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 10th, 2003 10:00 a.m.

CHAIRMAN: David C. Nicholson, Q.C.

COMMISSIONERS: J. Cowan-McGuigan

Ken F. Sollows
Robert Richardson
Leon C. Bremner

BOARD COUNSEL: Peter MacNutt, Q.C.

BOARD SECRETARY: Lorraine Légère

CHAIRMAN: Good morning ladies and gentlemen. I'm just going to go around the room and take appearances if I could. NB Power?

MR. HASHEY: Hashey and Morrison appearing.

time for J.D. Irving.

CHAIRMAN: Thank you, Mr. Hashey. Bayside Power? Canadian

Manufacturers & Exporters, New Brunswick Division?

MR. NETTLETON: Good morning, Mr. Chairman, Mr. Nettleton

here for the CME. With me is Mr. Goddard of JDI.

And I will register the appearance also at this

CHAIRMAN: Thank you. City of Summerside? Emera?

MR. ZED: Peter Zed, Mr. Chair.

CHAIRMAN: Energie Edmundston?

MR. MARTIN: Charles Martin.

CHAIRMAN: Mr. Martin. Mr. Gillis? Maine Public Service

Company? Northern Maine Independent System Administrator?

Nova Scotia Power, Mr. Zed. Perth-Andover? Mr Dionne is

not with us? Province of New Brunswick?

MR. KNIGHT: Jim Knight.

CHAIRMAN: Mr. Knight. Province of Nova Scotia? They have certainly made a valuable contribution to this hearing.

Saint John Energy?

MR. YOUNG: Dana Young, Jan Carr, Eric Marr and Tony Furness.

CHAIRMAN: Thank you, Mr. Young. And WPS?

MR. MACDOUGALL: Mr. Chair, David MacDougall. I hope to be joined tomorrow by Mr. Ed Howard.

CHAIRMAN: Thank you, Mr. MacDougall. Mr. MacNutt, you are appearing as Board counsel?

MR. MACNUTT: Yes, Mr. Chairman.

CHAIRMAN: Thank you. Mr. Wood, just so you understand, we have got a couple of preliminary matters that lawyers and parties are going to talk about. And then we will call upon yourself and Renewable Energy Services for your input

to the Board.

All the parties are in possession of a letter that the Board Secretary, Mrs. Legere sent out on Friday. I will find it and try to deal with matters in the fashion that's set forth in that correspondence.

As all the parties are aware, NB Power produced the embedded cost information in reference to ancillary services and offered up a panel. And that included Mr. Bishop and Mr. Porter.

As a result of that JDI came back and requested that in addition to Messrs. Bishop and Porter that NB Power should put Ms. MacFarlane and Mr. Snowdon on that panel.

And my understanding is the addition of those two would be to speak as to the Electricity Act and some of its implications upon our continuing the hearing.

Anyhow what I would suggest that we do now is that perhaps I could turn to Mr. Hashey and ask him to enumerate NB Power's concerns and how they wish to proceed in reference to Ms. MacFarlane and Mr. Snowdon or alternatively ask Mr. Nettleton to establish why it is that JDI believes that those two individuals should come before the Board.

And Mr. Hashey and the other Interveners can have their response. Perhaps that is a better way to go.

Mr. Nettleton?

MR. NETTLETON: Thank you, Mr. Chairman. Is the microphone okay? Can you hear me okay?

CHAIRMAN: Yes.

MR. NETTLETON: Mr. Chairman, as you pointed out, on January 31st parties received the embedded cost study relating to ancillary services.

Upon our review of this study it became clear that different cost of capital and capital structure assumptions were being used than what has been applied for in respect of the remaining transmission rates and services that comprise this application.

As we reviewed the study we saw these differences.

And we presumed that since they related to cost of capital and capital structure matters and that Ms. MacFarlane has testified to these very things, that she would perhaps be in the best and the most appropriate position and witness to address these concerns.

We reviewed Mr. Bishop's prefiled testimony and note his position with the company as stated as a Director of Marketing for the Generation Business Unit.

There does not appear to be anything in his evidence which would suggest Mr. Bishop was involved with the choice of the capital structure or the cost of capital

components for the embedded cost of service of New Brunswick Power's generation division.

As part of the New Brunswick Power Corporation, that is as Generation is a part of the larger corporation and the only corporation that is the applicant before this Board here, we would have assumed or anticipated that Ms.

MacFarlane, as the Chief Financial Officer, to have been involved in these matters, that is the cost of capital and capital structure related to that business unit, particularly so when she has again appeared in the proceedings before you in this matter.

Now Mr. Hashey has indicated in his correspondence dated February 6th that there are no changes in the capital cost assumptions as compared to the proxy units. And with all due respect, sir, that is just not right.

The evidence in this proceeding is that the proxy units were intended to use the same weighted average cost of capital as what the Transmission business unit has applied for in this proceeding. And that is found at page 43 of exhibit A-2, tab B -- tab appendix B at page 43, line 10.

Yet when we review the embedded cost study we see existing plant, plant that has been financed with 100 percent debt being altered, and a deemed capital structure

of 55 percent equity, 45 percent debt being used. And I checked those numbers to make sure I had the debt and equity references correct. I don't believe I have those numbers backwards, sir.

That is hardly consistent with the existing actual cost of capital for Transmission. And it is certainly inconsistent with the deemed capital structure that the applicant has applied for in this proceeding of 65 percent debt and 35 percent equity. So that is our concern with respect to capital structure.

Now I expect Mr. Hashey to say that the weighted average cost of capital is the same as what the applicant has applied for but that too is not so.

The applicant as we understand it is seeking to use the cost of debt on the Transmission revenue requirement of 10.7 percent. That is from table 5 of Ms. MacFarlane's panel C evidence. And you will recall we had considerable cross examination on that table.

But that is not the rate, sir, that is found in the ancillary service embedded cost study. The rate that is found there at schedule 1 is 9 percent. And so there is a discrepancy between the cost of debt assumptions being used in this application.

The question is why, sir? Why is the rate different?

And again it would strike me that the best person to answer that question would be Ms. MacFarlane, since it is her testimony that has been proffered for the suggestion that a 10.7 percent rate should be applied. So that is the cost of capital components.

The last issue on the capital structure, Mr. Chairman, respecting or requiring Ms. MacFarlane's attendance is the impact of the payment in lieu of taxes. And this is perhaps a segue into the next issue of Bill 30.

Our client's position with respect to payment in lieu of taxes was quite clear. It has been quite clear throughout this proceeding. And that is that there should be no payment in lieu of taxes if there is no legislative requirement to make that payment.

Bill 30 clearly indicates that that provision now is required, that there is now expected to be a payment in lieu of taxes flowing to a provincial Crown agency known as New Brunswick Power Electric Finance Corporation.

The concern that we now have, Mr. Chairman, is that with the payment in lieu of tax provision, and that tax provision has significant impact on the cost of capital, because the payment in lieu of taxes is in effect an adder to the overall cost of capital.

Perhaps the best way of suggesting it or looking at

the issue is this way. For every one dollar of equity under the scheme, and under the application, 56 cents is now having to be accumulated and included in the revenue requirement for the payment in lieu of tax provision. And there is that direct relationship between the equity component and the amount of money for equity and the payment in lieu of taxes.

We clearly had no reason to go there and discuss with Ms. MacFarlane that issue. And that issue does have direct bearing on the appropriate level of the capital structure, in particular the equity component in this proceeding.

Now with Bill 30 there is good reason to have Ms.

MacFarlane back, we submit, to have a discussion with her about the appropriate capital structure as it relates to the payment in lieu of taxes.

Now this leads to again to the topic of Bill 30. As the Board is aware, Bill 30, namely the Electricity Act, was introduced in the legislature on January 31st.

On December 19th the Board will recall there was a general discussion at the hearing as to how the legislation would factor into the evidentiary portion of the hearing, and in particular whether there would be a need to recall witnesses for further examination on the

impact of the legislation relative to the tariffs and rates proposed by New Brunswick Power Transmission, if necessary. And that was at transcript reference pages 1938 to 1939.

On January 7th this issue was again discussed and it was determined that if the legislation were introduced reasonably in advance of the resumption of the hearing, that would be sufficient time to prepare to discuss the implications of the legislation again if necessary on February 10th. And that was at transcript reference 22, 23.

In the limited time that we have had to review Bill 30 it is apparent that there are a number of issues addressed in the legislation which are clearly relevant to the evidence of New Brunswick Power with respect to capital structure and again return on equity.

We submit, Mr. Chairman, and it is certainly not our intent to have Ms. MacFarlane re-attend this proceeding for the purposes of extracting her interpretation of the legislation. Mr. Hashey is quite right that that is an inappropriate purpose.

Ms. MacFarlane is obviously a very busy person these days as the chief financial officer of the corporation, and we have no intention of having her re-attend for that

purpose.

But at transcript page 1372, sir, we spoke with Ms.

MacFarlane a great deal about the world of butterflies and it was based on speculation about what the legislation would be and would say. Now that we have some reasonable idea of what the legislation will say, surely our clients should be given the opportunity to test whether the testimony previously provided about the legislation that was absent originally is in fact consistent with what now appears to be the world which we are headed into.

In particular with respect to Bill 30 I again reiterate the major issue that we have relates to the debt equity swap that has been discussed by Ms. MacFarlane and the appropriateness of the debt equity swap that was speculated upon and how that debt equity swap will in fact arise and what criteria specifically will be used for the purposes of calculating that debt equity swap.

Again the issue, sir, is that debt being a tax efficient method of financing has implications upon the payment in lieu of taxes, or, said another way, the use of equity as an inefficient tax method of financing has implications upon ultimately the payment in lieu of tax provision that is now required under the Bill.

Those are my submissions, Mr. Chairman, with respect

to Ms. MacFarlane. I am happy to answer any questions that you might have.

CHAIRMAN: You also indicated you would like to see Mr. Snowdon?

MR. NETTLETON: Yes, sir.

CHAIRMAN: Are you still asking be done?

MR. NETTLETON: I am, sir, and perhaps I can provide you my views now on that point. I didn't know if you would like that.

Mr. Chairman, the embedded cost study respecting ancillary services indicates something quite striking in our view. It is that Point Lepreau is going to be providing ancillary services. That was not provided in the evidence or in the testimony before. What we understood was that it was going to be the generation units that were going to be providing ancillary services.

In light of Bill 30 and in light of the nuclear facilities being established as a separate corporation, we now have an issue of how ancillary services will be procured as between two individual companies by the system operator, two companies that are affiliated with one another.

We thought that those questions would be best addressed by Mr. Snowdon in the capacity of the director

of the energy control centre. We understand from Mr. Hashey's correspondence that there has been no appointment to the role of the system operator, but in any event we would expect Mr. Snowdon to have the best background and testimony to help us with understanding how procurement of ancillary services by affiliated corporations for the provision ancillary services would arise.

The other issue, Mr. Chairman, that comes up with the embedded cost of service study is that there is clearly indication that of the units that will be providing the ancillary services there are different costs associated with the provision of the service for each generating unit. This is again information that is new in light of the difference between a proxy method and the embedded cost method. We thought again that it might be useful to have Mr. Snowdon attend to help us in the capacity of a system operatory-type role to understand how those different costing, shall I say, units would be dispatched to provide the actual ancillary service for the system.

So again, Mr. Chairman, it really relates to the new evidence that is on the record now. It really relates to Mr. Snowdon's role in a capacity of system operator, shall I say, although he hasn't been appointed, and it really relates to the fact that there is a significant change

between the proxy method and the costs associated with providing ancillaries as outlined in the embedded cost study.

CHAIRMAN: Thank you, Mr. Nettleton.

MR. NETTLETON: Thank you.

CHAIRMAN: Mr. Zed?

MR. ZED: Nothing.

CHAIRMAN: Nothing. And Mr. Knight, what is the province's position?

MR. KNIGHT: We have no need for further witnesses from NB Power.

CHAIRMAN: And Mr. Young?

MR. YOUNG: Should Ms. MacFarlane and Mr. Snowdon join that panel to assist Mr. Porter and Mr. Bishop, Saint John Energy has no questions for Ms. MacFarlane or Mr. Snowdon. So we would have no position on this.

CHAIRMAN: Mr. MacDougall?

MR. MacDOUGALL: Yes, Mr. Chair, we have a few questions arising out of the legislation which Mr. Hashey has said Mr. Porter would likely be able to respond to. So we do not need any other witnesses except Mr. Porter.

CHAIRMAN: Mr. MacNutt, I have not spoken to you concerning this particular motion. Do you have any wisdom you want to share with the Board?

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

CHAIRMAN: Mr. Hashey?

MR. HASHEY: Thank you, Mr. Chairman. Maybe I could address -- first of all before I address anything, I will say that NB Power are willing to put forward any witnesses that this Board desires them to put forward. There is no attempt to hide anybody or hide any facts. question of convenience of people, it's a question of the necessity of some of the answers, and the main question is the question of whether or not the panel that we are putting forward cannot answer. I believe that on the majority of the issues, particularly those raised in relation to Mr. Snowdon, that probably the panel can answer as well as anybody can. And I would suggest that maybe the questions should be directed to the panel. it is clear that Mr. Snowdon is more appropriate, then we will bring him here tomorrow, no problem. I mean, he is in a -- actually he is giving a session today or we would probably had him sitting here today. That was very important. It was postponed a week ago because of the storm issue and the problems that arose that we all know that happened in the Moncton area.

So that would be my initial view on Mr. Snowdon. I think that some of these things can be answered, if not

all.

On the issues that are raised in relation to Ms.

MacFarlane again I would suggest that maybe these issues could be put forward, and I thank Mr. Nettleton for being specific as he has been here, that has been very helpful in getting us -- in allowing people to prepare for that sort of thing.

On the weighted cost of 10.7 percent and the difference from the 9, I think Mr. Porter and Mr. Bishop can deal with the 9. I think the 10.7 was answered very extensively. There was a lengthy cross examination of Ms. MacFarlane. But if it is required that she come to deal with that, we will certainly -- we will have her here.

The --

CHAIRMAN: She is available when, Mr. Hashey?

MR. HASHEY: She could be available tomorrow.

CHAIRMAN: Oh, she can?

MR. HASHEY: Yes, if that's desired we could have her here tomorrow, and maybe that's the best answer. But again I think that the -- really when we talk about the legislative amendments, my review of that, and I may be wrong, is that what was anticipated by Ms. MacFarlane actually happened in relation to the legislation.

I mean, our position always was that the government

had announced that there would be a payment in lieu of taxes. There were no surprises. And I thought the cross examination on that area really was quite extensive. And I don't see that really anything has changed in that area at all from where we were when we had the initial hearing.

Again if there are some additional questions though
I'm not here to say that we don't want everything on the
record so the Board can make a ruling as it sees fit
obviously, and that they have full information.

CHAIRMAN: Just before we take a quick recess, Mr.

Nettleton, anything you want to add in light of Mr.

Hashey's comments?

MR. NETTLETON: Thank you, Mr. Chairman. Just two very short points.

First, with all due respect, sir, the payment in lieu of tax issue has always been characterized as a level playing field issue, a level playing field issue as it relates to generation. There was clearly some at the very least uncertainty whether the level playing field as it related to taxes was one involving transmission. We can appreciate the payment in lieu of tax issues as it relates to competitive generation, where there was or is a generator that is a taxable entity and one that is not

mainly New Brunswick Power Corporation. But as it relates to transmission there was no -- no one else on the playing field. So there is that issue for your consideration.

With respect to whether Ms. MacFarlane was able to use her crystal ball correctly in determining what was and what has now come about or what was forecasted to be and what is now come about, that's not the purpose, sir, of why we want Ms. MacFarlane to attend.

What we want to understand is how under the legislation, under the black and white of the Bill, how the corporation is intending to refinance itself and how in particular the corporate decisions that will be taken to develop the capital cost structure and in particular the implications that that cost structure will have to ratepayers in the form of rates charged under the transmission tariff.

CHAIRMAN: Thank you, Mr. Nettleton. The Board is going to take a 10 minute recess and when we come back we will make a ruling on this matter and then we will hear from the Informal Intervenors.

