(9:30 a.m.)

MR. NOSEWORTHY, CHAIRMAN: Good morning. I trust everybody had a good weekend and I see some familiar faces. Welcome back to the, I guess, as a (inaudible), the cost of capital experts, for lack of a better definition. Before we get started I'll go to counsel and ask if there are any preliminary matters. Mr. Kennedy?

MR. KENNEDY: Chair, just that counsel had a meeting on Friday and it's my intention to provide an update on that. I prefer to do it after the lunch break, if that's appropriate, just so I could gather my notes.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Kennedy. If there are no other matters, we'll go directly to the Industrial Customers, and are you in a position, I guess, Mr. Hutchings, is it, to introduce Mr., Dr. Vilbert, please?

MR. HUTCHINGS: Yes. Thank you, Mr. Chair. Dr. Vilbert has made it despite the disruptions in the airline service and is prepared to take the stand at this point. Dr. Vilbert, please.

MR. NOSEWORTHY, CHAIRMAN: Thank you. Good morning, Dr. Vilbert, and welcome back. I wonder could you take the Bible in your right hand, please? Do you swear on this Bible that the evidence to be given by you shall be the truth, the whole truth and nothing but the truth, so help you God?

DR. VILBERT: I do.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much. Please be seated. I'll ask Mr. Hutchings to continue and introduce the direct examination, please.

MR. HUTCHINGS: Thank you, Mr. Chair. Could you please state for the record your full name and current address?

DR. VILBERT: My name is Michael J. Vilbert and I live in Melrose, Massachusetts.

MR. HUTCHINGS: Dr. Vilbert, in connection with this hearing you have pre-filed with the Board written evidence dated August of 2001, and supplemental written evidence dated November 2001. Do you adopt both of these pieces of evidence as your testimony for the purpose of this hearing?

DR. VILBERT: I do.

MR. HUTCHINGS: Thank you. Those are all my questions, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much, Mr. Hutchings. I'll move now to cross-examination by Hydro. Ms. Greene, please?

MS. GREENE, Q.C.: Thank you. Good morning, Dr. Vilbert.

DR. VILBERT: Good morning.

MS. GREENE, Q.C.: Welcome back.

DR. VILBERT: Thank you.

MS. GREENE, Q.C.: I understood, Dr. Vilbert, from your evidence that you are not recommending a specific return on equity for Hydro at this time. Is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: But rather recommending an approach which is called the after-tax weighted average cost of capital. Is that correct?

DR. VILBERT: Yes, ma'am.

MS. GREENE, Q.C.: And you also mention ... I wonder if we could look at your **pre-filed evidence**, please, Mr. O'Rielly, **page two**? On page two, line 17 to 19, I understood from those lines, Dr. Vilbert, that in your view the three percent return on equity that Hydro is requesting in this proceeding is low in relation to returns that would normally be considered in other proceedings, is that correct?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: I'd like to turn for a few moments to look at the approach that you're recommending. So as I understand it, you're not recommending a specific return on rate base or return on equity, but you are recommending an approach to the Board for the Board to consider in this application, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: The approach, ATWACC is a new type of approach for regulatory proceedings, is that correct?

DR. VILBERT: Yes, although it's inherent in everything that's been done by cost of capital witnesses. It's just that it combines some things in one step.

MS. GREENE, Q.C.: And the theory as, or the methodology is relatively new in terms of a regulatory board accepting it.

DR. VILBERT: Yes.

MS. GREENE, Q.C.: You have reviewed the evidence of Ms. McShane and Dr. Kalymon, have you?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: Would you describe the approach that Ms. McShane and Dr. Kalymon have put forward as the traditional type of approach that a regulatory board in Canada would use?

DR. VILBERT: Yes, although Dr. Kalymon has a deemed capital structure which is a little different and in fact it's in some ways similar to the ATWACC approach.

MS. GREENE, Q.C.: But in terms of the tests that we use to determine the appropriate return, that would be characterized as a traditional type of approach, is that correct, risk premium test, a discounted cash flow test, comparable earnings test?

DR. VILBERT: Yes. Those are traditional methods of estimating the cost of equity and I would use the same methods to estimate the cost of equity as well.

MS. GREENE, Q.C.: With respect to the methodology that you're recommending, the ATWACC approach, has any other regulatory board accepted that particular methodology as the primary tool in dealing with the issues of the return on capital?

DR. VILBERT: Not as a primary tool. The Alberta Energy and Utilities Board adopted the ATWACC method in the 1998 hearing, although they adopted it with a modification. It was a secondary or ... not the primary method.

MS. GREENE, Q.C.: So they still use the traditional method in setting it, is that correct?

DR. VILBERT: Yes, and I should note that the ATWACC method and the traditional method are not in any way in conflict. In fact they are very much in accord, and you'll get the exact same answer in terms of the return on equity. The advantage of the ATWACC method is that it ensures a consistency between the return on equity and the capital structure that is adopted.

MS. GREENE, Q.C.: And you just mentioned that the Alberta Energies *(sic)* Utility Board is the first regulatory board to have adopted the methodology, is that correct, in Canada and the United States?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: And in fact that board modified your recommended approach, is that correct?

DR. VILBERT: Yes, they modified it.

MS. GREENE, Q.C.: And I think you've already indicated that they also used it as a secondary tool, not as a primary tool, is that correct?

DR. VILBERT: I'm trying to remember their exact characterization. I believe they tried to say that it was co-equal but it probably is secondary and is still in their mind, because there's some ... any time you adopt a new approach, there's going to be a need to anchor it in terms of the old approach.

MS. GREENE, Q.C.: I'd like for us to look at how the Alberta Energy Utilities Board modified your recommended approach, and I think if we could look at your **pre-filed evidence first, please, page 36 to 37**, and it begins on the bottom of page 36. And I wonder, Dr. Vilbert, if you could read beginning at line 25 there on the bottom of page 36 and going over to page 37, please, your answer to the question, and the answer begins there on line 25?

DR. VILBERT: Yes. "The AEUB has taken a significant official step in this direction at least and there are other cases in which the principles are in use in the proceedings but which have not been officially adopted by regulators. In its adoption of the principle of the ATWACC, the AEUB decided to calculate the ATWACC based upon book value instead of market value weights (phonetic). This is economically incorrect. The reason for the AEUB's decision and the explanation of their (inaudible) in its application is discussed more fully in Appendix B, Section 4.

MS. GREENE, Q.C.: The decision of the Alberta Energy Utilities Board is very lengthy, isn't it?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: Okay. I think it occupies something like two big volumes.

DR. VILBERT: I don't think I read the whole thing. I just read the ones that were applicable to me.

MS. GREENE, Q.C.: At this time I have copies of extracts from that decision that I would like to refer to and that I have to circulate at this time. We'll just wait till everybody gets a copy, Dr. Vilbert.

MR. KENNEDY: I understand, Counsel, this is an excerpt from a decision?

MS. GREENE, Q.C.: Yes, it is. It's an extract, just two pages, from the very lengthy decision of the Alberta Energy Utilities Board in the Trans Alta case that Dr. Vilbert referred to in his pre-filed evidence and as well this morning.

MR. KENNEDY: Chair, unless there's an objection of counsel, I'd just list it as a consent document in light of its source, and it'll be Consent No. 10.

EXHIBIT CONSENT NO. 10 ENTERED

MR. NOSEWORTHY, CHAIRMAN: Thank you.

MS. GREENE, Q.C.: I'd like first, Dr. Vilbert, to look at the first page in the hand-out which is page 307 of this decision. Do you recognize these pages being from that decision?

DR. VILBERT: I do.

MS. GREENE, Q.C.: And the date on the bottom of the page is November 25th, 1999, is that correct?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: Okay. As I said, this is a lengthy decision but I believe if we could look at the last paragraph before the heading that begins with "E," which is conveniently a short summary paragraph, and I wonder if you could read that into the record, please, the paragraph that begins with "In summary."

DR. VILBERT: "In summary, for all of the above reasons, the Board finds it necessary to reject Trans Alta's version of the ATWACC model which proposes the use of market capitalization ratios. Accordingly, the Board considers that it should place primary weight on the traditional method in the development of a fair return for these proceedings. Nevertheless, the Board considers that useful insight and assistance can be obtained from the principles of the ATWACC concept that will assist it in determining the fair return for the integrated company as well as by business function."

MS. GREENE, Q.C.: So we see from that paragraph that the Board did modify the recommended methodology to use book values rather than market capitalization ratios, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: And we also see that the Board there agreed to place primary weight on the traditional method as described in the decision, is that correct?

DR. VILBERT: Yes. May I explain some things about this decision?

MS. GREENE, Q.C.: Perhaps after. As I said, I have some questions to get to and I'm sure if your counsel would like you to explain it, he will ask you those questions. I think you've acknowledged in your evidence, Dr. Vilbert, that Newfoundland Hydro does not pay incomes tax, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: Turning to the second page of this decision that we've just circulated, page 331, there were entities there that did not pay income tax as well, and the first paragraph on the top of page 331 deals with that issue, and I wonder, Dr. Vilbert, if you could read that first paragraph on the top of page 331 into the record, please?

