconvene at 10:00 o'clock. If you feel that that way about it why I think the Board would consider reconvening at 1:00 on Monday and --

MR. HASHEY: That would be preferable.

CHAIRMAN: -- and starting. The procedure -- you will have a chance to have a rebuttal argument but as you know our normal way of proceeding is that we get -- I like to give everybody the opportunity to go around and comment, and the Board as well. If there are some things that the parties don't cover in their summation to us is that we say we would like you to cover this or that or the other thing and you would come back and you would cover those things as well. So we will try and have a good full day for Monday and Tuesday and go from there.

Yes, Mr. Nettleton and then Mr. Young after that?

MR. NETTLETON: Mr. Chairman, it strikes me that since the other parties are likely to be a lot shorter than JDI, one way to use time effectively may be to have the other parties proceed ahead and fill that afternoon on Monday after Mr. Hashey goes and so that we would start off a full day Tuesday. And that way there would be no interruption between our presentation?

MR. HASHEY: I thought --

CHAIRMAN: Well first of all Mr. Hashey probably doesn't want to be limited to two hours or whatever. And I see, Mr. MacDougall, you are against that proposal?

MR. MACDOUGALL: Well, I think, Mr. Chair, we should follow the normal process here. People do follow in their slots. I think we would like to argue in the slot that we have been in throughout. There is a process. There is a reason to do that. I think it's appropriate we stick with consistency. No one else seems to have an issue with the schedule.

CHAIRMAN: Fine, Mr. MacDougall. I hear that. But I will say I probably will last long enough in this regulatory process to be able to quote that back to you some day.

Mr. Young?

MR. YOUNG: Mr. Chairman, our presentation will probably be a half hour. And we would actually request that it could be done Monday or Tuesday, even as a filler between different long presentations. We would enjoy going right after Mr. Hashey if possible if there was time. From my point of view, my perspective I have to co-ordinate three or four individuals from all across the province to be here.

CHAIRMAN: Well let's put it this way. I think we can say to you that you will be on on Tuesday.

MR. YOUNG: I appreciate that very much, sir.

CHAIRMAN: We will do that. Okay. We will adjourn over then until -- well, first of all, Panel, thank you very much for your participation again. And the Board wishes you luck over the next month and a half. And we are all going somewhere on the 1st of April.

Mr. MacNutt?

MR. MACNUTT: Mr. Chairman, just for complete understanding. I just wonder if you could summarize when we are reconvening and who will lead?

CHAIRMAN: 10:00 o'clock on -- 1:00 o'clock on Monday afternoon of next week. Thank you.

(Adjourned)

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

Reporter