(Short recess)

CHAIRMAN: Well the Board has taken the opportunity in the break to discuss JDI's request, and also Mr. Hashey's response which I think is quite generous. And, Mr.

Hashey, we will ask you to make arrangements to have both Ms. MacFarlane and Mr. Snowdon available. I see no reason why we couldn't proceed after -- it will probably be after lunch now, but with the panel with Mr. Bishop and Mr. Porter, and do the cross examination with them as much as we can, and then add the other two tomorrow morning. Okay?

MR. HASHEY: Thank you.

CHAIRMAN: Thank you. Mr. Wood, thank you for your patience. Would you pull that microphone over in front of you, sir. And that's microphone number 5. Go ahead, sir. MR. WOOD: Thank you, Mr. Chairman. I will try and be as brief as possible. I don't want to take up any of your valuable time.

My name is Ralph Wood. I reside at 22 Lyden Drive in Quispamsis, New Brunswick. I am no expert on things electrical but I am a taxpayer, pensioner and live in an all electric house. So one way or another I help to pay all your salaries, expenses and those of NB Power.

All these transmission lines, et cetera, which we are talking about today, partially belong to me indirectly.

In the last few years, we have seen this mania for deregulation of the power industry sweep across the western world and we have all seen the sad consequences in

places like the UK, California, Alberta and very recently in Ontario.

This mania has mainly been driven by private capital who have seen opportunities to make billions in profit. We have seen companies like Enron, Duke, Williams and Dynergy, who not by producing power but by buying it and selling it produced huge profits and then consumed by their corporate greed for even more built a bubble that was only burst by their corruption and greed. Now we see a government here intent on sending us down the same road as the consumers in Ontario and Alberta.

In Ontario the government has been forced to step in and subsidize rates to the tune of 800 million annually, that more than doubled since deregulation.

I am well aware that New Brunswick Power's situation is not the same as that in Ontario. It currently provides excellent service at very reasonable rats compared to other jurisdictions. It's balance sheet has been steadily improving and is paying down its debt, while keeping rates affordable. In the last seven years from 1996 it has reduced it's debt load by \$517 million. It funded its capital requirements from cash flow. So despite what the perennial critics say, the financial picture is improving.

Last year alone it was able to refinance debt of some 300

million on which they were paying between nine and a quarter and 10 and a half percent with debt at 6.56, for a saving in excess of 13 million -- 13 million in annual debt charges, and no doubt will be able to repeat this performance in this current year with even lower interest rates prevailing.

Now let's look at these transmission systems. New Brunswick is firstly a net exporter of power. Currently we consume approximately 919 million of electricity domestically, import 102 million and export 359 million. So in essence we export about a quarter of a billion dollars worth of power.

I would assume that because of our geographical position we are probably like the TransCanada Highway, a corridor for power to and from Nova Scotia and Prince Edward Island and New England. I must say that I have no figures on that traffic over our transmission system. It would seem to me that it is likely a source of revenue that NB Power can develop even further if rates are set that cover all our costs of capital and operation and a reasonable profit for our enterprise. This shouldn't be excessive so that our fellow Maritimers and cousins in Maine and New England bear an onerous burden. It should, however, be reciprocal -- or be a reciprocal type of

arrangement and should be dependent on those external jurisdictions treating us in a similar manner. I would hate to see us New Brunswicks being saddled with a huge increase in debt and over \$100 million a day in shadow toll as is occurring on the new Fredericton/Moncton Highway just to satisfy and subsidize private companies like Emera in Nova Scotia.

New Brunswick Power employees over 2,500 people and is one of the largest investors in capital construction in the province. It's ours and we have control over its future and thus contributes greatly to our local economy. I don't want anything done that reduces our control over our own destiny. I would hate to see the day when such matters are controlled by foreigners sitting in board rooms in Houston, London or New York, and don't have to pay NB Power bills on a pensioner's income.

In conclusion I would like to say that I don't think this government has a mandate from the people to take the radical steps it's intending to take regarding NB Power.

Although the subject was on the table before the last election it was hardly discussed in that campaign as the results of the committee's investigations were not available at that time. Such a radical change should have had more public input and there should have been much more

explanation and public participation and hearings like this provide to the people that count, those that pay the bills and who just don't have time to attend meetings like this.

I urge you to remember that in your deliberations and recommendations to the government, please don't let New Brunswick become another national scandal like Ontario and Alberta.

Thank you for your time, gentlemen. Subsequent to my writing that I have taken a great interest in these hearings and there is a couple of questions that I have which I would like to put forward to you at this time.

What are the implications in increased cost to the transmission company as a result of, A, the government not guaranteeing the company's debt, B, the cost of having to pay the equivalent of provincial property taxes, and will the tariff be constructed in such a manner so that it is impossible to circumvent the PUB as has been done recently with the electric power charges where they increased the base tariff amount by a hundred units and only increased by 2.9 percent where if they had gone to three percent they would have had to come to you? And that's just chicanery, as far as I'm concerned.

I would also state that -- like to state that

transparency is vital in these discussions on such an important matter. The current negotiations going on in secret regarding Coleson Cove are in my opinion not in the best interests of the owners, the public of New Brunswick.

Thank you, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Wood. A good deal of what you have had to say has to do with policy of the province and this Board has no jurisdiction or authority to deal with policy. But those matters I certainly will take under advisement what you have said about the tariff which is what we are adjudicating on now and the fairness of it.

MR. WOOD: I understand.

CHAIRMAN: The other I'm afraid that if you wanted to ask questions you should have become a full-time intervenor.

The Board is not in a position to answer your questions and NB Power doesn't have to. I hate to do this to your MLA, but why don't you have your MLA answer some of those questions, or attempt to do so?

Anyway, we appreciate your participation, Mr. Wood.

MR. WOOD: Thank you, sir.

CHAIRMAN: Now Renewable Energy Services Ltd.?

MR. TWOHIG: Good morning, Mr. Chairman.

CHAIRMAN: And your name, sir?

MR. TWOHIG: My name is Erik Twohig.

CHAIRMAN: Right. Mr. Twohig.

MR. TWOHIG: Before I begin, Mr. Chairman, there are copies of my presentation on the table at the back of the room for anyone who wishes to have one.

Mr. Chairman, members of the Board, ladies and gentlemen, thank you for granting me the opportunity to speak with you today.

My name is Erik Twohig. I am the President of
Renewable Energy Services Limited located at 135 Gerrish
Street, Windsor, Nova Scotia. I am also a member of the
Electricity Marketplace Governance Committee in Nova
Scotia, in my capacity as the Chair of the Renewable
Energy Industries Association of Nova Scotia. I am
speaking today on behalf of my company, a renewable energy
developer with an immediate focus on wind power
development.

My representation to the Board, and this hearing, is in respect to one small, but significant part of the proposed Open Access Transmission Tariff filed by New Brunswick Power. That is the ancillary service known as Energy Imbalance.

Although my concern is only one small element of the Tariff, by its nature it defines the treatment of renewable energy, specifically intermittent renewable

energy within New Brunswick. With all due respect to the hard work of the New Brunswick Power staff who personalized this tariff based on the 1996 FERC Order 888 Pro Forma Tariff, this tariff element, if allowed to exist as it stands today, will signal to wind developers around the world, that New Brunswick does not wish to utilize the wonderful wind resources available in this province.

My argument will focus on two issues: First, the issue of equity, or fairness if you will, in the application of this tariff to intermittent resources.

Second, the issue of how this particular ancillary service is in contravention to the stated policies of the Province of New Brunswick.

My intention today is to be brief, but the issue, though simple, does bear some further review. To that end I have provided a page of resource locations at the end of my printed version of this presentation. These online resources further detail the remedial treatment provided in many other FERC compliant jurisdictions to correct the inequity created, but not intended, by the FERC 888 Pro Forma Tariff in the first instance.

In Nova Scotia Power Inc. IR-35, three questions were asked of NB Power relating to the variability of wind energy, and how it would be addressed from a scheduling

and imbalance perspective under this Tariff. In response,

New Brunswick Power stated, "The Tariff provides non
discriminatory access to all users. Other than the

opportunity to elect point-to-point or network service, no

attempt has been made to provide special accommodation for

particular types of users."

Later in response to the same IR, New Brunswick Power uses the terms "non-discriminatory" in relation to use of the tariff, and proceeds to provide an example that, by its very nature, is discriminatory to wind generators. I would suggest that there is a difference between non-discriminatory and being applied in the same manner to all participants. I would further suggest that the implementation of the tariff as proposed will indeed discriminate against wind generators.

I would like to briefly go back to some of the principles established in the creation of this tariff.

The following quotes come from the NB Power Transmission Tariff Design, June 2002.

The overall objective is that rates be just and reasonable without undue discrimination and based on the revenue requirement.

It is my submission, supported by decisions in other jurisdictions, that the application o the Energy Imbalance

ancillary service as enunciated in this tariff is neither without undue discrimination nor based on the revenue requirement.

The Tariff Design states: "New Brunswick Power's approach closely follows relevant transmission pricing developments in other jurisdictions and applies them within the public policy directions of New Brunswick."

New Brunswick Power has chosen, not unlike most jurisdictions, to apply the pro forma tariff without significant amendment. This is highlighted by the following statement from a document whimsically called Regional Transmission Organizations and Wind Energy: A Happy Marriage or Divorce Proceedings?

I quote, "Transmitting utilities could offer terms superior to those listed in the pro forma tariffs but could not provide less than the basic provisions in those tariffs. At the time, it was thought that transmitting utilities would introduce new tariff provisions and innovations over time. Instead, transmitting utilities closely adhered to the pro forma tariffs, and those tariffs became a ceiling rather than a floor."

This application of the tariff as provided under FERC 888 thus created for wind generators exactly what it had been designed to eliminate -- discrimination.

I quote again, "Because wind is a variable energy resource and energy is only produced when the wind blows, it is basically impossible for wind generators to deliver wind energy within the 1.5 percent band included in the Order 888 tariffs. The penalty provisions in Order 888 tariffs typically exceed the commercial value of the wind energy."

The validity associated with wind energy must be recognized and accommodated. New Brunswick Power has recognized the inherent variability in the valuation of energy imbalance as noted by the following statement:

"Energy imbalance is a service that has no predictable required quantity and the cost of providing the service fluctuates with the real time cost of producing energy.

The challenge in designing this service is to find the appropriate balance between protecting the providers of balancing energy and allowing a degree of tolerance of imbalances in the market so as not to make participation in the market impractical."

Despite the recognition, NB Power has chosen to utilize only a punitive methodology which, when applied to thermal facilities is appropriately designed to encourage transmission customers to balance their supply. Applying the same methodology to wind power makes wind power

uneconomic.

I would like to take this time to quickly go back and review some of the Government of New Brunswick policy directives to see if a punitive Energy Imbalance charge, which restricts wind power development and does not relate to the revenue requirement meets their objectives.

The White Paper -- New Brunswick Energy Policy,

Section 2, Introduction, stipulates several goals of the

policy. Amongst them are to promote economic development

opportunities.

The following statement is key: "Access to a variety of energy sources with stable, long-term competitive rates is critical to the success of existing and new businesses."

To my knowledge renewable technologies are the only energy sources that can provide known pricing to customers over 10 or 15 years, or longer, let alone freedom from the volatility of global hydrocarbon duel prices, and the anticipated carbon constraints of the future. The proposed Energy Imbalance tariff does not meet this objective.

The White Paper -- New Brunswick Energy Policy,

Section 2, Introduction continues, "Protect and enhance
the environment."

It states, "In the near term, promotion of technical innovation in the areas of energy efficiency and alternative energy forms will have an important part to play in their acceptance and recognition as critical in reducing air emissions while increasing the reliability and security of our energy supply and the competitiveness of our industries."

The proposed Energy Imbalance tariff does not meet this objective.

The White Paper -- New Brunswick Energy Policy,

Section 5, Alternative Energy, Green Pricing states: "The

Province will direct the Crown utility and other

distribution utilities in the province to develop a green

pricing option and market it to interested customers."

Under the proposed Energy Imbalance Tariff, this green pricing option will be artificially expensive and send an incorrect message to those customers who wish to utilize it.

The Market Design Committee, in its final report, though not providing much detail on renewable energy sources, did address small renewable generation by suggesting that they could be small enough to fall within the deadband for their total output. This implies only very small, and hence more expensive generation. It

certainly does not promote access to a variety of energy sources, including wind energy.

Additionally, the Market Design Committee also offered two modifications to the standard tariff that are relevant in this circumstance. First, such generators could be allowed to submit unbalanced schedules. Second, alternatively, they could be given some special consideration, as for example they could be allowed to change their schedules on a shorter time frame than other market participants.

The Market Design Committee thought about the potential for problems relating to balancing, but didn't follow through specifically for renewables. In the discussion of Regulated Ancillary Services 7.3 in the Market Design Committee Final Report, they viewed that price ceilings and floors regarding imbalance needed to be in place to protect participants.

This final provision should provide the protection necessary to ensure that the pricing for balancing service does not become a barrier to entry for competitive suppliers.

While the treatment of balancing in the proposed tariff meets the test of the Market Design Committee statement just quoted, in terms of dispatchable

generation, it produces exactly the opposite effect when applied to non-dispatchable intermittent renewable generation.

My final comments today relate to the treatment of Energy Imbalance by renewable, intermittent generators in jurisdictions that currently employ a FERC 888 tariff model. These modifications to the standard model, as put forward by New Brunswick Power, have typically come after the problems associated with the standard tariff design became clear. Examples include the following:

California ISO allows for monthly netting of scheduling deviations, both positive and negative, and waives penalties.

ERTCO ISO in Texas allows wind generation a 50 percent deviation from schedules.

The New York ISO exempts intermittent renewable energy generators from regulation penalties and settles at realtime prices.

PJM ISO also settles at real-time prices without penalty, and further allows schedule changes up to 20 minutes before the hour.

RTO West has applied to FERC to provide an eight-year exemption on energy imbalance charges.

On September 30, 2002 FERC approved an application by

the Bonneville Power Administration to exempt wind generation from an imbalance penalty of \$100 a megawatt hour and to allow deviation to be charged at Bonneville's incremental cost plus 10 percent. The reason that all of these jurisdictions have modified the imbalance tariff provisions is most clearly stated in the following quote from a Bonneville Power Administration Press Release of July 25th 2002.

The penalty in question is designed to encourage power plant operators to accurately schedule the output of their generators", said Steve Wright, BPA administrator. "But wind generators cannot constantly predict, with accuracy, their output, so such a penalty would only discourage the development of wind projects.

I respectfully request that the Public Utilities Board of New Brunswick require New Brunswick Power Transmission to revisit the issue of Energy Imbalance as it relates to intermittent renewable generation and apply the principles of "equity" and "cost causation" by providing a methodology that will not only encourage the development of renewable technologies in New Brunswick but fulfil the economic development and environmental policy goals established by the Province of New Brunswick.

I thank you for your time and interest in this

subject. I can assure you that renewable producers from across our country and beyond will be watching your deliberations as they evaluate their investment opportunities.

Thank you, Mr. Chair.

CHAIRMAN: Thank you, Mr. Twohig. Any questions?

I'm quite interested in your presentation, Mr. Twohig.

CHAIRMAN: I wish -- and hindsight is 20/20 but that you had have approached the Board counsel at the commencement of the hearing and outlined your concerns to him so that he could have on your behalf asked some questions of the appropriate panels of NB Power, so it would have gone on the public record, which is too bad. As I say, hindsight is 20/20.

MR. TWOHIG: Yes, indeed, sir.

CHAIRMAN: Because there are loads of questions here that are unanswered that should be answered. But anyhow. We appreciate your participation. Thank you, sir.

MR. TWOHIG: Thank you.

CHAIRMAN: Those are all the Informal Intervenor presentations. What is your pleasure, Mr. Hashey?

MR. HASHEY: Well we are prepared to proceed ahead. At least I think it might be advantageous if we put the evidence in that we need to put in, for instance, the

binders and information have been distributed concerning the proposed changes to NB Power's open access transmission tariff.

CHAIRMAN: All right.

MR. HASHEY: As was requested it might be helpful to mark that as an exhibit. I believe that has been distributed to the Board and also to all of the Intervenors, both electronically and in hard copy.