(9:45 a.m.)

DR. VILBERT: "The Board earlier in this decision set out its approach to the determination of a fair return. The Board noted that it would use both the traditional method and a modified ATWACC as tools to arrive at the fair return for EPGI, EPTI and Trans Alta with primary weight placed upon the traditional method. The Board also noted that since EPGI and EPTI do not pay income tax, the modified ATWACC model collapses to the traditional method used to determine a fair return, or, in other words, the ATWACC return grossed up by dividing one minus the tax rate is mathematically equivalent to the traditional fair return plus income tax payable on the equity portion of the fair return."

MS. GREENE, Q.C.: Thank you. I'd like now to look to the **Information Request NLH-18**, and it's page two of five. This table produces the implied return on equity that would have resulted from your recommendations in three different proceedings, is that correct, Dr. Vilbert? Among other things, the last column shows the implied return on equity.

DR. VILBERT: Yes.

MS. GREENE, Q.C.: Okay. The first column there, could you please explain what proceeding that was? It's again before the Alberta Energy Utilities Board 1998, is that correct?

DR. VILBERT: Yes.

MS. GREENE, Q.C.: And at that time, shall we take from this table that if your recommended methodology had been adopted, the implied return on equity that would have resulted for Trans Alta at that time was 10.8 percent?

DR. VILBERT: Yes, that's correct.

MS. GREENE, Q.C.: Similarly with the second column, this is the decision that we just looked at, is it, the second one coming down on the left-hand side, the second, the Alberta Energy Utilities Board in 2000. That's just the decision we read, is that correct?

DR. VILBERT: The decision you read was from the 1998 proceeding.

MS. GREENE, Q.C.: Oh, sorry. In this one, it was for the transmission or (inaudible) part of the unbundled utility, is that correct?

DR. VILBERT: Yes, as part of a deregulated industry in Alberta.

MS. GREENE, Q.C.: Okay. And the implied return on equity that would have resulted if your methodology had been adopted is 11.08 percent, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: And the third one shown on the table ...

DR. VILBERT: That's National Energy Board, Trans Canada Pipeline, 12.52 percent.

MS. GREENE, Q.C.: And that particular proceeding is not concluded yet, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: Okay. And if that methodology that you're recommending is adopted by the National Energy

Board, you're saying that the implied return on equity for the pipeline would be 12.52 percent, is that correct?

DR. VILBERT: That's correct.

MS. GREENE, Q.C.: Thank you, Dr. Vilbert. That concludes the questions that I have for you.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much, Ms. Greene. We'll move now to cross-examination by Newfoundland Power. Ms. Butler, please.

MS. BUTLER, Q.C.: Thank you, Mr. Chairman. Good morning, Dr. Vilbert.

DR. VILBERT: Good morning.

MS. BUTLER, Q.C.: I wonder, Mr. O'Rielly, can we see again **NLH-18**? This time page five of five. Thank you. Dr. Vilbert, in relation to the question that was posed there, the response that was given is in three paragraphs. Can you just read the first paragraph, please?

DR. VILBERT: "Please see Dr. Vilbert's written evidence, page 12, line 12, through page 13, line 4, for Dr. Vilbert's views on the issue of the benchmark samples for Hydro. Dr. Vilbert believes that Hydro is less risky than the average company in the same sample of Canadian investor-owned utilities, IOU."

MS. BUTLER, Q.C.: IOU. Thank you, Dr. Vilbert. And is there anything in your supplementary evidence subsequently filed to these RFIs that would change that opinion?

DR. VILBERT: That the ... that Hydro is less risky than investor-owned utilities?

MS. BUTLER, Q.C.: Yes.

DR. VILBERT: No.

MS. BUTLER, Q.C.: No, okay. In your **supplementary evidence** now, Mr. O'Rielly, if I might, at page four, lines 12 to 14. Thank you. Can you skip the first sentence there and just start, if you might, Dr. Vilbert, with the sentence that starts with the word, "First." I think we only need the first sentence read in there, if you don't mind.

DR. VILBERT: "First, I do agree that the size of the percent of the debt guarantee fee is likely to change with capital structure, although probably not in the way she (phonetic) imposes in the example."

MS. BUTLER, Q.C.: Okay. You can go on and just read the next sentence there for me.

DR. VILBERT: "In my opinion a required debt guarantee fee could be estimated by the fee that a third party would charge to guarantee the debt of Hydro or it could be estimated by the difference in the required yield on Hydro's debt with and without the guarantee."

MS. BUTLER, Q.C.: Okay, thank you. Dr. Vilbert, is it your opinion that at 80/20 or 85/15 debt-equity ratio, the debt guarantee fee of one percent currently being paid by Hydro to the Provincial Government is reasonable?

DR. VILBERT: I believe it to be reasonable, yes.

MS. BUTLER, Q.C.: And is it also your opinion that as the equity increases it may be reasonable to decrease the debt guarantee fee?

DR. VILBERT: Yes. I believe that a third party who would bid to provide this guarantee would take into consideration how much equity the Company has when setting that fee.

MS. BUTLER, Q.C.: Now, Ms. Greene of course has pointed out that in your original testimony at pages two and three you basically conclude that the appropriate rate of return is not in issue in these proceedings.

DR. VILBERT: That's my understanding, yes.

MS. BUTLER, Q.C.: And that it's because Hydro is seeking three percent.

DR. VILBERT: That's correct.

MS. BUTLER, Q.C.: I wonder if I might, rather than spending the time with you then debating what appropriate method might be used, because the entire issue is not currently before the Board, just ask you some questions about perhaps a related issue, which is apparent at **page three of your original evidence at lines 13 to 18**? And perhaps you might just read the first sentence in there, Dr. Vilbert, please?

DR. VILBERT: "Most importantly, however, I show that the total amount of the capital charges in Hydro's revenue requirement will decrease as the amount of equity in the capital structure increases. In other words, rates" ...

MS. BUTLER, Q.C.: Okay. Go ahead.

DR. VILBERT: "In other words, rates should decrease as equity is added to Hydro's capital structure, which result seems counter-intuitive precisely because the analysis by cost of capital witnesses and intervenors frequently fails to maintain an appropriate relationship between capital structure and the return on equity and because of the tax effects resulting from Hydro's status as a Crown corporation."

MS. BUTLER, Q.C.: Okay. Now does your supplementary evidence filed in November affect the opinion that's expressed here?

DR. VILBERT: No, it does not.

MS. BUTLER, Q.C.: Alright. I wonder if we might look at your **supplementary testimony, Schedule MJV-8**? Thank you, Mr. O'Rielly. Now, relative to the point that was being made by you at page three of the original evidence, and let me see if I actually understand what's being expressed here, generally the lower the equity in a corporation, the higher the return on equity.

DR. VILBERT: Yes, that's because of financial risk.

MS. BUTLER, Q.C.: Right. Because, looking at your table there for a moment, let's take an example, line "E," while equity is 15.27 percent, you're suggesting that investors would want a return in the range of 19 percent because of the risk that they're taking.

DR. VILBERT: That's correct for this table. It's predicated on the 7.08 percent after-tax weighted average cost of capital which is constant, and as you increase the, or decrease the amount of equity in the capital structure, in order to maintain that 7.08 percent, return on equity must go up.

MS. BUTLER, Q.C.: But the same principle applies to the traditional model in the sense that as equity decreases, investors would want a higher rate of return on their equity.

DR. VILBERT: That's correct.

MS. BUTLER, Q.C.: And likewise, the higher the debt, so on the same line, at 83.18 percent debt, which is column four, the cost of debt shown as 8.35 percent, but if the debt were lower, say at line "B" at 58.45 percent, the cost of debt could be lower or the debt guarantee fee could be eliminated.

DR. VILBERT: Yes.

MS. BUTLER, Q.C.: Okay. In normal situations then, as the debt-equity ratio improves, that is as there is more equity, normally, looking at this table here which gives us a good example, returns on equity are usually higher than returns on debt or cost of debt, right?

DR. VILBERT: Yes.

MS. BUTLER, Q.C.: Okay. You can just compare the rates in column three to the rates in column five. Because the return on equity is usually higher than the cost of debt, as the debt-equity ratio improves, rates paid by ratepayers would increase.

DR. VILBERT: As the equity ratio goes up for Hydro, the rate ...

MS. BUTLER, Q.C.: Oh, yeah. No, normally.

DR. VILBERT: Excuse me?

MS. BUTLER, Q.C.: Normally. Not for Hydro in this particular application.

DR. VILBERT: For an investor-owned utility?

MS. BUTLER, Q.C.: In the normal rule as equity increases, if returns on equity are higher than the cost of debt, then rates for ratepayers should increase, correct?

DR. VILBERT: No. The point I was trying to make, for an investor-owned utility ...

MS. BUTLER, Q.C.: Yes.

DR. VILBERT: ... for constant ATWACC, that means that the before-tax weighted average cost of capital is also constant, which means that the rates that ratepayers pay are independent of capital structure.

MS. BUTLER, Q.C.: Right. Now in this particular situation before the Board ...

DR. VILBERT: Yes.

MS. BUTLER, Q.C.: ... given that Hydro seeks a three percent return on equity, which is significantly lower than the cost of debt, then the rates paid by ratepayers will reduce if the equity in the Company increases, is that correct?

DR. VILBERT: If the financial leverage is properly taken care of, the problem that I criticized Ms. McShane for was that when she changed the capital structure for Hydro, she left the rate of return on equity constant, and that has the effect of increasing the required return to ratepayers here because they don't adjust properly for financial risk.

MS. BUTLER, Q.C.: And I think ... we can just leave that schedule, Mr. O'Rielly, and have a look at **KM-3**. I think that was apparent in the Exhibit KM-3. Am I right, Dr. Vilbert?

DR. VILBERT: What was your question?

MS. BUTLER, Q.C.: The criticism that you were making of Ms. McShane's constant use of (phonetic) the factors, is that apparent on this particular exhibit or can you work with that exhibit in terms of explaining the criticism?

DR. VILBERT: Yes, I can talk about this. In the hearing it became apparent to me that Ms. McShane was keeping, what I would call, the before-tax weighted average cost of capital constant, and at least in her example I think it was **KM-1**, and what she was showing there was that as you change capital structure and keep the return on equity and the return on debt constant, what was really changing was the implied debt guarantee fee, and so she kept, by doing that she kept the revenue requirement for ratepayers constant. I'm saying that the use of equity by Hydro, because of its tax status, will actually reduce the required rate of return or required return for ratepayers in the province.

MS. BUTLER, Q.C.: Okay. I wonder if we might look at the actual conclusions that you gave in your testimony. That's **the original testimony, pages 46 and 47**. And before we read any of these, Dr. Kalymon *(sic)*, maybe you just might take a moment to tell me whether any of these conclusions have been affected by your supplementary testimony.

DR. VILBERT: No, I don't believe any of those conclusions have changed.

(10:00 a.m.)

MS. BUTLER, Q.C.: Can you tell me whether there are any implications for these conclusions to the issues that are in fact before the Board on this application?

DR. VILBERT: I think so.

MS. BUTLER, Q.C.: Okay. Given, and now I'm talking particularly because of the earlier testimony, pages two and three, where you indicate that the rate of return is not in issue in these proceedings.

DR. VILBERT: It is true that the rate of return is not in issue but it's my understanding that the Company is asking that a target equity ratio of 40 percent be established and that an 11.25 percent return on equity be, I don't know what the proper term would be, but would be regarded as the proper goal for the Company's rate of return in the future, even though three percent is what they're asking for today.

MS. BUTLER, Q.C.: Correct, but your opinion, expressed very early in your testimony, was that this was really not an issue that the Board need deal with.

DR. VILBERT: That's correct. The request for a three percent return on equity would mean that this request is far below the return on their debt and so there isn't an issue about whether that's too high certainly.

MS. BUTLER, Q.C.: Well, an exact quote from your testimony suggested that the rate is so low that the Board may assume that it is relieved from determining an appropriate rate in this proceeding.

DR. VILBERT: Yes, that would be my judgement.

MS. BUTLER, Q.C.: Okay. So that being the case, I'm wondering whether in fact any of your conclusions are particularly relevant to the task before the Board.

DR. VILBERT: The immediate task of setting a required return on equity of three percent, I don't believe so, but going forward there will be decisions about the relationship between the proper return on equity and capital structure that must be considered, the effect of the tax status of Hydro as a Crown corporation is very important for future rate making, and the fact that as equity increases, the required rates for ratepayers to pay will be lower. Those are all factors to me that are important, even though not specifically at issue with the three percent level of requested return on equity.

MS. BUTLER, Q.C.: Thank you, Dr. Vilbert. Those are my questions, Mr. Chairman.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. Butler. We'll move now to the Consumer Advocate, Mr. Fitzgerald, please.

MR. FITZGERALD: Thank you. Thank you, Mr. Chairman. Dr. Vilbert, if I could first direct you back to **NLH-18**, the RFI we were looking at earlier this morning, page three, I believe it is. I must have the wrong reference. Can you go to the last page, Mr. O'Rielly? I don't have the reference, Dr. Vilbert, and you will recollect that when I ask you the question, you were shown a table this morning giving, given *(sic)* deemed rates of return. There it is, **NLH-18, page two**, and here is a diagram or a schedule indicating what the implied return of, return on equity would have been had your methodology regarding the ATWACC been adopted, indicating the Trans Alta for 1998, implied return on equity of 10.8 percent, 2000, 11.08 percent, and Trans Canada, National Energy Board decision, 12.52 percent. Do these figures resemble any amounts that were actually awarded?

DR. VILBERT: The bottom two ... the last one is still in progress. It hasn't been decided. The 2000 AEUB settled and I'm not sure what the rate of return inherent in the settlement was. In the '98 the Board awarded a 9.25 percent return on equity.

MR. FITZGERALD: Okay. If I was to suggest to you that the AEUB 2000 settlement that you referred to also arrived at a figure of 9.25 percent, would you agree with me?

DR. VILBERT: I believe it did that in the sense that it continued the current rates.

MR. FITZGERALD: Currently or previous, you may have been here when you, during the evidence of Mr. Hall. I'm not sure if you ...

DR. VILBERT: I was here.

MR. FITZGERALD: Yes. And you might recall there was a schedule, and I won't bring us all to it right now, it was a Dominion Bond Security Report relating to the awards that the NEB was allowing for certain utilities, and it was in the range of 9.61 percent. Do you recall that evidence?

DR. VILBERT: I do.

MR. FITZGERALD: Do you know if your methodology has been adopted in any of those regulatory hearings?

DR. VILBERT: The NEB has a formula that adjusts the rate of return based upon a risk premium and the, I think it's the Canadian ten-year bond yield, and it adjusted ... it's called, I think, RH-294 decision, and that procedure has been called into question in a hearing that I'm involved in now in this, the Trans Canada, precisely because the rates of return that it's producing are fairly low.

MR. FITZGERALD: What would you describe as fairly low?

DR. VILBERT: I guess I'm trying to decide how long-winded an answer you want about Trans Canada's rate case, but the issue is that if you look at Triple A rated bonds right now, their yields are in the neighbourhood of 7.3 percent, something like that, and relative to Canadian long-term ten-year bonds the spread between the Triple A and the Canadian bonds has widened quite a bit. It's doubled basically. And what has happened then is if you use as a basis the Canadian ten-year bond yield to adjust your rate of return on equity, you're squeezing the difference between a Triple A rated bond and the return on equity, and this is why many of the pipelines in Canada are arguing that that methodology is broken right now and are trying to get the Board to reconsider how to do it, and one of the ways that are being considered is testimony by the Brava (phonetic) Group on use of the ATWACC method to compensate for this change in interest rates.

MR. FITZGERALD: Has the overall stock in Trans Canada suffered in the recent years as a result of regulatory inattention to that type of methodology?

DR. VILBERT: I think they would argue it has, yes.

MR. FITZGERALD: Do you know what, where are they, say, you know, just to ballpark it?

DR. VILBERT: In terms of?

MR. FITZGERALD: In terms of return on equity.

DR. VILBERT: I think their last year's was nine nine, something like that. I don't remember exactly.

MR. FITZGERALD: Has there been any, to your knowledge, any appreciation in share prices in the Trans Canada utility?

DR. VILBERT: I had a meeting with them, I'm trying to remember the date, and at the time they were afraid they were going to be taken over because their share price had gone down so much. I haven't really followed the price in the last month or so.

MR. FITZGERALD: Is it possible to get your undertaking to file information regarding the share prices for Trans Canada for last year?

DR. VILBERT: Sure.

MR. FITZGERALD: And do we understand it correctly, Dr. Vilbert, that really you have no recommendation on the level of the ATWACC, it's just a methodology approach? I believe that's the way we understand your evidence.

DR. VILBERT: Well, I think it's actually more than just a methodology. It's an emphasis on ensuring that the return on equity and the capital structure are consistent with one another, and that's inherent in the methodology but to just dismiss it as simply methodology I think is, ignores the primary contribution of it.

MR. FITZGERALD: And I believe you were asked this question, but for my purposes, I understand that you have not run any of the traditional tests to determine the average cost of capital, being the risk premium test, the comparable earnings test, the DCF test. That is not a part of your testimony whatsoever.

DR. VILBERT: No. I was not asked to do that for Hydro.

MR. FITZGERALD: Those are my questions, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Fitzgerald. We'll move on now to counsel.

MR. KENNEDY: Thank you, Chair. Dr. Vilbert, is there, in your view, any way for this Board to reconcile the requested rate of return of Hydro in this application and what, according to your evidence, would be an appropriate rate of return based on the ATWACC methodology?