CHAIRMAN: Our records indicate, Mr. Hashey, that that would be  $\underline{A-47}$ .

MR. HASHEY: Thank you.

CHAIRMAN: Yes, sir. And the next one?

MR. HASHEY: The next, Mr. Chairman, would be the responses to undertakings which I believe completes the record on undertakings. There are two, there is an answer to undertaking 45 and another to undertaking 47. Again, these have been very recently distributed electronically and hard copy. And I would ask that they be entered in to -- as exhibits I guess is the way we have been handling them.

CHAIRMAN: So you think that completes the undertakings?

MR. HASHEY: Yes, I believe so, Mr. Chairman.

CHAIRMAN: Well then, Mr. Hashey, just to ruin your morning why the Board has a request for a further undertaking, but

we will put those in. I just --

MR. HASHEY: You absolutely destroyed it. No. Anything the Board would request obviously --

CHAIRMAN: Yes. Well while the secretary is putting it around, I don't think it will be very difficult for you to comply with it at all.

In your exhibit A-2 at page 43 of -- sorry, that is page 13 of Ms. MacFarlane's evidence, lines 14 and 15 stated, and I quote, "Interest on short-term debt is calculated on short-term debt at forecast 90 day borrowing rates".

We would 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.

MR. HASHEY: Mr. Chairman, it would be helpful to me if you could repeat the reference?

CHAIRMAN: I can give you a sheet of paper.

MR. HASHEY: That would be helpful. That would be great.

CHAIRMAN: The response to undertaking 45 will be exhibit  $\underline{A-49}$ .

Anything further, Mr. Hashey?

MR. HASHEY: Yes, Mr. Chairman. Mr. Morrison has one preliminary matter he would like to address.

MR. MORRISON: Yes, Mr. Chairman. This is an issue that

arose from -- Saint John Energy has raised an issue with NB Power in the last several days which arises out of the discussions on the market rules and basically it deals with the noncoincident peak billing determinant.

And NB Power just wishes to clarify its intent with respect to a business practice pertaining to billing.

Past practice of NB Power has been with respect to load transfers from one substation to another will be continued upon the implementation of the tariff. That is to say that a load that has been moved from one substation to another within a calendar month will not contribute to the peak of both substations.

And that was an issue. It's not clear in the tariff.

Saint John Energy has asked the question what was -- what
is NB Power's intent on a go forward basis as to how this
billing was to be done.

And the intent is and -- well we would like to put on the record that the past business practice that I just referred to would continue. And I hope that addresses the concerns of Saint John Energy as communicated to our client.

CHAIRMAN: Thank you, Mr. Morrison.

CHAIRMAN: Does that, Mr. Young, address your concern?

MR. YOUNG: I thank Mr. Morrison for having raised this

issue as it is a concern of Saint John Energy and the other municipal utilities. It is a common operating practice.

We are concerned that this issue needs to be clearly understood in the tariff as to market rules are currently unclear on load transfer issues. And the market rules are continuing on this issue looking towards the tariff for direction as I believe the tariff has precedent over the rules in this area.

This goes part way to what we would like to see, in fact it is in the transcript now. But we would really appreciate if NB Power would consider finding an appropriate area in the tariff to add this clarification just for clarity that everyone could see it and be aware of it.

CHAIRMAN: Mr. Young, would you approach NB Power during the next break and talk with them about this and discuss where you believe might be the appropriate place and the appropriate wording?

MR. YOUNG: Most definitely, sir.

CHAIRMAN: Any other Intervenors have any input they wish to have in reference to that particular matter? No, good.

Thank you.

MR. MORRISON: Thank you, Mr. Chairman.

CHAIRMAN: Anything else, Mr. Hashey?

MR. HASHEY: Mr. Chairman, that does lead us to the -putting in evidence, the embedded cost of ancillary
services study. And I guess at that point possibly
calling the two Panel Members that exist here today for
that purpose. I would say this has been circulated in the
same manner as the other exhibits, Mr. Chair.

In addition to that there is some brief evidence of Mr. Bishop. We could mark that now if you like as well and then we could call them.

MR. MACNUTT: Mr. Chairman, just for point of clarification before we go on to the embedded costs. Are we going to come back to the proposed changes in the tariff wording for review and comment by the participants now or at a later time?

CHAIRMAN: I hadn't considered it at all, Mr. MacNutt. I think that -- I know that that document has been circulated among the parties, is that correct?

MR. MACNUTT: Yes. That's why I'm saying it.

CHAIRMAN: I am going to deal with it after I have got these exhibits marked and then we will come back and talk about that.

MR. MACNUTT: Thank you.

CHAIRMAN: So that will be A-50 the embedded cost of

ancillary services document.

CHAIRMAN: And as well, Mr. Hashey, there is the prefiled evidence of the Panel, is that correct?

MR. HASHEY: Yes. There is a very short -- there is a twopage -- sorry, a four-page document which is the direct
evidence of Mr. Bishop which really references the
embedded cost of ancillary services.

And appendix A to that is Mr. Bishop's c.v. I believe the others are all on record.

CHAIRMAN: Yes. The Board Secretary had bound the two of them together. So we will separate that. A-50 is just the embedded cost of ancillary services study.

And the three-page document which is headed direct evidence of Mr. Darrell Bishop will be  $\underline{A-51}$ .

Okay. Those are all the exhibits that need to be introduced at this time, Mr. Hashey?

MR. HASHEY: That is correct, Mr. Chairman.

CHAIRMAN: Now Mr. MacNutt, back to your question concerning exhibit A-47, what is the -- I don't know what has happened with this document. I know it has been gone between the parties, et cetera. The Board has not seen it.

Maybe I can ask Mr. Hashey how he thinks we should proceed with it and then go around the room.

MR. HASHEY: He is to proceed in any way you see fit. As you know, these were amendments that arose from previous undertakings and the evidence that was given before the Board whereby on cross examination or by suggestion by parties that there were changes to be made. We hope that we have accomplished those. We have shared that information with Mr. MacNutt, unfortunately or fortunately.

I mean, these were only recently sent out to the other Intervenors. And I guess we have to hear how they would like to proceed with that. We hope this is complete. But if there is something in addition that needs to be done, we are obviously here to do it.

CHAIRMAN: Mr. Zed?

MR. ZED: Mr. Chairman, I believe these were delivered to my office on Friday. I was out of the office. I saw them yesterday for the first time and was unable to reach my client.

There are two changes that have particular consequence for my clients. I don't see there being any major issue.

But I would at least like the opportunity to discuss them with both Nova Scotia Power and Emera Energy before commenting on whether or not we wish to take issue.

It is my belief that I can deal with any issues in

argument. But I would at least like to consult with my client in that regard.

CHAIRMAN: Having that in mind, as long as there is no objection to it, my suggestion is we put A-47 aside, and before we break to go for our -- for summation that we revisit the subject matter.

MR. ZED: That would be fine with me, Mr. Chairman.

CHAIRMAN: Is that all right? Anybody any problem with that? Okay. And that is the way we will go.

We have got at least a half hour before lunch. I think we should put the Panel on and swear them and -- oh, Mr. MacDougall?

MR. MACDOUGALL: One preliminary matter for WPS. And this might be an appropriate time to do if we have a moment.

We filed some direct evidence of Mr. Edward Howard on Friday.

This evidence was in response to the embedded cost of services study put forward by NB Power. I have mentioned this to Mr. Hashey today as well as to some of the Intervenors who received the document and to Mr. MacNutt. There seems to be no issues with that. I was wondering if maybe we should have that just put into the record now.

And also there was a consideration Mr. MacNutt had raised that whether or not parties actually will have any

questions of Mr. Howard, as you will have seen if you saw his evidence, it is very brief and on one discreet issue.

If there are no questions anticipated, I could possibly advise Mr. Howard of that at the break. And then he can make his determination on when he has to be here. And that would also help us if there is any need or lack of need for witness preparation, if he doesn't have to be called.

CHAIRMAN: Thank you, Mr. MacDougall. It is my understanding that Mr. Nettleton does not have instructions from his client at the present time in reference to how to proceed with that. Is that correct, Mr. Nettleton?

MR. NETTLETON: Excuse me, sir. Yes, that is correct. I'm sure I could obtain those instructions over the lunch hour though, sir.

CHAIRMAN: Okay. Would it be all right if we proceed that way? I'm not prejudging anything. I just look at it.

And I say it is just a matter of your client's opinion as to the use of embedded cost information, period.

And it may well be that there is no need to put him up for cross examination unless some of the parties wish to do so.

MR. MORRISON: Mr. Chairman, there is a possibility we would

have a couple of questions for Mr. Howard, although it would be very brief.

And I'm wondering if perhaps over the lunch hour we may be able to come to a resolution maybe to deal with it in argument rather than to have him come all the way up here for what could be a five minute cross examination.

Anyway if you can leave that with us. And we will advise the Board after lunch.

CHAIRMAN: All right. And at that time we will mark the -we might as well mark the testimony and give it an exhibit
number at the present time I think.

MR. MACDOUGALL: Thank you, Mr. Chairman. Mr. Howard, is certainly available for cross examination. He may be here tomorrow in any event.

CHAIRMAN: My notes indicates that this will be  $\underline{WPS-2}$ . Would you call the Panel, Mr. Hashey?

MR. HASHEY: Yes. I would request the Panel to come forward.

## GEORGE PORTER AND DARRELL BISHOP SWORN

## **DIRECT EXAMINATION BY MR. HASHEY:**

MR. HASHEY: Thank you, Mr. Chairman. I believe the panel has been sworn.

MR. HASHEY: Maybe just a preliminary question to

Mr. Bishop. As you know, Mr. Bishop is new on the PanelS

in this hearing. Mr. Porter is there to assist. Because Mr. Porter has been here throughout the discussion on the proxy cost method.

And there will probably be some discussion and questions concerning the comparison of the two. And I think he would be able to add and assist in that regard.

Q. - And the question for Mr. Bishop is Mr. Bishop, in front of you is the exhibit A-50 as the embedded cost of ancillary services study dated February 3, 2003. And this was prepared by you and under your direction?

MR. BISHOP: That is correct.

MR. HASHEY: I think that is sufficient, Mr. Chairman. The Panel is open to cross examination.

CHAIRMAN: I have one question.

MR. HASHEY: Oh, I'm sorry. I would ask that we -- and I apologize for interrupting.

- Q. I believe, Mr. Porter, there is one correction in your evidence that would relate to this issue. And I would ask that you might address that?
  - MR. PORTER: It is in exhibit A-2. It is appendix B. Page 43. This is a correction. It's in response to the comments made by the counsel of JDI this morning that was really brought to our attention for the first time. The statement on lines 10 and 11 -- 10, 11 and 12. It says,

The fixed cost of capital are based on the transmission business unit's weighted average cost of capital established in the financial report of this filing and an estimate of inflation.

The capital structure that was used in calculating the cost of the capacity based ancillary services was based on a different debt equity structure than what was assumed for the transmission business unit. It was based on 45 percent debt, 55 percent equity. And that information is included in a response to an interrogatory from Nova Scotia Power. It's interrogatory number 29.

Otherwise the cost of capital calculation was done on the same basis as the calculation of the cost of capital for the transmission business unit. That is the cost of debt, that is the interest rates of the debt component was the same and the return on equity of 11 percent was used.

And -- so that is the correction. Thank you.

- Q. Thank you, Mr. Porter. Mr. Bishop, just one additional question. You do adopt your evidence in this matter and do you have any correction?
  - MR. BISHOP: I do adopt the evidence and there is one correction. If I might have you refer to table C on page 13 of the embedded cost study evidence, exhibit A-51 --
- Q. A-50 I believe.

- 2276 - Direct by Mr. Hashey -

CHAIRMAN: Reference that again, if you would, sir? It's in exhibit A --

MR. BISHOP: It's in exhibit A-50, page 13. The title is

Table C. The heading in the last column, the units are

expressed as dollars per kilowatt-year. That is

incorrect. It should be millions of dollars per year.

MR. HASHEY: Thank you, Mr. Chairman, for your indulgence.

Those are the preliminary matters with this Panel.

CHAIRMAN: My only remark was going to be, Mr. Bishop, since you are a witness before the Board you can demand regulatory affairs at NB Power make you a name plaque, and shame on you, Mr. Porter, for forgetting yours.

MR. BISHOP: I am of the same shame because I have forgotten mine. They have done that.

CHAIRMAN: Okay.

MR. BISHOP: May I retrieve those, please?

MR. HASHEY: Surprise.

CHAIRMAN: Mr. Zed? No questions. Mr. Nettleton?

MR. NETTLETON: Thank you, sir. I think I will cross examine in the CME slot. I don't think it will matter.

## CROSS EXAMINATION BY MR. NETTLETON:

Q. - Mr. Porter, good morning, gentlemen, good morning, Mr. Bishop. Maybe, Mr. Porter, we could start by zooming up to 30,000 feet for a moment. Your application, sir,

- 2277 - Cross by Mr. Nettleton -

includes a revenue requirement for ancillary services of \$38.7 million, is that correct?

MR. PORTER: Yes.

Q. - And that revenue requirement is based upon a proxy unit pricing methodology, correct?

MR. PORTER: Yes.

- Q. And the use of the proxy unit methodology was because of the intent for the proxy to be an approximation of actual cost of providing the ancillary services, is that correct? MR. PORTER: It's an approximation of the long-run marginal costs of supplying that service.
- Q. So it's not intended to be an approximation of the embedded costs?
  - MR. PORTER: No, it's not necessarily reflective of the embedded costs.
- Q. Do you have the transcript there, sir? Do you have a copy of the transcript?

MR. PORTER: No, I do not.

Q. - Well maybe through your counsel you could obtain page 1828 of the transcript, sir.

CHAIRMAN: Mr. Nettleton, what day is that?

MR. NETTLETON: I have been asked that question off the record and I'm scrambling, sir.

MR. PORTER: Yes, I have that.

- Q. Do you see the response to a question that was provided by your colleague, Mr. Marshall, where he says, the proxy cost pricing that we have put forward before this Board in this application comes up with rates that are consistent and similar to an embedded cost study. Do you see that?

  MR. PORTER: Yes, I do.
- Q. So are you telling me today, sir, that it is your evidence that that is not the case?

MR. PORTER: No, I'm not saying that.

- Q. You are not. Well which is it?
  - MR. PORTER: This statement from Mr. Marshall is that rates

    -- the results are consistent and similar to unembedded

    costs put in a service study. And I believe that when he

    made that statement he was referring to a cost study which

    was done in the past.
- Q. So not this study, but another study about embedded costs?

MR. PORTER: I believe that to be the case.

Q. - Could you undertake to provide us with that study, sir?

MR. PORTER: Subject to check on confidentiality issues,

that has been a discussion before this Board previously,

this is a study that was presented in Northern Maine at

the opening of the Northern Maine market, and we have

indicated that it was an attachment to the products and

services agreement. The products and services agreement has been entered into the record here. The cost of service study is -- was the background to that and was confidential and we will -- I would have to check with others on that and get back to the Board on that.

- Q. I'm having trouble here, Mr. Porter. On the one hand we have Mr. Marshall indicating that the proxies are consistent with an embedded cost of providing ancillary services, and on the other hand what you just told me is that this study -- sorry -- rather your proxy method is not consistent with what has now been filed as exhibit A-50. So which is it? What is the proxy method approximating?
  - MR. PORTER: First of all I think you are implying that Mr.

    Marshall's statement indicates that the proxy method

    approximates or would tend to lead to the same results as

    embedded cost of service. I don't believe that he said

    that. I think what he said was that the results in this

    case were consistent to unembedded cost of service study.
  - MR. NETTLETON: Well, Mr. Chairman, with all due respect I will move on as far as I can, but I will return to this issue of undertaking to provide that which the proxy method is intended to approximate to so that we can determine whether or not proxies are, as I understand it,

still on the application being sought by this applicant as being the method to price the service. But I will save that matter and see how I can move on, but I would like to return to it if necessary.

CHAIRMAN: Could the Board have an estimate of how long it would take you to find out about that other particular study?

MR. PORTER: By after lunch we would be able to have a response.

CHAIRMAN: Do you want to break for lunch now?