DR. VILBERT: If you look at my direct written evidence there's some exhibits and I try to show, Exhibit No. 1, the implied ATWACC of Ms. McShane's recommendation as I understood originally. The forecast capital structure in the year 2002, at 11.25, you, and 15 percent equity, you end up with an ATWACC of 5.89 percent. If you then go to the next, I think it's the next exhibit, it shows how the return on equity changes as you add equity to the capital structure, and you can see that as you add equity it goes down, and, by the way, if you add equity it also reduces, and use this, these risk adjusted returns on equity, then you get a lower revenue requirement as well when you add equity. That's the ... I think the major point of the testimony is that if you had kept return on equity constant as you increase the amount of equity in the capital structure, then the amount of money that ratepayers would pay will increase, but if you properly adjust for financial leverage, financial risk, and recognize that the risk, the financial risk is decreasing as you increase the amount of equity, then the rates that ratepayers have to pay will be less than they would have been. So basically this accepts Ms. McShane's original recommendation of 11.25 percent and 15 percent return on equity, or 15 percent equity, and shows how that return on equity changes.

MR. KENNEDY: But if I'm gathering correctly, you're not necessarily agreeing with Ms. McShane about what the appropriate rate of return on the equity should be at a given spot in the capital structure, what proportion the equity is at any given time but more pointing out that as equity changes the rate of return should change with the capital structure, so it's, your evidence is more about the methodology employed in making adjustments for change in capital structure rather than pinpointing what an appropriate rate of return should be.

DR. VILBERT: That's correct. I did not determine whether or not the 5.89 percent is the appropriate overall cost of capital. I'm just suggesting that if it were the appropriate, then these are the numbers that you should have at 40 percent instead of 11.25 that she recommends.

(10:15 a.m.)

MR. KENNEDY: And if I gather correctly from your pre-filed testimony, you're indicating as well that the rate of return ... let me re-word that. I'm just trying to get the right word here now, if you could bear with me. That the capital structure of Hydro is what it is at any given moment and that the Board has to determine what's appropriate and what's not appropriate in that regard, that you're not making a recommendation concerning the capital structure either.

DR. VILBERT: You're correct, the capital structure is what it is. As a recommendation, however, I would urge the increasing the amount of equity as has been requested because ratepayers will be better off if you both increase the amount of equity and take into consideration the change in financial risk from increasing the amount of equity, so I would urge that they move to more equity, but it is what it is at any point in time.

MR. KENNEDY: Now, I guess the jeopardy is that if the ... the Board would need to be conscious of the fact that if it moves towards a greater proportion of equity as part of the overall capital structure of Hydro, but does not adopt your recommended ATWACC methodology but instead employs a more traditional risk premia methodology, that, and that in the future the rate of return is, on the equity is greater than the embedded cost of debt, that it will increase the revenue requirement of Hydro overall.

DR. VILBERT: I think this is the same question I was asked earlier. Let me see if I can take a little bit more time to try to explain why I think that's not quite right. The first point is, the estimation methods for the return on equity, whether it's ATWACC or any other approach, are all the same. I don't change comparable earnings, discounted cash flows, capital (inaudible) pricing model, risk premium. I don't change those methods at all, although I might implement them slightly differently than Ms. McShane or Dr. Kalymon. Nevertheless, those estimation methods are from a sample of companies that have capital structures that differ from Hydro and in fact there are very few of those companies, none in fact in Ms. McShane's sample, that had 15 percent equity capital structures. If you acknowledge the increased return from financial risk, then to take the numbers that you get from your samples which have more equity and apply that directly to a company with less equity, is not correct. On the other hand, as you increase the equity in the capital structure, if you don't take into consideration the change in financial risk when you do that, that's also, gives you an incorrect outcome. Now, there are other ways to adjust for financial risk than the ATWACC method but the ATWACC method is a very simple and, I believe, the most theoretically correct method in terms of also being consistent with empirical evidence, so if the Board were to decide to increase the amount of the equity and then not adjust return on equity, it would mean that the ratepayers are paying more than they should pay to compensate Hydro for the risk of its business and financial risk. A long-winded answer to your question. I don't know if I ...

MR. KENNEDY: I believe that's helpful to me. I guess being new to the methodology that you're recommending, I'm at a loss because, I guess, I'm more familiar with paradigm, the existing paradigm of determining a fair and reasonable rate of return, and being so you keep grasping for some of the more familiar pillars and posts that guide you along the way, and one of the considerations inherent in the more traditional methods of determining a fair and reasonable rate of return is to look to, for instance, the fact, and there's been a lot of discussion about Hydro being a Crown corporation and being a, at times, possibly an instrument of Government as a means of furthering social objectives, and that there's been discussion about how that would be incorporated into the rate of return of Hydro and the determination of what a fair and reasonable rate of return is for Hydro. So how ... the ATWACC methodology, if I'm gathering correctly, does not need to take that into account, that ultimately the rate of return is still assessed the way it's assessed and then the ATWACC steps in to just make adjustments in the rate of return as the capital structure fluctuates, or does ATWACC have embedded in it, in the methodology itself, a means of looking to the company, such as Hydro, being a Crown corporation?

DR. VILBERT: There's a couple of questions I think in there. Let me see if I can deal with each of them. The first is that you were wanting to anchor your thinking on the traditional methods, and let me tell you that the ATWACC method does nothing to the traditional methods that you're used to dealing with because cost of capital witnesses will come up with a recommendation that's based on what they think the return on equity should be and the only thing that the ATWACC method does or the main thing the ATWACC method does is you must consider that there are two types of risk that affect the return on equity. One is business risk and the other is financial risk, and the capital structures of your sample companies differ, as I said, and so the ATWACC then calculates the overall return for your sample companies that it considers both the debt and equity and preferred stock if it has it. The next part of your question is, alright, now I have my sample companies and I know the overall cost of capital and that overall cost of capital is a number that incorporates both the business risk of my sample companies and the financial risk of my sample companies in one number, and Ms. McShane has three samples that she was looking at, and I would have done something similar, had three samples or so, and all I do then is take, try to understand Hydro's specific situation and specific risk characteristics, including the kind of things you're talking about, about the fact that it's a Crown corporation and doesn't pay taxes, that it has more control, I think it was discussed, and the previous week, cost of capital hearings, that the Board, or the Hydro can request, Province can request a certain amount of dividends and it's basically given its wishes. These are factors then that must be considered in terms of comparing Hydro to the benchmarks you've established. You've got ... in Ms. McShane's case, she would have three benchmarks, and the question then is, how risky is Hydro relative to those benchmarks, and this is where cost of capital gets into some judgement, but you can ask yourself what is the effect of things like the RSP on the risk of Hydro compared to the typical companies in the samples used by the cost of capital witnesses, and when you have those sort of factors in your mind and look at the benchmarks, you can then make a judgement about what the after-tax weighted average cost of capital should be for Hydro relative to your benchmarks. Once you have that number, you go to the capital structure of Hydro and you can then calculate what the appropriate rate of return on equity is given your judgement on what the appropriate overall cost of capital should be.

MR. KENNEDY: I'm not ... maybe ... so is it the case then that the peculiarities of, associated with Hydro as a company are, still taking into account in the determination of what the fair and reasonable rate of return is using the traditional methodologies, that that target is selected and then after that the ATWACC methodology is used to adjust the rate of return based on a mathematical, an application of a mathematical formula of how the ATWACC is taken into account as the equity portion changes?

DR. VILBERT: I think you almost have it, if I can just alter it one more time. I think the difference between what I'm proposing and what has been traditionally done is that samples, the methods that you're familiar with, the comparable earnings and the discounted cash flow and the risk positioning methods, are applied to a sample of companies and then that, those equity numbers are adjusted for Hydro's risk. The problem with that approach is that there is no consideration of, when we do the return on equity, of the financial risk of the sample companies compared to the target company, in this case Hydro, and so the ATWACC method first figures out the overall cost of capital, the after-tax weighted average cost of capital for the sample, which then automatically includes both financial risk and business risk in that number. Then the adjustments are made based upon the relative risk of the companies in the sample and Hydro to adjust the overall cost of capital up or down, depending on what you believe the risk to be, and then the mathematical procedure that you've described at the end (phonetic) is used to come up with the return on equity that would be consistent with the overall cost of capital that you have now estimated.

MR. KENNEDY: So is it the case then that the, if you have two companies and you've determined what the overall cost of capital is using that methodology that you just employed that as their equity levels change, the rate of return on the equity will change the same for both companies, that you don't make adjustments within ATWACC, inside the ATWACC methodology to take into account how differing levels of equity might affect two different companies then?

DR. VILBERT: We do. That's the point. In other words, hypothetically, assume you had two companies that were identical in all respects except that one had 30 percent equity and the other one had 60 percent equity. Well the one who had 60 percent equity would have a lower return on equity than the company that had 30 percent equity, but their ATWACC, their overall cost of capital, would be exactly the same. The only thing that's different between those two companies is the way they have divided the risk between equity holders and debt holders. The company with more equity has ... the debt holders haven't ... you know, there's not as much risk being not borne by the debt holders, that the equity holders must bear.

MR. KENNEDY: But if we have those two companies and then, as, as you, I think your sample was one has 60 percent equity and the other has, I think it was ...

DR. VILBERT: 30.

MR. KENNEDY: ... 30 percent equity, and if both of those companies move to a point where they now have half as much equity, so the company with 60 percent is now at 30 and the company that was at 30 percent equity is now at 15 ...

DR. VILBERT: Yes.

MR. KENNEDY: ... that proportionally their ATWACC should be the same as what it was prior to the 60/30, in other words, they'll both drop at the same level?

DR. VILBERT: The ATWACC would remain unchanged for both of them but the return on equity will change for both of them and both of them will increase.

MR. KENNEDY: And the return on equity for both of them, being a falling out from the application of the mathematical formula, will be proportional to each other in that sense?

DR. VILBERT: No. In fact the return on equity as you ... I think there's also an exhibit I have here which shows how the return on equity changes as capital structure changes. When you get to high levels of debt or low levels of equity, the return on equity to give a full compensation to the equity holders goes up faster than it does at higher levels of equity, and part of that is mathematical but a part of it is logical. If you think about what's happening when you go from 40 percent equity to 20 percent equity, it means that the entire risk of the company that's not being borne by the debt holders is now being borne by equity holders of only 20 percent, whereas before there were twice as many equity holders, and that's not quite the same as going from 40 to 60 because now you're getting double the amount of risk that's being borne.

MR. KENNEDY: This is the, if I'm gathering correctly, the band (phonetic) and that as long as the changes are within a certain range, it should be almost a one-to-one effect, but if you start to hit the peripherals on either side, that the impact may be more exponential in nature, if you will, rather than a one-to-one effect.

DR. VILBERT: I don't know if I agree with the one-to-one, but there's a couple of concepts there. One is that it's not true that the ATWACC is constant in all capital structures because there are some capital structures in which it's inefficient, and for an industrial utility, specifically initially there's tax advantage to use of debt by an investor-owned utility and that tax advantage reduces, well increases the cash flows to debt holders and equity holders, primarily equity holders, and as you start to use debt, the total cost of capital will start to decrease. It reaches a sort of a flat middle section for the sort of standard capital structures you observe for most companies in an industry and then begins to increase as you get to very high levels of debt. The reason it starts to increase is because the risk of bankruptcy and financial distress, which are costs associated with excessive levels of debt, begin to outweigh any tax savings that you might have from use of more debt, so as a result the capital structure, the overall cost of capital has kind of a U-shape with a flat middle section where the cost of capital is constant in that range. Now you had said one-for-one change, and what really happens within that flat range is the ATWACC is constant and the cost of equity will adjust to compensate for financial risk to keep that ATWACC constant within that range, or another way of saying that is that you can use this methodology then to adjust the required return on equity as you change the capital structure and ensure that two equally risky companies who have different capital structures are appropriately compensated in terms of their rate of return on equity that takes into consideration both the business risk and the financial risk of the company.

(10:30 a.m.)

MR. KENNEDY: You recognize that the Board uses a different methodology for regulating the rate of return on the, on Newfoundland Power, and in the sense that the ... the automatic adjustment formula, I'm speaking to.

DR. VILBERT: Yes.

MR. KENNEDY: And in reply to a question from Mr. Fitzgerald you indicated that, I believe it's the NEB is at least reviewing whether it would continue with the automatic, a similar automatic adjustment formula or move to an ATWACC methodology.

DR. VILBERT: We're encouraging them to do that. I don't know if they're going to do it.

MR. KENNEDY: Is there a benefit to be gained or conversely are there problems that could arise from having, in this instance, in the specific instance for the Province of Newfoundland, the generator Hydro regulated under on methodology and Newfoundland Power, the main purchaser of the power produced by Hydro, regulated under a different methodology, or can the two of them operate at the same time?

DR. VILBERT: I guess we're back again now to this same issue, and let me be sure that I understand what you're saying, or you understand what I'm saying, I guess. The ATWACC method again starts with the exact same procedures to estimate the return on equity as is used for Newfoundland Power to estimate its return on equity. The only difference is they're now on, once their rate of return is set, it adjusts with a formula as opposed to, which is, well, what would happen to Hydro I'm assuming until the next rate case, or maybe not a formula, it'd just be stuck at a particular level of return until the next rate case, but in either case there's nothing inconsistent about using the ATWACC method or the traditional method to estimate the cost of equity. The inconsistencies arise when people don't take into consideration financial risk when they set the return on equity for two like situated companies, and that's why in the States at least, and in Canada I think, there are these raging battles over the appropriate capital structure, because the raging battles centre on the fact that if the utility can convince the board to increase its amount of equity while simultaneously not reducing the return on equity, then the utility wins. On the other hand, if the advocates for the ratepayers' side can convince the Board to reduce the amount of equity in the capital structure without increasing the return on equity, then the ratepayers win.

MR. KENNEDY: Okay. So we're familiar with the shortcomings, if you will, on the process of unlinking the capital structure of a utility with its rate of return on its equity.

DR. VILBERT: Okay.

MR. KENNEDY: And I'm wondering if you, being more familiar than I with the ATWACC methodology, could perhaps give me a heads-up and in turn the panel on what the shortcomings are of the ATWACC methodology? In other words, if I was a utility regulated under the ATWACC methodology, how would I gain that?

DR. VILBERT: How would you gain it?

MR. KENNEDY: How would I gain it?

DR. VILBERT: Can we start with the investor-owned utility because I think it's clearer, it's easier there? An investor-owned utility, if I, if the Board were to set the allowed return, the revenue requirement on the ATWACC method, then there's no gaining that you can do, and in fact the Board could free the Utility to select any capital structure it chooses because the revenue requirement would be completely unaffected by that choice, and so all the Board would have to worry about was whether or not the overall cost of capital was estimated properly for the risk of that business. Once that's done, the ATWACC method is now, you can't game (phonetic) it, because changing the capital structure doesn't change your revenues to you, doesn't change the revenue requirement, doesn't change the rates that ratepayers pay, but it will change the mix of return to debt and equity depending on the capital structure selected by the utility. Going to Hydro, things are a little different and the reason they're different is because Hydro, because it pays no income tax, it has an advantage through the use of equity. That's why the revenue requirement for Hydro is always lower than the revenue requirement for an investor-owned utility, because there's no taxes that have to be paid. On the other hand, Hydro has a disadvantage when it comes to debt. The interest payments made on debt are a tax deductible item for investor-owned utilities, and as a result of that the after-tax cost of debt is less to an investor-owned utility than it is Hydro. Hydro gets no advantage from that, but when it competes to get the debt in the market, it's competing with investor-owned utilities, other agencies, that do have an income tax advantage when it comes to the use of debt, and so they, Hydro pays roughly the same cost of debt as an IOU roughly but gets no tax advantage. So what does all that mean for Hydro? Well it means that the use of equity, which is tax advantaged for Hydro, is beneficial, and the use of debt which it has a lot of right now, is a disadvantage because there's no tax benefit to the interest that's paid. Now Hydro does receive the, or the province does receive the debt guarantee fee, (inaudible) income, but that's just compensation for the increased risk of having a capital structure with so much debt. Now, I'll stop there and let you ask me where you want me to go next. I can continue if you like.

MR. KENNEDY: Well, and actually it leads to just the last area I wanted to speak to, speak about, which is the guarantee issue, and I noted that in your pre-filed testimony you seemed to be fairly emphatic that the debt guarantee has no impact on ATWACC, and yet, you know, in some senses that's counter-intuitive again to me being more familiar with the sort of traditional way of looking at the regulation of a utility, so, and then you just mentioned the guarantee in the same phrasing of the determination of the ATWACC, so I'm just wondering if you could speak to that a little more, about why it is that the guarantee has no impact on ATWACC and yet at the same time in effect affects Hydro's ability to access debt on the market.

DR. VILBERT: Okay. Let's start with the debt guarantee fee then. As I suggested earlier today, Hydro could issue debt without the fee, without the guarantee, and presumably the required yield on that debt would be higher than it is with the guarantee. To the extent that they ... and if the fee is fair, which in a sense means that its actuarially fair, that this is the proper insurance premium necessary to provide the guarantee and that the guarantee, grantor is being paid a proper fee, then that is essentially an interest charge because Hydro could have issued the debt without the guarantee at a higher interest rate than it does or it could issue the debt at a lower interest rate, include the guarantee fee, and that, I assumed in my evidence, for purposes of my evidence, that those two numbers were roughly the same. In fact I assumed they were exactly equal. As a result of that, that means that the cost of debt is now properly established in the weighted average cost of capital for Hydro and that all that remains then is to figure out the appropriate return on equity that goes with the after-tax weighted average cost of capital. Now it's also true though that if the province were to substitute equity for debt, it is getting, it's earning that fee right now, and that's money in its pocket, that would be giving that up. On the other hand, it would be earning the rate of return on equity, which is going to be higher than the return on debt for its increased use of equity, and ultimately it'll make more money that way than it would have made if it were running as a business. This is a good investment in a sense, what I'm suggesting to you. They put the money into Hydro, they'd get an ongoing cash flow stream from its investment in equity and the ratepayers of course would get a benefit because equity is tax advantaged for Hydro and debt is tax disadvantaged.