MR. PORTER: That would be fine, sir.

CHAIRMAN: Okay. Why don't we leave that and we will come back at 1:15.

(Recess - 11:35 a.m. - 1:15 p.m.)

CHAIRMAN: Good afternoon. Any preliminary matters,
Mr. Hashey?

MR. HASHEY: Thank you, Mr. Chairman. The study that was requested by my friend Mr. Nettleton has been located.

And we have no problem with having that marked. I mean, hopefully this is an opportunity to give an explanation on it. But beyond that it is here.

CHAIRMAN: I certainly would ask that Mr. Porter give an explanation. But what, before or after?

MR. HASHEY: Sure. Whatever. Mr. Nettleton probably will

- 2281 - Cross by Mr. Nettleton -

bring up most of the --

CHAIRMAN: Your choice, Mr. Hashey.

MR. HASHEY: We will offer that.

CHAIRMAN: This will have exhibit number A-52. (Attachment A, cost of service study)

How do you want to proceed, Mr. Hashey or Mr. Nettleton?

MR. HASHEY: I think if Mr. Nettleton wants to continue, that is probably the best approach. He has requested this. And I don't think we should intervene on it at the moment.

CHAIRMAN: All right. Thank you. Go ahead, Mr. Nettleton.

MR. NETTLETON: Mr. Chairman, what I have before me, what I

was provided just before the start of this afternoon, was

an eight-page document, which as you can see firstly

comprises exhibit A-52. But it provides similar

calculations and uses similar revenue requirement. It

appears tight calculations.

I certainly haven't had a chance to review this in any level of detail or scrutiny. But if -- and I would request that time, sir, to have that ability. I can proceed.

I have in fact in the past five minutes been able to conjure up a few questions that I see. But I certainly

- 2282 - Cross by Mr. Nettleton -

would like more time to do that.

CHAIRMAN: I appreciate your request, Mr. Nettleton. I would say that perhaps if Mr. Porter has a statement he wants to make in reference to it before we decide how we are going to proceed, why that would be in order.

Mr. Porter?

MR. PORTER: Certainly. I would just like to establish the context of this study to make sure it is clear to everyone where this has come from and why it has been introduced.

First of all, back to before lunch, there was a quote from Mr. Marshall indicating the proxy study of producing -- come up with rates that are consistent and similar to embedded cost study.

And my statement was that I believed that it was this study which led -- the results of this study which led Mr. Marshall to make that statement.

This study was performed, as you can see, in the end of 1999, early 2000 and was used to produce the prices that would be charged by NB Power to Northern Maine. And that was done at the request of Northern Maine.

It was done based on a embedded cost study. It did look at the costs associated with the units that can and do provide the ancillary services. It is not a study that has been submitted to FERC for their approval, nor was it

- 2283 - Cross by Mr. Nettleton -

based on a study that was submitted to FERC for their approval.

It is a study that was done in-house, an NB Power methodology. And we believed at that time that it created appropriate prices for Northern Maine. And those prices have been in effect and I believe without complaint since that time.

That really leads us up to the new study which Mr.

Bishop has submitted. And I would like to turn it over to him to explain that study in contrast to this study.

MR. BISHOP: In view of the fact it would be questioned further, let me just not point out all the similarities of the studies. But let me point out the salient differences.

When the earlier study was done there was weighting given for the regulation ancillary that looked at the inefficiencies that were caused in generation by the very fact they were regulating. I might make an analogy to pumping the gas pedal in your car rather than driving at one rate. So there was a weighting given for regulation inefficiency.

And there was no particular weighting in this previous study that was done to account for the difference in the rate of movements, the ability of units to respond to area

- 2284 - Cross by Mr. Nettleton - generation control and load following controls.

So there is -- there are numerous similarities in the studies. But those are salient differences that produce different results.

I might add that the interest rates and other things, the capital structures have been updated somewhat since that study was done in the embedded cost service that we have provided you here today as A-50.

CHAIRMAN: Mr. Nettleton, what is your desire? Do you want to take a recess? Or do you want to adjourn till tomorrow? How do you want to proceed?

MR. NETTLETON: I sure would like to continue and see -- and try and get as much of this cross done today. My client is certainly cognizant of the costs, you know. So to answer your question, sir, I think let's try and proceed as best we can. I will go as far as I can.

But as you are aware, sir, my clients have retained experts in Los Angeles. Dr. Earle has been very much involved in the analysis of the embedded cost of ancillary services that was provided to us on January 31st. I'm going to have to get a copy of it to him.

Mr. Goddard has left the room in fact to do that right now. So I suspect we will have to adjourn perhaps earlier than usual today, and then come back tomorrow to discuss

- 2285 - Cross by Mr. Nettleton -

the new study in more detail.

CHAIRMAN: Fine. Then proceed and complete what cross you are able to.

MR. NETTLETON: Thank you, sir.

- Q. Mr. Porter, in your description of this new study you made reference to a study that was provided to the FERC for approval, is that correct?
  - MR. PORTER: My statement was that this study, which we have just handed out as A-52, has never been submitted to FERC, nor was its origin any FERC-based study.

And I made that statement in contrast to the study which Mr. Bishop has submitted as A-51 which was based on the Central Maine Power methodology which, as Dr. Earle has acknowledged under cross examination, was submitted and approved by FERC.

- Q. Mr. Porter, I just want to be clear. Has there been any study of New Brunswick Power submitted to the FERC for approval respecting embedded costs of generation?
  MR. PORTER: No. As noted earlier on other questions pertaining to filing with FERC, it is this Board which has authority over both the transmission tariff and ancillary services. And it will be this Board that makes a decision on appropriateness of the application.
- Q. Mr. Bishop, could I have you turn to exhibit A-51, sir?

- 2286 - Cross by Mr. Nettleton -

That is your direct evidence.

MR. BISHOP: Okay, I have it.

Q. - Thank you.

MR. MACNUTT: Mr. Chairman, just a point of clarification.

I assume this January 6th 2000 study has been marked as an exhibit, as A-52. I may have missed it on the way through.

CHAIRMAN: We can't hear everything you said, Mr. MacNutt, so go over that again.

MR. MACNUTT: The document which Mr. Hashey just introduced dated January 6th 2000, referred to as attachment A Cost of Service Study, has that been formerly marked as an exhibit?

CHAIRMAN: Yes, A-52.

MR. MACNUTT: Thank you. I missed that.

- Q. Mr. Bishop, you are the director of marketing for generation for the generation business unit for NB Power?
  MR. BISHOP: That's correct.
- Q. And as part of your responsibilities, does that include the marketing of power to the United States?

MR. BISHOP: Yes, it does.

Q. - Thank you. Now, Mr. Bishop, can I have you turn to page 3 of exhibit 50? I'm going to be referring primarily to exhibit A-50. On page 3 at line 10 there is the order

made by the Chairman respecting generating facilities that will actually provide each of the necessary ancillary services. Do you see that?

MR. BISHOP: Yes, I do.

Q. - And, secondly, the order went that -- or requested that estimated costs of providing the actual ancillary services be provided. Correct?

MR. BISHOP: That's correct.

Q. - Using generating facilities that will actually be used to provide ancillary services. Do you see that?
MR. BISHOP: That's correct.

Q. - Now, Mr. Bishop, as I understand exhibit A-52, it was prepared on January 6th 2000. Is that correct?

MR. BISHOP: That is correct.

- Q. And this information then was available to you at the time that this request was made by the Chairman?
  MR. BISHOP: That is correct.
- Q. Why, sir, did you not include this study as part of and in fulfilment of the Board's order?
  - MR. BISHOP: There is two primary reasons. Number one is that the exhibit A-50 is a methodology which we have looked at and researched subsequent to producing the initial embedded cost study. It also allowed us to update with this study the capital structure with the interest

rates and equity -- return on equity rates which were in question. And moreover, there are -- there is a better thread of logic through the latter embedded cost study that I submitted as my evidence, than what I am able to find in -- not -- not that this is anything terribly wrong with the former exhibit or the exhibit A-52, but I just -- we feel that it's much more thread of logic through the embedded cost study that we have submitted.

Q. - Mr. Porter, am I right in thinking that the application of New Brunswick Power is for this Board to approve ancillary services that are based upon a proxy unit methodology?

MR. PORTER: Yes, that is correct.

costs of the provision of this service.

- Q. And your evidence, sir, is that the proxy methodology is a proxy to the January 2000 study, is that right?
  MR. PORTER: No, it's not. That is not correct. It's a proxy which is intended to indicate the long run marginal
- Q. Well, we are back to Mr. Marshall's quotation, sir. I thought we got down this path by you saying that the proxy cost pricing that we have put forward before this Board in this application comes up with rates that are consistent and similar to an embedded cost of study. Which study are we talking about, sir?

- 2289 Cross by Mr. Nettleton -
- MR. PORTER: The proxy pricing as stated by Mr. Marshall it comes up with rates. And the end results, the rates that result from the proxy study are consistent and similar to the results of the January 2000 study, A-52.
- Q. Let's go back then to the question. The proxy methodology then is a proxy for A-52 then, correct?

  MR. PORTER: No.
- Q. Why not? What is your definition of proxy?
  - MR. PORTER: The proxy -- the relevance of the term proxy is the fact that we are looking at units which are not actually on the system. We are looking at a hypothetical new investment in contrast with facilities that are existing. Have been built and exist and are connected to the system. So it's a contract between proxy, meaning a new unit that could be built in the future versus existing facilities in which case we would use the term embedded.
- Q. Ancillary services provided by New Brunswick Power today,

  Mr. Bishop, are provided by proxy units?
  - MR. BISHOP: No, they are not.
- Q. How are they provided, sir?
  - MR. BISHOP: They are provided by existing units on the generating system. I think one of the things that's worthy to note here is that when the transmission business unit presented the tariff, the basis of the proxy was a

- 2290 - Cross by Mr. Nettleton -

bases of a market going forward, recognizing that we are attempting to go to a competitive market.

An embedded cost study on the other hand actually tries to project to the future from past units. At some point in time there will not be sufficient capacity on the system from the existing units to provide those services.

Moreover, those services that are provided by competitive suppliers in New Brunswick will quite likely be supplied from new generation.

- Q. Mr. Bishop, are you telling this Board now that ancillary services in the test year period that this application speaks to are going to be provided by any other party than New Brunswick Power?
  - MR. BISHOP: I would suggest that very little if any will be provided by other than New Brunswick Power.
- Q. So, Mr. Porter, the coincidence that the proxy method pricing methodology coincidentally approximates to the prices contained in the cost of service -- cost of service study, which is exhibit A-52, is just that, coincidence?
  - MR. PORTER: The fact that the numbers are close is not coincidental. Because you are looking at costs of generation facilities. In the case of embedded, you are looking at a mix of new and old and -- and generation that's built to minimize cost of energy. Some -- built

- 2291 - Cross by Mr. Nettleton -

for various purposes. The fact that they align so closely I would say is coincidence.

- Q. Let's look at the exhibit A-52 as much as we can. On page 1 of 8 at the top left corner is marked "draft". Do

  I take that to me that there is a other version other than a draft version of this document?
  - MR. PORTER: No, there is not. This is a the final version even -- in spite of the fact that it does say draft on the top. The results of this were used to give -- the results of this are the prices that were given to Northern Maine.
- Q. If we could turn to page 5, sir. Mr. Bishop, could you read into the record the capitalization for a ratio that is stated three/quarters of the way down the page?
  - MR. BISHOP: The capitalization percentages were debt 60 percent, equity 40 percent, for a total of a hundred percent.
- Q. And, sir, with respect to the cost of financing, could you please read into the record the interest rate and return on equity before tax?
  - MR. BISHOP: The interest rate is 7.5 percent and the return on equity before taxes is 18 percent.
- Q. 18 percent?

MR. BISHOP: Yes.

Q. - Now, Mr. Bishop, could you turn to page 6. Do you have

that?

MR. BISHOP: Yes, I do.

Q. - Under the column G and under the column H there is a heading entitled "Allocation Factors for Energy and Ancillaries", do you see that?

MR. BISHOP: That's correct, yes, I do.

Q. - And with respect to the generating unit entitled Point

Lepreau could you please read into the record what the

allocation factor is for ancillaries?

MR. BISHOP: The allocation factor is zero for ancillaries.

O. - Zero?

MR. BISHOP: That's correct.

Q. - Could you turn to page 3 of your exhibit A-50, sir.

MR. BISHOP: Yes, I have it.

Q. - In the table that is stated on page 3 there is a column entitled "Point Lepreau", do you see that?

MR. BISHOP: Yes, I do.

Q. - And can you confirm with me, sir, that there are allocations for ancillary services for Point Lepreau?

MR. BISHOP: Yes, I can. Specifically --

Q. - Thank you.

MR. HASHEY: Are we going to let him finish, Mr. Chairman?

CHAIRMAN: Go ahead.

MR. BISHOP: Specifically 19 percent of the reactive supply

and voltage control, two percent for spinning reserve and one percent for each of ten minute reserve and 30 minute reserve.

Q. - Spinning reserves from a nuclear facility, is that correct?

MR. BISHOP: That is correct.

Q. - Mr. Bishop, which of your units is your lowest cost producing unit to produce energy on a variable cost basis?
MR. BISHOP: The hydro units.

Q. - Hydro?

MR. BISHOP: Hydro typically.

Q. - Not nuclear?

MR. BISHOP: Nuclear would rank second.

- Q. Could you turn to page 10 of exhibit 50, sir?

  MR. BISHOP: I have it.
- Q. Mr. Bishop, will you confirm with me that from page 10 of exhibit 50 there is a 9.8 million dollar difference between the revenue requirements generated by the proxy method and the -- I was going to say the embedded cost method but I want to be clear -- it's the embedded cost method of exhibit 50. Do you see that?
  - MR. BISHOP: Yes, I do, and the number is correct with the embedded cost method providing the higher revenue requirements.

- 2294 Cross by Mr. Nettleton -
- Q. Right. The proxy method came in at 9.8 million dollars less --
  - MR. BISHOP: That is correct.
- Q. -- than the embedded cost. And, Mr. Bishop, is it your evidence here today that the embedded cost study performed most recently in exhibit A-50 is the better of the two cost studies now conducted?
  - MR. BISHOP: In my opinion, yes, it is.
- Q. Mr. Porter, aren't you concerned that you are applying for a rate that has a shortfall of 9.8 million dollars of embedded cost recovery?
  - MR. PORTER: My interest is in the creation of a tariff
    which will work and meet the goals that were set out at
    the creation of the tariff. I believe that we will have
    under contract the capacities required at the rates
    proposed and therefore I'm not concerned about any revenue
    shortfall in generation.
  - MR. BISHOP: If I might add, one of the things that we need to consider here in looking at any competitive supply, or competitive supply of any resource, is what that rate really means in a competitive market. And while I agree that early -- and will continue to agree that early in the future New Brunswick Power will be supplying most of the ancillary services, already we find ourselves competing

for ancillary services in Northern Maine, for example, where the rates that we have demonstrated and provided in the study just submitted after lunch today are too high to compete for those rates. So quite frankly, while the embedded cost study provides higher numbers there is no guarantee that those numbers will be availed to New Brunswick Power in any type of competitive market. We find ourselves discounting those rates in generation from time to time.

- Q. Well let's be clear, Mr. Bishop. The proxy method has been based on a fictional facility, correct?
  MR. BISHOP: You can call it fictional, we will call it proxy.
- Q. Do you have this -- these combined cycle generation units in your fixed asset accounts?
  - MR. BISHOP: No. We have one under contract for a portion of the year, in the Bayside generating station.
- Q. Mr. Porter, I believe you have told this Board that the facilities that comprise the proxy methodology are not facilities owned or even constructed yet, but simply theoretical costs associated with the construction facilities, is that not correct?
  - MR. PORTER: That's correct.
- Q. Thank you. And, Mr. Porter, if we alter the proxy

methodology and take for a minute the output of exhibit A-52, which coincidentally comes to the same sorts of rates as your proxy method, we see a capital structure and a return on equity more specifically that is fundamentally different from the capital structure and the components of the cost of capital that you have used in your proxy unit, correct? Your proxy unit has used a 55/45 cap structure.

MR. PORTER: That's correct.

Q. - Your proxy methodology has used a return on equity of 11 percent?

MR. PORTER: That's correct.

Q. - And your proxy method has used a debt rate of 10.7 percent?

MR. PORTER: That is not correct.

Q. - The proxy method has not used 10.7 percent?

MR. PORTER: The long-term debt is at 10.7 percent, but the -- sorry -- one component of the debt is at 10.7 percent, and only one component.

Q. - 95 percent of that component?

MR. PORTER: I don't believe that to be correct. Could you point to me where that number comes from?

Q. - Well are you suggesting that the rate of interest -
MR. PORTER: Perhaps you could turn up the response to an

interrogatory --

Q. - Yes.

MR. PORTER: -- it's from Nova Scotia, so it would be A-4, page 251.

MR. MACNUTT: Could we have that reference again.

MR. PORTER: It's in A-4. So responses to interrogatories.

It's page 251 and it's the response to IR number 29 from

Nova Scotia Power.

MR. MACNUTT: Thank you.

MR. PORTER: Specifically the top of the page, part E. This is a calculation of the overall -- what we call the weighted average cost of capital. You can see from the first row that we have 55 percent of the capital structure composed of equity at a rate of 11 percent.

The next three line items are the three components of the debt, and it shows the respective percentage of the total capitalization followed by the respective rate. As you can see in the second row under rate we have a 10.7 percent which is the rate associated with the existing long-term debt. And this is the same 10.7 percent to which reference was made earlier today in regards to Ms. MacFarlane's table 7 in her evidence.

Q. - And your point -- sorry -- continue.

MR. PORTER: As you can see, the next two components are at lower rates with the new debt being at 7.5 percent and

- 2298 - Cross by Mr. Nettleton -

short-term debt being a little over five percent.

So albeit lengthy, my response to your question is that 10.7 percent is not the interest rate that was applied in the proxy units. It's the weighted average of the 10.7, 7.5 and 5.06, and I believe the number comes out to 9.35 percent.

- Q. Thank you. Using that same methodology, Mr. Bishop, that is, determining a weighted average cost of capital, would you expect the weighted average cost of capital as stated on page 5 of 8 of exhibit A-52, using the 60/40 capital structure and the interest rate of 7.5 and the return on equity before taxes of 18 percent, to be 10.3 percent?
- Q. What is the weighted average cost of capital from the

MR. BISHOP: Would you repeat the question, please?

- variables found on page 5 of 8 of exhibit A-52?
  - MR. BISHOP: I'm afraid I don't have the answer but my -- I think intuitively I would think the weighted cost of capital would be lower than in the exhibit A-50.
- Q. Would it be lower than the 10.3 percent?

  MR. BISHOP: The debt only?
- Q. No. The weighted average cost of capital.
  - MR. BISHOP: Without doing the calculation I believe it is lower.
- Q. You believe it's lower?

- 2299 Cross by Mr. Nettleton -
- MR. BISHOP: Yes. Bear in mind that the return on equity is similar in the two cases. One is quoted before and one is after taxes.
- Q. So your point is that we have to add the payment in lieu of taxes to exhibit A-50?
  - MR. BISHOP: A-50 already includes -- sorry -- yes. I think the before tax -- or the after tax number comes to 17.5 as a rate of return on equity.
- Q. Now, Mr. Bishop, if we turn to schedule 1 of exhibit A-

MR. BISHOP: Yes.

Q. - -- that provides the weighted average cost of capital that you were speaking of, is that fair?

MR. BISHOP: That is correct.

- Q. And so on a before tax basis it's 10.10 percent?
  - MR. BISHOP: 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.
- Q. Well what does the column entitled WACC mean?

  MR. BISHOP: It's weighted average cost of capital.
- Q. And what is the total of that?

  MR. BISHOP: It's 10.10 percent.
- Q. Thank you. Now if we turn to page 5 of exhibit A-52, could you undertake to provide me with the weighted

- 2300 - Cross by Mr. Nettleton -

average cost of capital that we could use for comparative purposes? You can do that by way of undertaking, sir.

MR. BISHOP: Thank you. We will do that.

Q. - And, Mr. Bishop, is it fair to say from schedule 1, page
14, that the impact of the payment in lieu of taxes to
this capital structure of a 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?

MR. BISHOP: That is correct, yes.

MR. NETTLETON: Mr. Chairman, I think I have gone as far as

I can with respect to this matter. We are broaching on
the area I would like to discuss further with Ms.

MacFarlane. So I will move on from here.

- Q. Mr. Bishop, as director of marketing and following up
  with what you were saying about the competitiveness of New
  Brunswick Power Generation, you will agree with me again,
  just so that we are not off side here, that it is only New
  Brunswick Power who is going to be providing these
  ancillary services to customers in New Brunswick during
  the test year as applied for?
  - MR. BISHOP: I believe that to be the case. I can't anticipate that anybody else may be in the market.
- Q. So your comments concerning the opportunity to provide

the export market with ancillaries has nothing to do with the matter before this Board, has it? This is a matter relating to ancillary service pricing or rates under this tariff.

MR. BISHOP: It is a matter under this tariff, yes.

Q. - Are you pricing your power sale contracts to the export market to meet embedded costs, sir?

MR. BISHOP: No, we are not. We are in the export market at competitive rates competing with other suppliers for the same market.

Q. - You are not?

MR. BISHOP: No.

Q. - How do you make up that shortfall, Mr. Bishop? Surely there is a shortfall to your revenue requirement then.

MR. BISHOP: I must have misunderstood the question. Would you repeat, please.

Q. - Sure. When you price your sales contracts in the export market are they priced to meet your embedded cost?

MR. BISHOP: And -- okay, I do repeat the answer is no.

- Q. So there is a shortfall in your revenue requirement as it relates to embedded cost?
  - MR. BISHOP: There may or may not be, depending on the price that is available in the export margin. Typically the answer is yes, has been in history.

Q. - Who picks up that shortfall?

MR. BISHOP: It's picked up in rates --

Q. - Charged to who?

MR. BISHOP: -- either charged to the customers or the

Province of New Brunswick. Another way of saying that is

that for the embedded costs in the generation that is a

cost to supply low cost energy, the export markets in fact

help pay for some of the embedded costs that would

otherwise be paid in full by the New Brunswick customer.

Q. - And that would include ancillary services?

MR. BISHOP: It will in the future. Ancillary services have been a very small portion and newly defined in this market.

Q. - All right. We have heard that phrase before, that discussion point before, I will call it a speech button, about how important the export market has been to the domestic rates, and I think you are agreeing that those export sales help the rates that are paid by customers in the province, correct?

MR. BISHOP: That is correct.

Q. - I'm still, Mr. Porter, having difficulty understanding why you believe it is prudent for a Board to approve a proxy pricing methodology that under-recovers a revenue requirement based on embedded costs of 9.8 million.

- 2303 - Cross by Mr. Nettleton -

Can you help me understand that?

MR. PORTER: There are a number of factors that have led to the recommendation or application for proxy-based pricing which may not fully -- may not lead to full recovery of the embedded costs as stated.

And we gave that in response to an interrogatory from Saint John Energy. It is interrogatory number 66. And we will probably end up coming back to that.

But it comes down to a number of issues, one of which Mr. Bishop has mentioned in terms of his competitiveness. There is no advantage to NB Power Generation or to those that pay rates that are based on NB Power Generation's profitability, if the rates that are approved under the tariff are so high that other -- that users of these services elect to self-supply or purchase from elsewhere.

- Q. And so, sir, when we look at a study that is based upon the actual generation facilities that have provided users in this province with ancillary services, namely that which is found in exhibit A-52, we see considerably different cost of capital and capital structure estimates?

  MR. PORTER: Sorry. I missed the comparison. You are talking about capital structure but --
- Q. Let's try this. Can you undertake to provide me a revision of attachment A -- sorry, exhibit A-52 that

- 2304 - Cross by Mr. Nettleton -

includes the capital structure that you are proposing to be included in the proxy unit methodology?

MR. PORTER: Yes. We can do that.

MR. BISHOP: I assume you would need the rates updated as well as the capital structure?

- Q. I would like you to do it -- let's be clear. I would like you to do it using an interest rate of 9 percent and a return on equity of 11 percent?
  - MR. PORTER: And is that without updating any of the information based on a lot of this data being from 1999 type thing?
- O. That is correct.
  - MR. HASHEY: Mr. Chairman, I wonder if that is really relevant. If the Board feels that it is, we will go to that exercise. But it is grinding down to the end here.

And I think Mr. Bishop has probably explained the lack of relevance of that by itself. However --

- CHAIRMAN: I stand to be corrected. It is not a terribly onerous thing to do, is it?
- MR. BISHOP: No, it isn't. I will point out for clarity that it still won't give an apples to apples comparison until we -- or unless we do change OM&A costs, other fixed components.

The capital structure is a large part of the fixed

- 2305 - Cross by Mr. Nettleton -

components. But it is not the only fixed component in the study. So it does require some updating.

Again, that is not terribly onerous. It is probably an undertaking we could accomplish by tomorrow.

Q. - And I do intend to review this document in more detail, including those other components, this evening. And we will probably have more questions for you on those other components.

So maybe this. Maybe what we should do is just wait until that cross happens. And at that point in time we can have a full revised document. Is that satisfactory?

MR. BISHOP: That is satisfactory.

MR. PORTER: Yes.

CHAIRMAN: I don't appreciate what Mr. Nettleton just said, frankly. Sorry. Appreciate is not the proper word. I don't think I comprehend totally what he just said. But if you gentlemen do, and Mr. Hashey is clear, that is fine with me.

Q. - Just to be clear, Mr. Bishop, I take it that this is a modeling exercise, that this is a spreadsheet, so the variables are quite easy to change and alter?

MR. BISHOP: That is correct.

Q. - Thank you. So if there are several different scenarios it would be quite easy to do those types of modeling

- 2306 - Cross by Mr. Nettleton -

exercises, correct?

MR. BISHOP: That is a question?

Q. - Yes.

MR. BISHOP: Relatively easy.

- Q. Thank you. All right. Let's go back to the exhibit A-50. And I just want to understand, Mr. Bishop, starting at page 3, in the table again, are the generating units and percentages shown in that table the units and percentages of how ancillary services have been provided in the past?
  - MR. BISHOP: Yes, they are. They are an average of the past three or two years. And it is more specifically set out in table -- excuse me for a moment please -- more specifically set out in table B to actual quantities. And the historical time frames are noted in the notes at the bottom of that table on page 12.

Specifically reactive supply and regulation are based on a two-year average in calendar years 2000, 2001. And I'm sorry, regulation and load following is based on a two-year average in 2000, 2001.

And each of the three types of reserves, namely spinning, 10-minute and 30-minute, are based on a three-year average of calendar years '99, 2000 and 2001.

Q. - Sorry. This is on table 2?

- 2307 - Cross by Mr. Nettleton -

MR. BISHOP: This is on table B --

- Q. Table B?
  - A. -- on page 12. That table is just simply a recreation of the table you see on 3 expressed in absolute quantities of megawatts multiplied by the hours that the unit was online, capable of providing those reserves.
- Q. Now ancillary services are not an easy area, believe me, for any person I think to understand. So maybe you can help me understand a little bit more about how they work.

Suppose I have a 100-megawatt unit that is capable of providing 30-minute reserve. Can I provide more than 100 megawatts of 30-minute reserve from that one unit at a given time?

MR. BISHOP: At a given time, no.

Q. - And likewise, suppose this 100-megawatt unit is available and capable of producing both supplementary, supplemental 10-minute reserve as well as supplemental 30-minute reserve.

Can I provide from that same unit 100 megawatts of supplemental 10-minute reserve at the same time I provide 100 megawatts of 30-minute reserve?

MR. BISHOP: No.

Q. - So in other words, I could provide 50 megawatts of 10minute and 50 megawatts of 30-minute reserve at the same - 2308 - Cross by Mr. Nettleton -

time though, right?

MR. BISHOP: That is correct.

Q. - Or for instance I could provide 25 megawatts of 10-minute and 75 of 30-minute at the same time, right?

MR. BISHOP: Yes.

Q. - But I couldn't provide 75 of 10-minute at the same time I provide 75 of 30-minute?

MR. BISHOP: That is correct.

Q. - And that is because I would be providing 150 megawatts, right?

MR. BISHOP: You would be double-counting the reserve, yes.

- Q. And this principle applies to all of the capacity-based ancillary services, right?
  - MR. BISHOP: Not necessarily. 10-minute and spinning can be counted equally. And in fact spinning under NERC criteria has to be at lest 25 percent of the 10-minute.

In other words, it says that if I need 100 megawatts of 10-minute reserve, which says that in a period of 10 minutes, if I have a contingency, I must be able to recover from that contingency by providing 100 megawatts, that 25 megawatts of that piece of generation or generators must be online and spinning to give very immediate response.

Q. - One does have to separate the megawatts of capacity

- 2309 - Cross by Mr. Nettleton -

available for each of the services provided, right?

MR. BISHOP: Not for those ones that I have noted. And in fact a generator can be providing area generation control or load following while at the same time providing reserve.

A generator can be providing voltage control and voltage regulation and still provide reserve or load following or regulation. So they are not totally mutually exclusive.

Q. - Right. Well, let's turn to table B where you were on page 12 of your exhibit A-50?

MR. BISHOP: Yes.

Q. - Do you have that? Now that table is entitled "Summary of services provided by each generating plant", right?
MR. BISHOP: Yes, it is.

Q. - So this table shows the services provided by each generating plant, right?

MR. BISHOP: That is correct.

Q. - Now would you keep this table out please, but also turn

to

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on

Do you

have

that,

sir?

MR. BISHOP: Yes, I do now.

Q. - All right. Now if you go to the column under "Coleson Cove" -- do you see that --

MR. BISHOP: Yes.

- Q. -- it is shown to have a capacity of 998,000 kilowatts?

  MR. BISHOP: That is correct.
- Q. Or 998 megawatts, right?

MR. BISHOP: Yes.

Q. - So that means that 998 megawatts, if it was always available and technically capable of producing capacity-based ancillaries, that it could produce at most that rating, that 998 megawatt rating multiplied by 8,760 hours times, right?

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

Q. - Well, the capability of Coleson to provide capacity-based ancillaries would be 998 times 8,760, correct?

MR. BISHOP: If in fact all ancillaries were mutually exclusive, I would agree. But they are not. And so I subsequently can't agree with that statement.

I can provide 998 megawatts of reserve at the same time that I'm providing 998 megawatts of regulation --

Q. - Right.

MR. BISHOP: -- or 998 megawatts of load following.

Q. - Right. Let's save that reservation. And let's move on.

And subject to check, the 998 times the 8,760 is

8,742,480 subject to check.

Now turning back to table B, could you look under the column "Coleson Cove". Do you see that?

- 2311 - Cross by Mr. Nettleton -

MR. BISHOP: Yes.

Q. - And subject to check, the amounts shown under that column, if you add those up, that adds up to 11,183,138 megawatt hours, subject to check?

MR. BISHOP: Yes.

- Q. And that is a figure that is bigger than the 8,742,480 number of maximum potential ancillary services that Coleson Cove could provide, correct?
  - MR. BISHOP: No. That is where we differ in suggesting that
    -- your suggestion is that each of these ancillary
    services are mutually exclusive.

But while I'm supplying in any one hour -- if you excuse me, if I may round off at a thousand megawatts from Coleson Cove in any hour, I can supply a thousand megawatts of area generation control or regulation. And that is the response to small movements. It has that potential within limits.

I can provide a thousand megawatts of load following capability, which is the hourly load following as load changes in the province. I can provide a thousand megawatts of spinning reserve theoretically, simply because a unit can't operate at zero, a thermal unit. And I can provide a thousand megawatts of 10-minute reserve or a thousand megawatts of 30-minute reserve.

So the only one that I can agree is mutually exclusive is a 10-minute and 30-minute.

- Q. Well, how much overlap is there between these numbers?
  MR. BISHOP: That is a question I cannot respond to. There is continuous overlap as we use these units to regulate and provide reserve simultaneously more often than not often.
- Q. So Mr. Bishop, are you telling me that table B are in fact actuals, that is actual services provided? Or are they capabilities of the units that can provide these services?
  - MR. BISHOP: They were actual services provided. They were actual services provided. Can we have just a moment please?
- Q. Yes.
  - MR. BISHOP: Mr. Nettleton, if I may just clarify.