MR. KENNEDY: Just so I'm clear, and it may be just a quick assumption that you ran through, you indicated that the equity would be a higher rate of return than the debt, and again you're not providing evidence on what the appropriate rate of return should be on equity and whether in fact it should be higher or lower than the embedded cost of Hydro's debt.

DR. VILBERT: As a general principle equity is more risky and therefore requires a higher return than debt. Now, you could possibly, I suppose, get into a situation in which the market cost of debt ... well, let me back up and say the market cost of debt and the market cost of equity, in those circumstances, the market cost of equity will always be greater than the market cost of debt because it's a riskier security. If you go to embedded cost of debt which changes with a lag, you could imagine a circumstance in which the embedded cost of debt is very high just because interest rates at some point in the past was very high and the going forward cost of equity would be lower than the embedded cost of that debt. Most places have call provisions and bonds to avoid that problem so that you can, say, call back your bonds that are very high interest rates and replace them with a more moderate cost of debt going forward, but basically the answer is equity is always more expensive than debt.

MR. KENNEDY: Based on a market ...

DR. VILBERT: Market costs.

MR. KENNEDY: Market costs. And so again you haven't looked to specifically and you're not making recommendations to the Board concerning what the appropriate rate of return on Hydro's equity should be.

DR. VILBERT: No, I wasn't asked to do that.

MR. KENNEDY: And so you haven't taken into account any considerations about, as discussions have taken place on the evidence, about who the investor of Hydro is and whether that should impact on the appropriate rate of return on equity. You haven't included that in your pre-filed testimony, is what I'm saying.

DR. VILBERT: No.

MR. KENNEDY: You indicated that in the, using the ATWACC methodology, that it's, you seem to describe it as almost a fail-safe methodology, that there's no way to gain the methodology, and you indicated that the Utility could choose any capital structure that it wanted to within the ATWACC methodology because its rate of return is always going to be adjusted no matter what the amount of equity will be at any given moment in time, but would it not be appropriate that if the Board were to move towards an ATWACC process that it should also provide at least some thresholds, minimum and maximums of what the equity should be in a company?

DR. VILBERT: I agree, yes, they should, and the reason is because, to back up and emphasize, the reason the ATWACC method would allow the company to use any capital structure it likes is because the return would be fixed at a constant rate and so changing the capital structure doesn't provide the company any more return on equity or any less return on equity by adjusting the capital structure. But capital structure, companies choose capital structure for more than just trying to adjust the return on equity. There are bond provisions, there are appropriate levels of capital structure based upon things like how much operating leverage the company has and how risky they view it to be, and so the Board may be concerned or may want to ensure that a utility doesn't move one direction or the other too far for other reasons than the rate of return in the overall cost of capital.

(10:45 a.m.)

MR. KENNEDY: If you were to, as a Board, impose an ATWACC process for the automatic adjusting of the rate of return, would you also provide some time frame for when reviews would be conducted, and, if so, how long would you recommend?

DR. VILBERT: I think that there are a couple of issues there. One is cost of capital reflection of interest rates in the economy and it's not a one-for-one sort of thing, but you know that as interest rates go down, generally cost of capital goes down and vice-versa. You could also ... but you'd also want to be concerned about whether or not the nature of the business that is being regulated is changed in some way for reasons outside of the control of the company. Specifically, if you thought that the industry was becoming much more risky for some reason, perhaps you'd need to have a review of the cost of capital on a more frequent basis. If you thought things were pretty stable and static, you may not need another review for some extended period of time, and particularly if the company is reporting to you its earnings and you feel comfortable that they're providing a quality of service that you want the utility to provide and they're not over or under earning by any dramatic amount, there's probably no need to have another rate of return hearing. They're costly and not always much fun.

MR. KENNEDY: But clearly a utility might be anxious to get back before the Board if it felt that its business risks had increased or other factors may have contributed to it feeling that it's entitled to a greater rate of return than what was previously set under its ATWACC, but may not be as anxious to get back if its business risks have fallen or conditions have changed in favourable terms, sort of a rockets and feathers approach to economics. So how is it that the Board, and what should the Board look to as factors in determining when a new ATWACC hearing would be triggered off, on the low side, if you will, or the side where it's unlikely that the utility would be the one coming forward?

DR. VILBERT: I think it would ... it's the case that this would happen either methodology, would it not? I mean, in other words, returns that a company earns, whether it's being regulated on the basis of ATWACC or basis, just return on equity and a fixed capital structure. Either one of those circumstances are going to be the kind of issues you just raised if ...

MR. KENNEDY: Yes, and in the case of Newfoundland Power with an automatic adjustment formula, there was a specific sunset, if you will, on the application of that automatic adjustment formula and a requirement for Newfoundland Power to come back before the Board for a full review of the application on that formula, which is scheduled to take place in 2002, so that's why I was asking you about the time frames on the ATWACC methodology but you didn't seem to suggest any, so I'm looking more to then specific indice of what would trigger off an ATWACC if it's in fact not a time frame that would be appropriate.

DR. VILBERT: I think the same sorts of things that you would look at. You would look at the earned returns on equity and determine whether or not, if you're an intervenor, look at their capital structure, what the authorized ATWACC was and evaluate the earnings that they're getting on their return on equity and determine whether or not this is high or low relative to what it should have been. If you're an intervenor and it seems like they're really making tonnes of money, probably going to want to come in and ask for a rate hearing to see if you can get the rates reduced, and if you're the company, I suspect you'll have high incentives to come in if you find that your returns on equity aren't, you're not able to earn your allowed returns on the ATWACC. I don't know that that's a time period sort of thing although there probably is some period of time where it would be nice to refresh the whole set of cost of service but I don't know that particular set times ... well, let's say, there has been proposals to just, to deal with it based upon things like percentage change and interest rates since the rates were set originally, and you could adopt something like that, and that's probably something that will come up in NEB proceedings.

MR. KENNEDY: Chair, if it's appropriate, I'd like to break now. It'll give me an opportunity just to review my notes on the break. We went through in rather lickety-split time this morning, so ...

MR. NOSEWORTHY, CHAIRMAN: I agree, yes. Thank you. We'll break now until 10 after, please.

(break)

(11:15 a.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you. Mr. Kennedy, can I ask you to continue or are you finished?

MR. KENNEDY: No, Chair, I just have a couple of areas that I just wanted to quickly canvas with Dr. Vilbert. Dr. Vilbert, one of the counsel, I believe it was counsel for Newfoundland Power, indicated that ... or had you confirm that it was your assessment that Newfoundland and Labrador Hydro had a, I believe the term was a below average business risk profile. Is that correct?

DR. VILBERT: I think the question was whether I ... in relationship to the investor owned utilities that I would have compared it to in the samples that were on the data request No. 18 from Newfoundland Hydro ... or Newfoundland Power, that the business risk is less than the investor owned utilities.

MR. KENNEDY: And I'm wondering if you could just indicate to the Board what factors you would have looked at in making the determination, making that determination that Hydro has a below ... a risk profile below that of the IOUs?

DR. VILBERT: I think there are several things, and I should add that I did not study this carefully, just because I was not asked to establish a rate of return for Hydro, but there are things that came to my attention as I was getting ready for the hearing, one of which is you have the rate stabilization program; you are not in the process of deregulating your electric utility industry; you are a utility that is isolated from other electric utilities which is a weakness in the sense that you don't have anybody to fall back on if you have problems, but it also means that you don't have any competition from power generated outside the province. You have a unique situation in that the province is the shareholder and also has the ability to direct that the Company pay dividends, which most shareholders don't have that luxury, and presumably, if dividends are paid then the combination of the Board and the Company will have to adjust their activities to compensate for that, so these are all things that I think are risk reducing relative to an investor owned utilities that are, some of them being subject to competition in a variety of ways and don't have the luxury of being able to direct the Board to do anything.

MR. KENNEDY: The first ones ... just this final point on this issue. For instance, the presence of the RSP, the fact that there's no movement towards a deregulated market, it being isolated from the North America grid and therefore fewer competitive forces at play, they would be business risks that a bondholder would look to as well as a equity investory *(sic)* would look to, correct?