    Mr. Porter has pointed out to me where the confusion I believe exists.

When I indicate that these are services provided, I stand to clarify that situation. These are services that the generator was able to provide or the generator was in a state of being able to provide over this average period.

The requirement for the 10-minute and 30-minute and spinning reserves are not in fact those numbers that are

- 2313 - Cross by Mr. Nettleton -

in that table. These numbers would have been less than those or less than the combined table.

But the generators over this three-year average were as shown, ready and able to provide those services in that period.

Q. - So that would be a capability?

MR. BISHOP: I'm sorry. Yes, it is. That is a capability.

Q. - These are all capabilities?

MR. BISHOP: Capabilities, yes.

- Q. So they are not as what the table B is entitled, of services provided?
  - MR. BISHOP: That is correct. I stand corrected. It is capable of providing, a better statement.
- Q. So as we talked earlier, Mr. Bishop, in the 2000 cost study, exhibit A-52, Point Lepreau had no actual ancillary services. But there is a capability of providing ancillary services?
  - MR. BISHOP: In the 2000 study, my opinion is that it is an oversight and simply an oversight that Point Lepreau was not included in the provision of ancillary services.

Very definitely, without any question at all, Point Lepreau does provide some ancillary services in our system.

Q. - Can you turn to schedule 7, page 21? Do you have that,

sir?

MR. BISHOP: I have it.

- Q. Now is it fair to say that this schedule lists all of the units that are capable of providing the 10-minute reserve?

  MR. BISHOP: It is schedule 6 or 7?
- Q. 7?

MR. BISHOP: 7? Yes. Okay. Yes, I agree.

- Q. And Point Lepreau is listed as the first line item?

  MR. BISHOP: Yes, correct.
- Q. And the weighted annual cost amount that is provided to that \$79 amount is what, sir? It is the last column.

  MR. BISHOP: \$3.65 a kilowatt.
- Q. And in column 11, sir, it is denoted "used, yes -- equals 1, no -- equals zero." Do you see that?

MR. BISHOP: I see that, yes.

- Q. And is Point Lepreau denoted as a 1 or a zero?

  MR. BISHOP: It is a zero.
- Q. Thank you.
  - MR. BISHOP: I might add that in our definition or in the methodology we noted that there was an area where we dealt with recallable sales from generation which have the same effect of having a unit sitting on the system either unloaded or onloaded to provide reserve for the system.

And specifically how that occurs is that if in fact

during the spring period when this situation occurs and New Brunswick's hydro facilities are operating at full capacity, nearly 900 megawatts, and Point Lepreau is operating at over 600 megawatts with the in-province load -- an in-province load less than that level -- the options are either to partially load Point Lepreau, in other words back it down and have a part of Point Lepreau spinning, providing 10-minute reserve or alternatively, because its incremental price is -- cost is low enough, we can sell it on the export market but with what we refer to as a predetermined condition which says that if there is a contingency, a predetermined contingency occurs on the system, loss of generation, then in fact that sale can be recalled, which has every bit the same effect of being able to load that unit up almost instantaneously, in fact it is better than even spinning reserve, to allow the reserve on the system.

And that is the time and the period that is being denoted by the small percentage of the time that Point Lepreau provides that ancillary service.

- Q. But that logic was not used for the purposes of the Northern Maine system administrator?
  - MR. BISHOP: That is correct. And that is why I'm indicating that in my opinion this is a better thread of

- 2316 - Cross by Mr. Nettleton -

logic of this embedded cost.

Q. - And that better thread of logic adds \$3.65 to the price that is derived for this service?

MR. BISHOP: I think so. And I think fairly so.

Q. - And sir, could you go back to exhibit A-52, page 6 of 8.

I'm sorry for this, Mr. Chairman. But it is I think due
to just the timing of this document.

Do you have that, sir?

MR. BISHOP: Yes, I do.

Q. - Can you read into the record what the amount is under column G for Belledune?

MR. BISHOP: Under column G for Belledune the amount is 100 percent.

Q. - And that would mean that it has been allocated 100 percent for energy, correct?

MR. BISHOP: That is correct.

Q. - Now going back to exhibit A-52 -- sorry, A-50, schedule 7 -- Belledune is also listed as a unit having the capability of providing spinning reserve and in fact has a weighted annual cost of \$18.77. Do you see that?
MR. BISHOP: Yes, I do.

Q. - A lot has changed since 2000 I guess, Mr. Bishop, to the way you have operated your facilities, no?

MR. BISHOP: No. I believe that is not correct. I believe

what has changed is the recognition of the value of the recallable sales to requiring less reserve to be carried on spinning or otherwise readily available units on the system.

So that it has allowed a recognition of the fact -this is not new -- recognized the fact that having the
ability to sell into specifically the New England market
with predetermined conditions allowing a recall of energy
from those units.

- Q. Why would you not want the user of the ancillary service to pay for that then, Mr. Bishop?
  - MR. BISHOP: The user of this ancillary service is paying for that.
- Q. I'm sorry. I thought that this application is for approval of the proxy method?
  - MR. BISHOP: Oh, I'm sorry. I'm back on the same response that I had given you earlier, that these -- given the nature and the costs of our particular generating system, which was built to minimize total electricity costs, not just ancillaries or capacity, that at this particular point in time the embedded cost study derives the numbers that you see before you in exhibit A-50.

As the system ages without the addition of capacity, as system operations change, those numbers can change I

- 2318 - Cross by Mr. Nettleton -

submit either upwards or downwards. Those numbers are not at all static.

And in fact those numbers in our opinion are really not representative of what a future market will bring.

- Q. A future market, not today's market?
  - MR. BISHOP: No. But I think the tariff is not for necessarily today's market. There is no suggestion that this is simply for one year.
- Q. But it is intended, is it not, to reflect the fact that ancillaries, all of the ancillaries are going to be provided by New Brunswick Power during the test year.
  - MR. BISHOP: And I'm reminded this is an application for a three-year term and on that basis I don't accept the one year test year.
  - CHAIRMAN: Mr. Nettleton, is that a good time for us to take a recess?
  - MR. NETTLETON: Yes, it is.

(Recess - 2:30 p.m. - 2:45 p.m.)

- CHAIRMAN: Mr. Nettleton, have you received instructions from your client in reference to WPS's witnesses?
- MR. NETTLETON: I have, Mr. Chairman. And I can advise that we would not be cross examining that witness.
- CHAIRMAN: So therefore my memory is that there are no parties that wish to cross examine the witness, therefore

he need not attend.

MR. MORRISON: I would say that -- I would say that's fair,
Mr. Chairman.

MR. HASHEY: But if he comes, he is at his own risk.

CHAIRMAN: Mr. MacDougall, tell him to stay at home.

MR. MACDOUGALL: I believe he is going to be here anyway,

Mr. Chairman. (Mike not on.)

CHAIRMAN: Okay. Thank you, Mr. MacDougall. Okay, Mr. Nettleton?

Q. - Now, Mr. Bishop or Mr. Porter, I suspect, Mr. Porter, I'm going to ask you to turn to exhibit A-3 -- sorry, A-2, tab Appendix B, the tariff design document at page 71, if I could?

MR. PORTER: Yes, I have that.

- Q. That is the document entitled, Schedule 1.4 Capacity -Capacity Based Ancillary Services Rate Design, correct?

  MR. PORTER: Yes, that's correct.
- Q. Now the requirement for load following is shown there as being 46.6 megawatts for load following. Is that right?

  MR. PORTER: That's 46.74.
- Q. Sorry, correct, 46.74.

MR. PORTER: Yes, that's correct.

Q. - Now subject to check, converting that into megawatt hours would be 46.4 times 8760 or 406,464, right?

- 2320 - Cross by Mr. Nettleton -

MR. PORTER: Agreed, subject to check.

Q. - And that 46.74 is as column 2 indicates, the service that is required, correct, for load following?

MR. PORTER: Yes, in the case of load following, that's the average hourly requirement.

Q. - Now, Mr. Bishop, if we could turn to your evidence, sir, which is exhibit A-50, Table B at page 12. And I just want to make sure that I have the right reference here.

Sorry, it's Schedule 5 which is the load following document, not Table B.

CHAIRMAN: What page?

MR. NETTLETON: Sorry, that's page 19, sir.

CHAIRMAN: Thank you.

- Q. And, Mr. Bishop, you can confirm with me, sir, that the total load following amount found in column 4 is 1.812,704 megawatt hours. Sorry, 1,812,704 megawatt hours, correct? MR. BISHOP: That is correct.
- Q. So the capabilities of the units to provide load following exceed the requirements, correct?
  MR. BISHOP: That is correct.
- Q. And if we go now to Table B, on page 12, when you compare the similar totals found on the last column of Table B on page 12, the same holds true for the reserve spinning, reserve 10 minute, reserve 30 minute. When you compare

those two, the actual requirements versus the capabilities, and I think the capabilities are found in Schedule 1.2 of the tariff design document, there is a considerable excess between the requirement and the capabilities? Can you do that subject to check?

MR. BISHOP: There is, yes, an excess.

Q. - And again subject to check, based on Schedule 1.2 -- and I don't think you have to turn to this, but subject to check. For reserve spin the requirement is 1,095,000 as compared to 5,742,087?

MR. BISHOP: Subject to check.

Q. - And for reserve 10 minute it is 3,285,000 as compared to 8,829,612, subject to check?

MR. BISHOP: Yes.

- Q. And for reserve 30 minute the requirement is 2,006,916

  versus the 12,204,270 stated on Table B, subject to check?

  MR. BISHOP: Yes.
- Q. So since the capability of providing these services exceeds the needs, there are choices that are made as to which units actually provide the service, correct?
  - MR. BISHOP: The -- yes, that is correct. But the choice is not mutually exclusive of providing reserves itself. The system is dispatched to provide the most economic overall energy dispatch or overall cost dispatch with the reserves

- 2322 - Cross by Mr. Nettleton - being made available after the fact, so to speak.

- Q. So overall cost minimization, fair?

  MR. BISHOP: Overall cost minimization is the objective.
- Q. Now if we turn back to the more detailed Schedule 5

  dealing with load following, page 19. Have you got that,

  sir?

MR. BISHOP: Yes, I do.

- Q. And we established that the numbers in column 4 are capabilities, not the amount of service provided, correct?
  MR. BISHOP: That is correct.
- Q. So it would appear that there are choices in choosing what unit actually provides load following, because there is a capability of 1,812,704 megawatt hours, but a requirement of roughly 25 percent of that, 404,464, correct?
  - MR. BISHOP: But, again, the -- the choices are determined first to minimize energy cost on the system. Mr. Porter has just pointed out, and I think it's fair to clarify that certainly up until now without pricing signals for ancillaries in New Brunswick, that energy is dispatched, or the generation is dispatched to minimize the energy cost on the system. And a check is made with generation to ensure that sufficient ancillaries are available to meet all of the operating requirements. And if, in fact,

that can be provided with units that are on line for spinning purposes, that's fine. If it needs to come on line for something units will be started to provide that service.

- Q. Well, let's take a look at Belledune, for example, that's found on the load following Schedule 5 chart. Now we have established that Belledune was not providing any ancillary services in the year 2000, right?
  - MR. BISHOP: No, I don't believe we have established that.

    I believe that we established that the earlier conducted study did not recognize the services that were being provided. I think we have established nothing more than that.
- Q. So you are having this Board -- you are requesting this

  Board to recognize, as you put it, \$13 of the \$64 -- the

  \$64.59 for the load following costs in your study now?

  MR. BISHOP: That is correct.
- Q. But that's okay because this Board is not asked -- you are not asking this Board to use an embedded cost methodology. Is that -- is that fair?

MR. BISHOP: That is also correct.

- Q. But the proxy unit method is one which is more similar to the methodology expressed in exhibit A-52?
  - MR. BISHOP: I'm sorry, would you repeat that question?

- Q. That the proxy method of pricing replicates or is more akin to the methodology found in exhibit A-52?
  - MR. BISHOP: No. Each one of those methods -- each one of those methods is very -- well, the proxy method in particular is a different methodology. Because we have no history to determine the amount of energy or the amount of capacity that is available to provide ancillary services in the proxy case as we do have history to provide that capabilities in the embedded cost study with units that are already on the system and have already -- with already data available to show what ancillaries those units can provide in any particular hour.
- Q. Well, it would seem from looking at Schedule 5 that

  Belledune's share of the weighted annual cost could be supplied out of other plants that are cheaper, correct?
  - MR. BISHOP: If those plants were dispatched solely for the purpose of providing ancillary services, and were not first off dispatched to meet the overall economic energy dispatch of the system, that is correct. But that being said, if plants are dispatched specifically to provide lowest cost ancillaries, total overall generating costs will not be minimized.
  - Q. This study, Mr. Chairman -- sorry -- this study, Mr. Bishop, indicates that there is four times the available

- 2325 Cross by Mr. Nettleton -
- capability to provide load following, does it not, than what the requirement is?
- MR. BISHOP: Subject to check, I will accept your number, yes.
- Q. Why would we not attempt to allocate on a cost minimizing basis for ancillaries to obtain the embedded cost of the ancillary service?
  - MR. BISHOP: Very simply I repeat that the system is dispatched to provide the lowest energy cost in any point in time to provide it to the customers. For example, if one of the Coleson Cove units is not on line because it has not sufficient load to require that it be on line, then in fact that unit will not be dispatched to provide ancillary services in spite of the fact that if you look at the numbers, Coleson 1, for example, is at \$5.21 and Belledune is at 13.06. This represents such a small part of the overall cost of the total energy and capacity production that we will still stick to the dispatch objective of minimizing overall cost.
- Q. But, sir, the cost minimization objective that you have here, are you saying that this study is based upon the optimization of energy production first?
  - MR. BISHOP: The study is based on history, you will agree, based on the calendar years as noted below, and that

- 2326 Cross by Mr. Nettleton -
- history -- in that historical period generation was dispatched to provide the lowest cost overall energy source from the system. The ancillaries fall out of that.
- Q. But the ancillaries don't fall out based upon the actual plant that has been used or put in service or dispatched, have they? That's not what the study shows. This study is based on capability, right?
  - MR. BISHOP: The derivation of the rate that is established is based on capability, but what the actual cost will be will be the rate multiplied by the service actually provided.
- Q. Can you go to page 1 -- sorry -- page 3 of your study,

  sir. Now I would like you to read lines 10 to 14 and help

  me understand how the Chairman's directive in requiring

  the study be performed is one that is intended to provide

  capacity-based ancillary services based on their

  capability?
  - MR. BISHOP: The Chairman's words say, and I quote, "it would be beneficial to know which generating facilities will actually provide each of the necessary ancillary services. The table that follows that actually is our best estimate based on history of which generating facilities and by what quantity will provide this ancillary services in the next year."

- Q. Well let's stop there for a second. Have we not already established that the table below is based upon capability, not actual ancillaries provided by each of the generation units?
  - MR. BISHOP: May I have just a second, please. The table at the bottom of page 3 shows the amount of resources that are available or the amount of services that are available to the system operator from each of these units in the following year based on the past three years of history, three or two. Now how the operator selects it is going to be certainly based on the actual energy dispatch of the system. And at this point in time while we can't definitely predict what that dispatch will look like we believe that this is a representation of the percentages that this will serve.
- Q. Based on the capability --
  - MR. BISHOP: Based on the capability.
- Q. -- not based on the historic actual units that have provided the ancillary services?
  - MR. BISHOP: These units have been available to provide those ancillary services.
- Q. I know that they have been available. It's a question of whether they have actually been used for the provision of ancillary service.

- 2328 Cross by Mr. Nettleton -
- MR. BISHOP: That's simply a nomination function of the generation that is available.
- Q. But that's not what the study represents, does it? That historic study has not been conducted for the purposes of this --
  - MR. BISHOP: Well the historic study has been conducted to look at the generation facilities that are available to provide those services from which those services can be procured or provided from.
- Q. When you mention --
  - MR. PORTER: I just want to add to that that those quantities are the quantities that were available, as Mr. Bishop has said, and the system operator could call on those resources in the case of a contingency. So those are services -- quantities of services that I could say that they were provided. Now as you have pointed out overall in many hours they exceed the minimum requirement that system operator has. The system operator has criteria established by North East Power Co-ordinating Council and North America Electric Reliability Council, and they had to meet those minimum requirements, but that does not take away from the fact that during many hours the availability or provision of the service by the specific units exceeds those quantities.

So the numbers on the tables do reflect what was available and in that respect were provided to the system operator.

- Q. That capability was provided?
  - MR. PORTER: To me if the capability is there, then the service has been provided.
- Q. If we can go back to schedule 5, Mr. Bishop, you can't tell me which of these units were actually used to provide the ancillary services in the 2001/2002 time frame, can you? You can only tell me which of the units have had the capability and based on that capability you have designed a rate?
  - MR. BISHOP: Based on the fact that that service was there, whether or not the system operator chose to use it, I cannot tell you with the data that is here that the system operator was using a specific unit at any point in time. I do not have that data.
  - MR. PORTER: If I could add to it from the system operator's perspective, a system operator looks at it from the perspective of whatever generation capability exists in the system based on the generation dispatch, they would take that into account, and as I say many hours it would exceed the minimum requirement, but from the system operator sitting there in the control centre the service

that is provided is reflected in these numbers, and -well you say it's not just the fact that they are capable,
those resources are there, can be called upon by the
system operator. So this is really just a reserve or an
insurance. So to me that insurance service is being
provided.

- Q. So what you are asking ratepayers to pay for under an embedded cost methodology is a cost that may have nothing to do with the actual service that is provided?
  - MR. BISHOP: I think it has got to do with -- I believe it has to do with the service that is provided, and in fact that is used to establish a rate. We have a service that is provided to the system operator by a number of generating facilities. The embedded cost study has calculated the embedded cost that New Brunswick Power incurs in having generation there ready to provide that service, any particular service, and indeed to determine the amount that is charged in any one hour, that rate is applied against the actual quantity that the system operator chooses to use or is required to use by reliability criteria.

CHAIRMAN: Mr. Nettleton, would you let me ask a question?
MR. NETTLETON: Please.

CHAIRMAN: Mr. Bishop, you said that what is in this study,

the information is not there that will give you -- or from which you can derive what was actually -- what facilities were actually used and in what amount in each year to provide the ancillary services. That's the way I heard you. Does that mean that there are records available that will tell us what facilities were actually used in the historic years that you are looking at to provide ancillary services?

- MR. BISHOP: Mr. Chairman, I would need to consult with our energy co-ordinating people, our system operator, to determine if that information is available. We certainly do not have it available in Generation.
- MR. PORTER: My experience at having worked at the Energy

  Control Centre is that they do not have that information.

  Hour by hour they know whether or not the requirements

  are met and indeed they ensure that the requirements are

  met, but if there was a surplus, they do not say, okay, we

  needed 100 megawatts of spinning reserve in this hour,

  there was 150 available, so we are going to take 50 from

  Coleson number 1 and 50 from Coleson number 2, they do not

  do that exercise. That hasn't been a requirement in the

  past. They merely ensure that the minimum requirement is

  met.

MR. SOLLOWS: If you don't mind, just so that it's clear in

my mind, they must -- there must be some record of the total output of each unit and that could be compared to the requirement in that hour that we could -- I mean the amount of available capacity must be known to the dispatcher.

MR. PORTER: That's what is reflected in the studies, the available capacity.

MR. SOLLOWS: Right. That's the total that is available.

MR. PORTER: Yes.

MR. SOLLOWS: And the amount of required capacity to meet your reliability criteria must be known to the dispatcher as well.

MR. PORTER: Yes.

MR. SOLLOWS: So the difference between those two would be known to the dispatcher, is that --

MR. PORTER: Yes.

MR. BISHOP: And that is the numbers that we have provided, but what I am not sure that we know, and in fact I think George has indicated we don't know, is which generating units of that total difference in capacity on the system, that capacity that's sitting not providing energy, I don't believe we have the actual selection that the system operator makes and says that this 100 megawatt Mactaquac unit and this 150 megawatts of unloaded Coleson Cove unit

is what we are using in this particular hour. It may be it may be a Millbank unit or it may be a Beachwood unit.

I don't believe that we have that.

MR. SOLLOWS: Right.

MR. PORTER: The requirement side of it which we have looked at schedule 1.4 in the tariff design document which was the 46.74 megawatts of load following, the numbers in that column are relatively fixed. The regulation and load following would be a little larger on peak than off peak. These are the average numbers given there, but in terms of the reserve requirements, those are driven by the size of the largest contingencies and typically being Point Lepreau is the largest and Belledune is the second largest with those being base load units, and on the majority of time the bulk of the hours these quantities that we provided in the tables are the requirement quantities.

MR. SOLLOWS: Not the capability quantities?

MR. PORTER: That is correct, in all hours the capability —
in fact when I say provided what was actually there and
available for the use of the system operator would exceed
those requirements. But in the tariff what we want to
accomplish is to have the transmission customer paying for
the quantity that is required, not paying for a greater
amount.

- 2334 - Cross by Mr. Nettleton -

CHAIRMAN: Sorry, Mr. Nettleton.

- Q. I'm equally confused here, Mr. Chairman. Let me just go back, Mr. Bishop, to a point. You mentioned optimization of the system as a whole. Is what you are telling me that the cost in the system including those of ancillary services depend on the use of the system as a whole, including all energy production for use in New Brunswick and as well for export sales?
  - MR. BISHOP: At this point in time ancillaries have not been costed, but it's fair to say that in the future that is correct.
- Q. And just to follow up Dr. Sollows' point of capability versus capacity, what is found in schedule -- if we turn to schedule 5, for example, the load following. Just as an example, we know that there is a requirement and you are allocating that requirement based on all of the capabilities of the units that have the capability to provide the ancillary service, fair?
  - MR. BISHOP: We are allocating on the basis that that unit may or may not have been providing it, that's correct.
- Q. And that is capability, correct?
  - MR. BISHOP: It was available to provide, yes.
- Q. And that is capability, just for the record, yes?

  MR. BISHOP: I believe it is capability, yes.

- Q. Thank you. You mentioned, Mr. Bishop, that -- or Mr.

  Porter, you mentioned that Lepreau is -- base load it's always on line, right? That is what you just said in your answer to Dr. Sollows, right?
  - MR. PORTER: I said that, that it is base loaded meaning that when it is available to be loaded it would be on line and loaded.
- Q. And is it on line most if not all of the time?
  MR. PORTER: Yes, that's correct.
- Q. Well how then can it provide some of the reserve types of ancillaries?
  - MR. BISHOP: May I take that question, please --
- Q. Sure.
  - MR. BISHOP: -- and refer you to the point where NB Power has indicated that it has added to the Central Maine Power methodology on page 5 of exhibit A-50. And we have attempted to describe that in lines 19 onward. And I would be happy to expand on that after you have read it.
- Q. Please carry on.
  - MR. BISHOP: Again I note the situation -- or I noted the situation earlier when in fact Point Lepreau -- and if you want to take this system load higher then Belledune gets dispatched after Point Lepreau. But let's assume if Point Lepreau is in fact the last unit dispatched on a system in

any hour, so that the capability of Point Lepreau is utilized only to 500 megawatts, for example, rather than its 600 megawatts output to meet total load. And for mathematics purposes if I say there is 900 megawatts of hydro and 500 of Point Lepreau, I'm meeting an in-province load of 1,400 megawatts.

At that point in time, the option is to leave Point Lepreau unloaded and spinning to provide 100 megawatts of reserve on the system for loss of any of the hydro units.

Alternatively, if in fact we choose not to leave that 100 megawatts unloaded, but alternatively see an opportunity for a gross margin on the export market, we will choose to load that unit up. But we will do on the bases of being able to export that with so-called -- under so-called predetermined conditions which says that if an event occurs in New Brunswick that energy can be recalled virtually instantaneously. The 100 megawatts that's being exported.

So by virtue of the fact that Point Lepreau is now able to by recalling its output from the energy markets do the same thing that it could were it loaded to 500 megawatts and had to be loaded back up to 600 megawatts for that reserve. We feel that it is quite appropriate that it be given that reserve credit.

- Q. So what we are talking about here, Mr. Bishop, is not actual costs. We are talking about apportioning some other type of cost economic avoided opportunity that relates to an allocation for the purposes of designing this rate. Is that fair?
  - MR. BISHOP: I don't agree because I don't believe that that situation is any different than had I loaded a Coleson Cove unit to 200 megawatts with 150 megawatts of reserve capacity. And if the system operator had chosen that as reserve, I think you will agree that is a legitimate reserve service. However, if I have then loaded that unit up because it is opportunistic to sell into the New England market at a cost above my marginal energy cost, and in fact I have predetermined that -- or preconditioned that with a predetermined condition that I could recall that sale, should another generator trip, then in fact the results are identical. I have 150 megawatts of reserve.

    Or I have reduced my single contingency by 150 megawatts, whichever the case.
- Q. Are you aware, Mr. Bishop, of any utility that has nuclear generation where that generation facility has been included in a reserve capacity based ancillary service --
- Q. -- calculation?

MR. BISHOP: No --

- 2338 Cross by Mr. Nettleton -
- MR. BISHOP: No, I am not. But I have not sought out that fact either.
- Q. Mr. Porter, could we please turn to the tariff design document at page 69 of appendix B, it is schedule 1.1.

  MR. PORTER: Yes, I have that.
- Q. Now let's take the row labelled load following there, do you see it?

MR. PORTER: Yes, I do.

- Q. Is it correct to understand -- or is it correct that the total fixed cost of the unit used in the study to provide load following is \$154.26? That is column 7. Do you see that?
  - MR. PORTER: Could you repeat the reference again? I don't
- Q. Schedule 1.1, page 69 -- sorry, 68.

MR. SOLLOWS: 68.

- Q. Sorry. I apologize, 68.
  - MR. PORTER: Okay. I have that. Could you start at the beginning again please?
- Q. Sure. See the column on the left-hand side entitled load following?

MR. PORTER: Yes.

Q. - And is it correct that the total fixed cost of the proxy unit used in the study to provide the load following is

- 2339 - Cross by Mr. Nettleton -

the \$154.26 in column 7?

MR. PORTER: Yes, that's correct.

Q. - And this includes the capital cost, the OM&A and the payment in lieu of taxes, correct?

MR. PORTER: Yes, that's correct.

- Q. Now if we could turn to schedule 5 of the embedded cost document, that is at page 19. In column 3, that provides the similar total fixed cost of each unit, correct?

  MR. BISHOP: That is correct.
- Q. So the analogy here is that the proxy unit has a \$154.26

  per kilowatt year of combined cycle, that is the proxy

  unit pricing, and for Coleson Cove unit we have \$39.58

  kilowatt year for Coleson Cove unit number 1, right?

  MR. BISHOP: There is no question that the Coleson Cove unit

  of \$39.58 is correct for that portion allocated for the

  provision of load following.
- Q. We will have a discussion about fixed cost tomorrow but the numbers are representative. That is the comparison, correct? Those are the fixed cost comparisons?

MR. BISHOP: Yes.

MR. PORTER: Yes.

Q. - Well now let's turn back to schedule 1.1 of the tariff

design document. We have -- after column 7, we have

column 8 with the contribution to fixed cost of reactive

- 2340 - Cross by Mr. Nettleton -

supply. Column 9 which is installed capacity contribution to fixed costs. And column 10 which is energy production's contribution to fixed cost, correct?

MR. PORTER: Yes, that's correct.

- Q. And so in other words the rate for ancillary service provision is not the total fixed cost but it is the total fixed cost minus the contribution to reactive supply, installed capacity credit and energy production, correct?
  MR. PORTER: Yes, that's correct.
- Q. Now if we could turn to table C of the exhibit A-52.

  That is on page 13.

CHAIRMAN: Would that be A-50?

Q. - A-50, yes. And, Mr. Bishop, the units that are shown in the plant name column, those are the units that are used to produce energy including that which is exported to the United States?

MR. BISHOP: That is correct, yes.

Q. - And the full net book value of generation plant has been included in the total fixed costs shown in table C, correct?

MR. BISHOP: In table C it has, yes.

Q. - And similarly table C provides the total revenue requirement for the generation plant, correct? That is the column E?

- 2341 - Cross by Mr. Nettleton -

MR. BISHOP: Including the energy requirement, yes.

Q. - Sorry, the energy requirement?

MR. BISHOP: Or the revenue requirement from energy, yes.

Q. - So if we totalled column E that would provide you with the total revenue requirement -- sorry, in the last column. I have pencilled in here what these columns are, so I apologize.

In the last column of table C, which was -- I believe the name was changed earlier. That represents the per unit in millions of dollars the revenue requirement. And so if you added all of those numbers up you would get the complete revenue requirement for total plant, correct?

MR. BISHOP: Not the fixed -- not the other fixed charges.

This is for the capital charges only. Fixed OM&A and some of the other charges as is detailed in schedule 2, shows the adders to that.

Q. - Right. But that includes OM&A depreciation, interest,

ROE, payment in lieu of taxes --

MR. BISHOP: That's correct.

Q. - -- am I missing any?

MR. BISHOP: Return on equity, yes.

Q. - And that is included too?

MR. BISHOP: Yes.

Q. - So that gives us our revenue requirement, correct?

- 2342 - Cross by Mr. Nettleton -

MR. BISHOP: Yes.

Q. - Now, Mr. Porter, I provided to your counsel a document,
I'm not sure if you have it there or not. But I'm going
to be asking you a few questions about it. And what I
would like to do at this stage is have it available and
mark it as an exhibit, if I could, Mr. Chairman?

CHAIRMAN: No objection, Mr. Hashey?

MR. HASHEY: No.

CHAIRMAN: That will be <u>JDI-31</u>.

MR. NETTLETON: I miss Mr. Smellie in moments like this.

MR. MORRISON: So do we.

Q. - Mr. Chairman, I appreciate Mr. Hashey's flexibility here.

I realize that this would probably be best put through a witness of JDI, CME, but in light of these unusual circumstances I -- we have decided to see if we can just simply cross examine on this calculation that has been performed.

What this shows, Mr. Porter, is the calculation of embedded cost prices in a similar way to the proxy prices, and so on the left-hand side in column 1 we have the ancillary services, do you see those?

MR. PORTER: Yes, I do.

Q. - And then in column 2 we have the total fixed costs for the units supplying the service, and these have been

weighted by various means as outlined in the schedules 4 to 8, correct?

- MR. PORTER: Those are the rates from the embedded cost study. Sorry?
- Q. Those are your -- that's correct, yes, subject to check.

  Now --

MR. PORTER: Could you clarify that please?

MR. BISHOP: I believe those do not look like numbers that have come from the embedded cost study. I would suggest it may be the proxy.

Q. - I'm sorry. Those are the proxy price units, yes, correct.

MR. BISHOP: Thank you.

- Q. Now we have -- in the left column -- we have left column 3, the contribution to reactive supply blank, but since we know it's greater than zero in the proxy unit pricing there is likely to be some contribution here as well, correct?
  - MR. PORTER: In the proxy unit pricing we allowed for a contribution from reactive supply, took that into account, yes.
- Q. Now in column 4 we have used the same installed capacity credit of 17.31 that you have used in establishing the proxy price, correct?

- 2344 - Cross by Mr. Nettleton -

MR. PORTER: Yes, that's correct.

Q. - Okay. Now it gets a little bit more complicated, but we have two different calculations for the energy production credit here in columns 5 and 6. One is entitled for the years 2001/2002 and the other -- that's column 5, and then column 6 is 2004/2005. That's for column 6. Do you see that?

MR. PORTER: Yes, I do.

Q. - Now looking below on the sheet there is a heading that says, energy production credit 2001 and '2, do you see that?

MR. PORTER: Yes.

Q. - And we have the figure of 160 million that gives the margin based on export sales in 2001 and 2002, and subject to check that's the reference at page 719 of the transcript?

MR. PORTER: Subject to check.