DR. VILBERT: Yes. Bondholders, however, I think, are concerned about somewhat different risks than equity holders. In finance theory there's the concept of systematic or non-diversifiable risk, and in the capitalistic pricing model that's the risk that's being compensated. Bondholders, on the other hand, are really concerned with sort of total variability in return because what they are worried about is whether they're going to get their money back and whether they're going to get their interest as promised, and so while total variability doesn't impact as much systematic risk, it's a big factor for bonds.

MR. KENNEDY: Just curious, I guess, of the last example that you gave concerning the fact that the province being the shareholder has some influence over the payment of the dividends from Hydro being one of the things that you took into account in determining that Hydro has a risk profile below the average IOU, and I guess I had some questions of Ms. McShane regarding the ability of the shareholder in this instance to require of Hydro to pay dividends at certain points in time and in certain amounts as having some inherent value. Is it your testimony then that that's something that should also be taken into account, the fact that the dividends can be called upon at a given moment in time by the shareholder should be taken into account necessing *(sic)* the risk that the shareholder is presented with in buying equity, theoretically, in this company?

DR. VILBERT: Yes, I think so because the shareholders of an IOU have no such ability, and the ability ... I think it's tied to two things, as well. One is the shareholders of an IOU have no ability to do that, and therefore, that means the cash flow to the province, as equity holder, is much more assured than it would be for an IOU, and the other part of that is that should the province determine that a dividend of a certain amount is appropriate, then both the Company, Hydro, and the Board must work to make that work out, is my understanding, and of course, this is, again, it's not something that IOU has in its back pocket.

MR. KENNEDY: Dr. Vilbert, you'll recognize, if you will, that as far as I'm aware, at least, this is the first time that an expert has put forward the ATWACC methodology as a proposed mechanism for making adjustments to the rate of return of a utility, based on its capital structure to this Board, at least, and I'm wondering, being cautious in nature, as boards often are, instead of leaping straight to a full adoption of the ATWACC methodology from where we stand today, is there an appropriate mid step that the Board could go to as a sort of the transition process in order test drive, if you will, the ATWACC concept without fully adopting it so that they could see how it's working and how it's not working?

DR. VILBERT: Yes, I believe so and in fact, just to followup your comment about it being adopted, one of the things that absolutely astonished Dr. Colby and I, when we presented the ATWACC method to the Alberta Energy Utility Board, is that they did adopt it based upon the first time they had heard it, and we can go in later, if you like, to why they made the one change they made. But that was the first time it had been presented to them and when we left the hearing we thought we had completely sold them, and I think we had. Subsequent events, some information they got that we didn't have a chance to speak to, caused them to adjust their decision, but the point is what they did was to make it in parallel to this traditional approach so that you could sort of see what's going on, and I think as an intermediate step the Board could do something like that, as well as, even if they decide not to adopt the ATWACC method, if simply keeping in mind the return on equity is a function of at least two things, business risk and financial risk, and making an explicit adjustment as you change capital structure for the return equity. Those are movements in the right direction, short of a full fledged adoption of the ATWACC method.

MR. KENNEDY: Just curious, what was the additional evidence that changed that Board's decision regarding the full adoption of the ATWACC?

DR. VILBERT: I'm glad you asked me. What happened was we went through the hearings and everybody put their evidence in and then people filed briefs, and in the brief, additional evidence was submitted that Dr. Colby and I did not have a chance to rebut, and the evidence specifically was that if you graph what appears to be the measured ATWACC versus capital structure, what it appears to show is that as you use more debt the ATWACC goes down, and we didn't get a chance to respond to that, and in fact, if you graph it on a book value basis it appears to be flatter than it does on a market value basis, and that was their decision, they decided to use book value weights instead of market value weights. I brought a footnote which will be in the next textbook that's produced by Breely and Myers (phonetic) Professor Richard Breely and Stewart Myers. Myers is ... well, both Breely and Myers are members of the Brava Group (phonetic) and Stewart Myers is a professor at MIT. Dr. Breely is now at the London Business School of Economics, and this is a footnote that specifically addresses the issue. It'll be in the next edition of the book, and I can give it to people to copy, but can I read it now?

MR. KENNEDY: Go right ahead, absolutely.

DR. VILBERT: I may have to stop periodically to sort of explain what's going on because this is a footnote into a section of a book that's moderately complicated, but "Some financial managers argue that the costs of dept and equity increase rapidly at high debt ratios because of the cost of financial distress. This, in turn, would cause the WACC curve in Figure 19 to flatten out and finally increase as debt ratios climbed. There may be other costs to excessive debt in addition to the risk of outright financial distress, for example, loss of financial flexibility. Formal modelling of the interactions between the cost of higher debt ratios and the expected rates of return on a company's security is not easy. No one knows just when the value of interest tax shields begin to be offset by the cost of too much debt, nor are all of the costs of excessive debt reflected in the cost of capital, some should be used to reduce the expected cash flows. Personal taxes may offset the corporate tax advantage of debt too. All of this suggests a shortcut used by some practitioners, instead of trying to model precisely the cash flow and cost of capital impacts of more debt when considering the different financial structure, simply treat the industry WACC estimated from a sample of companies as constant, regardless of the capital structure, at least within the normal range of observed industry debt ratios. This is equivalent to the substitution of the after tax cost of debt for the pre-tax cost of debt in the above un-levering and re-levering formulas."

As I say, there's a whole lot of other things being discussed in this section of the textbook, but basically what they are saying is that the reason that the graphs looked the way they did, which is to say that it appears that the ATWACC instead of being constant as you add debt to the capital structure decreased, is because not all of the costs of debt are measured in the terms of the yield on the bonds, some of the costs of debt are things like loss of financial flexibility, the cost of financial distress which are not fully showing up in the cost of debt. And so even though these graphs showed the appearance that it wasn't flat, it's more a matter of the fact that these other things were not being captured, and so as a simplification to a fairly complex problem, treat it as flat is the best way to approach it, and there's another section in the textbooks that talks about, and I didn't bring that reference, I think I included it somewhere in my evidence that the market value weights were the appropriate weights, not the book value weights, because it's the market value of evidence that we're considering. Nobody really cares what the book value, other than at a utility proceeding, nobody really cares what the book value of the stock is. It's really the market value that matters. I could give you this if you want a copy.

MR. KENNEDY: And so just to complete that, the market value is a surrogate for these other more unquantifiable aspects to what happens when a company gets highly leveraged, that those types of ... the inflexibility in its financing would not necessarily show up as a ... is a form of pressure on the company that's not reflected in the yield that it pays on its bond, but is reflected in the market value of its stock?

DR. VILBERT: Yes.

MR. KENNEDY: Okay.

DR. VILBERT: In essence, that's right, some of the costs just don't show up in the measured ATWACC.

MR. KENNEDY: That's all the questions I have, Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Kennedy. We'll move now to Industrial Customers, Mr. Hutchings, on redirect, please?

(11:30 a.m.)

MR. HUTCHINGS: Yes, thank you, Mr. Chair. Dr. Vilbert, I just wanted you to look, for a moment, at **Consent 10**, which was the extract from the AUB decision that Ms. Greene gave you this morning. The second page of **Consent 10,** you were referred to the top page where the Board was discussing the use of the traditional and modified ATWACC. Just by way of background, can you explain for us the relationship, as you understand it, between EPGI, EPTI and Trans Alta?

DR. VILBERT: Trans Alta is the company for which we were giving the evidence, and they are ... they were at the time an integrated electric utility with generation transmission and distribution mostly in the southern part of the state. I think ...

MR. HUTCHINGS: The province.

DR. VILBERT: Excuse me?

MR. HUTCHINGS: The province.

DR. VILBERT: Oh, excuse me, sorry. EPGI and EPTI, I think, are Edmonton Power gas and the other one is transmission, and they are, as it says, nontaxable entities in the province.

MR. HUTCHINGS: So your evidence was not directed toward EPGI or EPTI?

DR. VILBERT: No, not at all.

MR. HUTCHINGS: Okay. The part that you read this morning, at the request of Ms. Greene, refers to the notion that the modified ATWACC model collapses to the traditional method used to determine fair return, in their view, because of the fact that these two entities do not pay income tax. Can you, first of all, try to explain, for my benefit, what you understand them to be saying about the collapsing to the traditional method and whether or not you feel that's a correct statement of the effect?

DR. VILBERT: First of all, I have to say that I haven't read this decision in some time and I don't really remember what they meant there, but I honestly don't understand what they mean there. It doesn't seem to me that they're ... the words don't convey to me what I understand them to be saying, so it's hard for me to respond to that part of it. But one of the issues that came up with trying to set the rate of return for Hydro is to try to understand the relationship between the after tax weighted average cost of capital for an IOU, which we're using as the benchmarks for Hydro and the ... which, when you gross it up, becomes the before tax weighted average cost of capital for an investor owned utility, both of which are constant, compared to Hydro which, when you gross up the return to get the revenue requirement from an ATWACC is not constant for Hydro, and so when it says that it collapses to the traditional, I think what they mean is is when you gross up the return on debt from an ATWACC to get the before tax return on debt and you don't have to gross up the return on equity for these nontaxable entities, you end up then with what is the regulated weighted average cost of capital for Hydro which is an after tax rate of return equity and a before tax return on debt. I think that's what they mean by that passage, but it's not quite clear to me that that's exactly right.