Q. - And then we have a revenue requirement that is the sum of the total fixed costs of 550 million which was based on table C on page 13 that we just last spoke about of exhibit A-50. Subject to check is that correct?

MR. PORTER: Agreed, subject to check.

Q. - So subtracting the 160 million in export margin from the revenue requirement of 550 million, that gives us 390

million, subject to check?

MR. PORTER: Agreed.

Q. - And now the 160 million is approximately 29.1 percent of the 550 million, subject to check?

MR. PORTER: Subject to check, agreed.

Q. - And if we apply a proportionate decrease to the total fixed cost listed in column 2, subject to check, we get an energy production credit in column 7 of 15.79 for regulation, right?

MR. PORTER: I agree with that calculation.

- Q. And subject to check, if the same holds true for the other ancillary services in these tables, and so again subject to check, just like on schedule 1 in the proxy unit pricing method we have here subtracted from the total fixed cost credit for reactive supply installed and energy production to get the rate for ancillary service, correct?
  - MR. PORTER: I agree that that is the calculation that you performed, but I don't want to give the impression that I buy into the appropriateness of doing such a calculation.
- Q. We will get there. We will get there. In other words on this table using the embedded cost numbers for total fixed costs we have derived the rates for ancillary services by subtracting columns 3, 4 and 5 from column 2, correct?

MR. PORTER: Agreed.

- Q. And that yields a rate of 15.79 for regulation and the remainder of what is found in column 7, you see that?
  MR. PORTER: Yes, I do.
- Q. All right. And the same calculations and the process has been used for 2004 and 2005, do you see that?

  MR. PORTER: Yes, I do.
- Q. And subject to check the process is entirely similar again for the energy production credit for that year and you can check on that too?
  - MR. PORTER: Agreed, subject to check.
- Q. Now the question. Mr. Porter, why would a credit calculation like we have just explained not be appropriate for the calculation of the embedded cost of ancillaries?
  MR. PORTER: I think the best way to answer that question is I can give you an explanation as to why it is appropriate for the proxy, which is what I'm familiar with, and either I can answer or perhaps Mr. Bishop will answer with regards to the embedded cost study and the -- what the appropriate approach is in embedded cost study.

In the case of the proxy unit we are looking at what would be the total revenue requirement for a new facility coming onto the system that could provide these ancillary services. And in determining the revenue requirement associated with ancillary services we want to take into

- 2347 - Cross by Mr. Nettleton -

account the contribution to fixed costs which we anticipate would be captured through the provision of these other services, namely the reactive supply, installed capacity and energy production.

And the calculation in the proxy unit methodology was done so as that the potential investor in a new facility would have the incentive to make that investment to have their total revenue requirement covered off.

That's the rationale for having those components subtracted from the total revenue requirement to get to the net revenue requirement for ancillary services. So it's to ensure that the investor has the proper incentive but to ensure that the transmission customer is not paying above and beyond a reasonable return on that investment.

And the -- I would just say that's -- the proxy methodology, and embedded cost study such as that done by Central Maine Power and others and have been submitted and approved by FERC in the past are a very different approach. I think we have talked about that extensively today and on previous dates. And I would leave it to Mr. Bishop to talk about the appropriateness of the embedded cost calculation.

Q. - I'm not so interested in -- I'm very interested in having you confirm that from schedule 1.1 there were credits or

reductions to the total fixed cost for the proxy unit that related to contribution reactive supply, installed capacity, energy production, that ultimately led to a lower rate or proxy price than what the total fixed cost was, fair? That's what is shown in schedule 1.1.

- MR. PORTER: Yes. We have gone through what is in schedule 1.1, yes.
- Q. And so there are these credits, correct?
  MR. PORTER: That's correct.
- Q. Now, Mr. Bishop, your evidence has been that the existing plant is used for the purposes of producing export sales, correct?
  - MR. BISHOP: Among other things, yes.
- Q. And what we are attempting to do in this calculation is take into account a proportionate share of the export sales as it relates to the ancillary service, why would that not be an appropriate calculation?
  - MR. BISHOP: In the embedded cost study there is already provision for the fact that generation is -- the generation is used to provide both energy and ancillary services. So in the calculations as you go through these schedules it is a determination of how much of the capacity is not on line. You can look at the availability factors and the capacity factors, or as not producing

energy including export energy. And it is that portion of the capital cost that gets allocated to the ancillary services. In other words in this calculation -- in the calculation in each of these schedules, only the portion of that generation that is used for supplying ancillaries is costed to need a derivation of revenue to cover those ancillaries.

Q. - But, Mr. Bishop, we can agree that the revenue requirement for generation is -- on just the total fixed charges for your generation plant is \$550 million, correct?

MR. BISHOP: Yes.

- Q. And we can agree that what your embedded cost study says is that of that 550 million, 448.2 million is attributed and going to be recovered through ancillary services, correct?
  - MR. BISHOP: I think that's an apples and oranges comparison because the 550 million is a product of the proxy. Is that what you stated?
- Q. No, sir. The 550 million comes from your table, and I believe it's table C. That's the total revenue requirement for your total plant, correct?

MR. BISHOP: That is correct.

Q. - And \$48.2 million is the revenue requirement derived from

- 2350 - Cross by Mr. Nettleton -

this embedded cost study, and that is related to ancillary services, correct?

MR. BISHOP: That is correct.

Q. - All right. So just to keep the numbers straight, there is \$500 million of revenue -- of a revenue requirement that is going -- that has to be recovered from other sources, correct?

MR. BISHOP: That is correct, yes.

- Q. And part of that would be your export sales, correct?

  MR. BISHOP: Part of it, yes.
- Q. Now why would you not allocate a portion of those export sale revenues to the revenue requirement attributed to ancillary services?
  - MR. BISHOP: Well again because we are treating export
    energy revenue the same as revenue from in-province in the
    allocation to the capacity itself. And by already
    factoring out the time that the generation is there
    producing energy leaves only a percentage of that net book
    cost again as set out in the schedules.
- Q. But, sir, that's not how the ancillary service has been calculated, has it?

MR. BISHOP: Yes, it has.

Q. - Well it's been based on capability, correct, not actual energy production?

- MR. BISHOP: It's -- one is the inverse of the other or one is one minus the other. When a 300 megawatt unit is producing energy to the extent of 150 megawatt hours per hours, then in fact we note 150 megawatts, the remaining portion, as available for the provision of the ancillary service.
- Q. Mr. Porter, you have in column 9 of schedule 1.1 a \$17.31 credit for installed capacity?

MR. PORTER: Yes, I do.

- Q. Help me understand, Mr. Bishop, why that \$17.31 credit doesn't apply to your embedded cost study?
  - MR. BISHOP: That 17.31 assumes that you have an unlimited market, if you are going to have that revenue to apply against all of the ancillary requirements.

Limited time capacities, the market itself, there is no means of calculating, looking forward, where that -- or if that revenue is available.

- Q. But in any event that credit has been applied to this proxy unit fixed cost charge, right?
  - MR. BISHOP: Only because in my -- as I understand it, it is proxied as that unit being the marginal unit that supplies ancillary services including ICAP installed capacity sales on the New England market -- or to the New England market, or rather export markets.

- Q. It is the marginal unit, sir?
  - MR. BISHOP: That is the way that the proxy method calculates it. In other words --
  - MR. PORTER: This is long run marginal units of that,

    meaning the next investment that would be made. We are

    not talking about a short run incremental cost type

    margin.
  - MR. BISHOP: And this calculation in the proxy would assume that it has total access to that ICAP market for all other remaining capacity that is not energy-producing.
- Q. And that would include the export market?

  MR. BISHOP: Yes.
- Q. And that would be part of the energy production credit?
  MR. BISHOP: That is the assumption that is made. And of course when a unit of this size, using something less than the size being able to transmit capacity or sell capacity over an existing interconnection, is a fair approach.
- Q. But it is not fair using that type of approach with existing plant?
  - MR. BISHOP: Not when the existing capacity far exceeds —
    the existing capacity to provide ancillaries far exceeds
    the capability of getting that down the road to another
    market.
  - MR. NETTLETON: Mr. Chairman, I am about to move to a

- 2353 - Cross by Mr. Nettleton -

different area, namely schedule 2. And I'm going to be dealing specifically with the items of the fixed charge component.

I know I spoke with you and the need for

Ms. MacFarlane to attend for four of those components,

taxes, ROE, cap structure and interest costs.

It might be convenient now to stop and have the other matters of OM&A and depreciation dealt with at tomorrow's session.

CHAIRMAN: So you are suggesting an adjournment now?

MR. NETTLETON: Well, unless other parties can take my place. But I'm moving on to that capital structure area.

CHAIRMAN: Okay. Mr. MacDougall has his hand up.

MR. MACDOUGALL: Mr. Chairman, Mr. Hashey has advised that I could ask a couple of questions arising out of the legislation to Mr. Porter that will take two or three minutes.

So we could use some time now and I could do those if that is convenient for anyone.

CHAIRMAN: Fine. Would you like to come down to mike number 5 in the front?

## CROSS EXAMINATION BY MR. MACDOUGALL:

MR. MACDOUGALL: And what I have given is an excerpt. I guess I shouldn't call it the legislation, the bill, Bill

- 2354 Cross by Mr. MacDougall -
- 30. So I have given the excerpts that I'm going to refer to, so people can --
- CHAIRMAN: And I will give it an exhibit number. Every time

  I see it it makes me slow down.

And it will be  $\underline{WPS-3}$ .

MR. MACDOUGALL: And just for the record, Mr. Chair, this is just a couple of excerpts from Bill 30. It is not the entire bill.

CHAIRMAN: It certainly is just a couple.

Q. - Mr. Porter, just a couple of questions. I'm hopeful you can answer these. If there is any concern with you being the right person to do that, you know, don't hesitate to let me know.

MR. PORTER: Right.

Q. - If I could refer you to the third page which is the final page of this exhibit. And it is section 111, "Application for approval of tariff", and in particular section 111 (4). And I will just read that subsection into the record.

"The Board shall, when considering an application by the SO", which is the system operator, "in respect of an approval of a tariff pertaining to transmission services, base its order or decision respecting the tariff on all of the projected revenue requirements of the SO and the - 2355 - Cross by Mr. MacDougall -

transmitters for transmission services and the allocation of such revenue requirements between the SO and the transmitters."

So Mr. Porter, my first question is with respect to the reference in 111 (4) to the projected revenue requirement of the SO and the transmitter, does your proposed tariff currently account for the revenue requirements of the proposed SO?

MR. PORTER: Schedule 1 in the tariff is the rate that covers off the system operator cost.

Q. - So when you say schedule 1, you are talking about mandatory service, schedule 1, scheduling system control and dispatch service?

MR. PORTER: Yes. That is correct.

- Q. And you are saying the tariff before this Board now, with the numbers in that, includes all of the revenue requirement of the SO as well as the transmitter under the legislation?
  - MR. PORTER: I don't know the answer to that question. I think Mr. Snowdon would be a better one to answer that question perhaps. But I'm not familiar with going forward with the setup of the system operator what the additional cost.

I believe Ms. MacFarlane had spoken to that to some

- 2356 Cross by Mr. MacDougall extent. But I don't have the answer to that.
- Q. Could we maybe take that as an undertaking? And I can make the direct question so people understand. The legislation talks about the revenue requirements of the SO, which I understand has not yet been set up or will not be set up for some time, and the transmitter which I'm presuming is the division of NB Power that will become the transmitter under this tariff.

And I just want clarification if schedule 1 as now proposed includes the revenue requirement of the proposed SO as well as the transmitter, or whether there will be another application coming back here later on to increase the revenue requirements to include those of the SO?

- MR. PORTER: Given the rate at which the restructuring is moving and the stage that it is at, I don't know the details that would be required to answer that question.

  These are costs that fall out of the restructuring.
- Q. So could we just get an undertaking though as to whether or not your application includes the revenue requirement of the SO as well as the transmitter?
  - MR. PORTER: Yes. We will take that as an undertaking.
- Q. Thank you. And I will just ask a couple of other questions arising out of that. And you may not be able to answer them, Mr. Porter, based on the discussion we have

- 2357 - Cross by Mr. MacDougall - just had.

Are you able to provide any estimate of the order of magnitude of the SO's revenue requirements?

MR. PORTER: No, I'm not.

Q. - Okay. If you could just look at the other page of the exhibit here. And that is the second page. And it refers to section 42 of the Act, "Objects", the objects of the SO.

And I just note, if you go down the list, they include items such as maintaining adequacy and reliability of the New Brunswick Transmission system, procuring and providing ancillary services, maintaining the adequacy and reliability of the integrated provincial electricity system, and this is all in accordance of the objects of the SO pursuant to the Act.

So could I just ask you whether you believe these costs or charges could be significant? Does that look like a significant undertaking?

MR. PORTER: I don't see it being a significant undertaking in terms of monumental or unjustified in any way. It depends on what you mean by the word significant? I don't -- as I said, I don't know the cost, so I can't give you any precise answer. But I believe there was testimony earlier by Ms. MacFarlane about -- to some extent about

- 2358 - Cross by Mr. MacDougall -

the cost and the fact that the intent certainly by the people involved is to minimize those costs.

MR. HASHEY: Mr. Chairman, I am wondering if with Mr.

Snowdon and Ms. MacFarlane coming tomorrow, I wouldn't have any problem if Mr. MacDougall wanted to reask those questions to those, and I think he has given us fair notice of the question he would like to pose. It might be the easier way when they are here, or try to give you an undertaking answer, whichever.

MR. MACDOUGALL: My questions were actually over, Mr. Chair.

And I certainly appreciate the situation Mr. Porter is

in. An answer to the undertaking may be given orally

tomorrow by Ms. MacFarlane or Mr. Snowdon when they are

here, and then if I have a follow-up question arising out

of it, I could pose that to them. That would be fine with

me.

CHAIRMAN: Fine, Mr. MacDougall, we will do that.

MR. MACDOUGALL: Thank you, very much, Mr. Porter. And I realize those were -- you were the one available. So on that point, Mr. Chair, I would like to mention discretion being the better part of valour, Mr. Howard will not be here tomorrow then. And so I will pose my questions to Mr. Snowdon, but they can't pose questions to my witness, so that worked out nice.

CHAIRMAN: Thank you, Mr. MacDougall.

- 2359 - Cross by Mr. MacDougall -

MR. MACDOUGALL: Thank you, Mr. Chair.

CHAIRMAN: Saint John Energy?

MR. CARR: Yes, Mr. Chairman, we have one question that rather contingent a bit along the line of the question that was just asked. And it occurs to me that it might be most easily dealt with as just perhaps an extension of the undertaking, which you were just talking about, if I could just get into that, just an additional item on the undertaking basically.

CHAIRMAN: All right. Well my understanding is that basically Mr. MacDougall has put tomorrow's witnesses on notice that these questions will be asked then. So if you want to put something on the record, so again they have a heads up why by all means.

MR. CARR: We could do that. I am sorry, I misunderstood.

I thought the resolution was that you had an undertaking and you were not going to in fact going to ask any further guestions but --

MR. MACDOUGALL: Mr. Chair, if either Mr. Snowdon or Ms.

MacFarlane responds to that undertaking on the record

tomorrow, if I have no follow-up questions I won't ask

them, and if I do, I would just ask them out of that. So

I think it would be appropriate now if Saint John Energy

wanted to add to that, then we could have one response and

- 2360 - Cross by Mr. MacDougall -

follow-up questions only if they were required.

CHAIRMAN: Good. Go ahead.

MR. CARR: Thank you. Basically the additional information we sought was in unbundling this bundled tariff application with regard to the revenue requirements of the SO versus the revenue requirements of the transmission owner/operator. We recognize that the SO under Bill 30 is in fact a nonprofit corporation, and presumably therefore wouldn't -- well it is not under the Act subject to pseudo taxes and return on equity and all those other things, which the transmission owner is.

So in the undertaking related to the costs allocated to the SO, could you also indicate whether or not there are pseudo taxes and also return on equity and basically cost of capital charges in the SO portion of the revenue requirement. That was it.

MR. PORTER: We would add that to the undertaking.

MR. CARR: Thank you.

CHAIRMAN: We will rise and reconvene at 9:30 tomorrow morning.

(Adjourned)

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