MR. HUTCHINGS: Okay, so in terms of the evidence that you were giving in Alberta, there was not an issue about nontaxable entities that you dealt with?

DR. VILBERT: That's correct. Trans Alta is highly ...

MR. HUTCHINGS: Trans Alta is taxable?

DR. VILBERT: Taxable, yes, IOU.

MR. HUTCHINGS: Just one other brief point. In your discussion with Mr. Kennedy you spoke about the ability of the shareholder of Newfoundland Hydro to control the payment of dividends, and your reference then was that the Company and the Board must work to make that work out. When you referred to the Board in that instance, were you talking about the Board of Directors of Hydro or this Board?

DR. VILBERT: It's my understanding that it really applies to both of those boards, but that whether or not the Regulatory Board wants the dividend to be paid, it will be paid. It's my understanding at least that that's the case, and then the situation will be such that everyone has to work hard to be sure that that happens as requested and the operations of the Company is not impacted too negatively by that decision.

MR. HUTCHINGS: Okay. Thank you, Dr. Vilbert. Those are my questions on redirect, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Hutchings. We'll go to Board questions now. Mr. Powell, please, Commissioner Powell, please?

COMMISSIONER POWELL: Thank you, Mr. Chair. Dr. Vilbert, I enjoyed reading your presentation. A lot of food for thought. As you said, we really don't have to make the decision at this point in time because Hydro has sort of asked us to make a different one, but what I was interested, when was the first time that the ATWACC was proposed?

DR. VILBERT: I neglected to mention, because it wasn't asked earlier, that it had been used in the United Kingdom as well in the regulation of electric utilities over there.

COMMISSIONER POWELL: When?

DR. VILBERT: I think they started using it, or a form of it, in the mid `90s. I don't remember the exact time period, but if I may say, one of the things that the Brava group has done for a long time in submitting evidence was to adjust the rate of return we recommend before differences in capital structures between our sample companies and the target company, and so we've done that for a long time. The difference with the ATWACC method is in the past we had used three different methods because there were several different theories about how taxes affect the rate of return on equity, and basically what we decided to do, rather than put three different theories in, which tended to have the effect of confusing everyone, we settled on the theory that is not only the simplest but also corresponds to the empirical evidence the best, and we did that presentation before Trans Alta in 1998. That was the first time the method was set forward in that fashion.

COMMISSIONER POWELL: In Canada?

DR. VILBERT: In Canada.

COMMISSIONER POWELL: Any other jurisdictions in North America?

DR. VILBERT: Yes. We did this almost simultaneously, we did it in California before the California Public Utility Commission and it was for Pacific Gas and Electric. The commission there was not as bold as the commission in Alberta and shot us down, but interestingly then all the intervenors who had railed against it adopted it as a way to adjust the return equity for changes on capital structure that they were recommending, so it was sort of snuck *(sic)* in the back door by the intervenors even though the board, or the commission decided not to adopt it.

COMMISSIONER POWELL: One of the issues, or the number of issues we're having to deal with. One of the issues is Hydro is, in their presentation and the evidence we've heard so far, is proposing that they be treated like an investor owned utility, but at the same time they come towards the Board saying that we only want a three percent cost of capital but they think that ten and a half percent is correct. Now, how do you, as a professional dealing with that, look upon a utility sort of saying one thing but asking something that seems to be ... so I think you said that the rate is so low in relation to normal returns granted. How can you rationalize that, how would you rationalize that?

DR. VILBERT: I basically accepted the explanation offered by the Company, which is, as I understood it, that there is a transition from interest coverage methodology of rate making to one of rate of return on rate base and going to a full justified risk adjusted rate of return on equity would be such a rate shock that they thought it better not to make that transition. Were I a shareholder of such a company I would be unhappy with them, but in this circumstance it seems like a reasonable way to proceed to make the transition from one methodology to another.

COMMISSIONER POWELL: So you don't think that the fact that they're a government owned utility as opposed to an independent investor owned utility, going this method, there's nothing really wrong with it, other than being a shareholder you may feel ... wondering what the management is doing, but the process itself?

DR. VILBERT: You mentioned another thing in your question, and that is I think one of the disadvantages of regulated companies and probably in particular government owned regulated companies, is that the incentives are not the same as they would be for an investor owned company, and those incentives, profit motive and those sorts of things, have been well known to lead to more efficient operations, and to the extent that you can alter Hydro's incentive structure in a way that provides them the incentive to be more efficient, I think that's a good thing. As far as the three percent, you know, as I say, I accept what the Company says is the reason they chose that number.

COMMISSIONER POWELL: Was there any other recommendation that you would recommend that they would go with the full cost of capital and blend in the rate shock? Do you have any examples of that?

DR. VILBERT: Where they would deliberately ask for a lower rate of return?

COMMISSIONER POWELL: No. That they deliberately ... or they come in and say here is our appropriate rate of return, be it 10.5 or whatever, but here is the effect on rates but we don't think the ratepayers should have to pay all this but they should be phased in, say, over a three year period or a two year or five year?

DR. VILBERT: I think that happens periodically. I know that in some states in the States, California, for example, which has a rate hearing on cost of capital every year, they try to do that by ... their method is to say the rate of return on equity will not go up by as much as we think justified in this year because of changes in interest rates, let's say, in the economy in order to deliberately sort of dampen out the rate shock to investors. That's a comparable sort of thing to what they're doing here. I suppose the alternative here could be to publish rates, what they would be if a full risk adjusted rate of return were authorized and then phase those in at some schedule over time to avoid the rate shock, that's another way to do the similar sort of thing.

COMMISSIONER POWELL: One of the other things Hydro wants us to do, in addition to adopting the three percent, they want the Board to acknowledge that it's inadequate, and I guess my words, but they want us to send a message to ... send a signal to the market with a message that this is inadequate. How do you think the panel, or how would you recommend to the panel to put the appropriate signals or do you think that's appropriate?

DR. VILBERT: I think regulatory certainty is always a good thing, as from the markets point of view, and particularly if you have stock that you're ... that's going to react to changes in the signals that the Board is sending. In this case, for Hydro the only market that you're going to affect, I suspect, is the bond rating agencies, and you've already provided, the province already provides a debt guarantee. I think that to the extent that you increase the amount of equity in the Company, that will send a signal also that the risk of the bonds of Hydro are going to be less in the future than you have now. And perhaps you may get a decrease, slight decrease in the interest rate you charge, are being charged for your debt, but there's no signal to send to the equity markets, that I see.

COMMISSIONER POWELL: Because of the loan guarantee, basically takes care of the issue?

DR. VILBERT: To (inaudible) standard the loan guarantee fee will go down as you signal that you're moving towards a heavier equity ratio, but it's to the extent that it's established by other means in the market, then that fee wouldn't be affected.

COMMISSIONER POWELL: But this load guarantee fee is determined by the shareholder, so it would be up to them if they would lower it as their equity increased, would it not?

DR. VILBERT: If that's the agency in charge of determining the fee, then I suspect that's right.

COMMISSIONER POWELL: Thank you. Those are my questions.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Commissioner Powell. Commissioner Sanders?

(11:45 a.m.)

COMMISSIONER SAUNDERS: I have no questions, Mr. Chair. Thank you, Dr. Vilbert.

MR. NOSEWORTHY, CHAIRMAN: Thank you. Commissioner Whelan?

COMMISSIONER WHELAN: No, I have no questions. Thank you, Dr. Vilbert.

MR. NOSEWORTHY, CHAIRMAN: Dr. Vilbert, thank you very much for your evidence. Certainly for a non-accountant it requires some careful reading and scrutiny. I don't have a ... I just have but one question, actually. I guess in listening to Ms. McShane's it seems to me, again from a fairly broad perspective, that what she would be proposing would be to look at sort of an investor owned utility with a view to establishing some financial principles and parameters around that investor owned utility, looking at cost of debt and cost of equity and then making some adjustments after the fact for elements of financial and business risk associated with a specific utility based on a comparison to other models that might be in place. And I realize that's a fairly simplistic description. There are other elements of that, but I think for my purposes, in any event, that's what I understand at this point in time. I think, in looking at your approach to this after tax weighted cost of capital, that indeed, you would be looking at that weighted cost of capital would contain the sum, I think as indicated in your evidence, the sum of the return on equity, the payment of interest, the debt guarantee, and I think implicit in that return on equity would be based on comparisons that would be ... that you would use, although you haven't used them necessarily here. That that return on equity would indeed acknowledge financial and business risk as opposed to making the adjustment after. In response to Mr. Kennedy's question, I think he put it to you, well, if we didn't accept this methodology fully what are some intermediate steps, and I believe you said in response that even if we didn't go with the ATWACC model that some recognition of the return on equity is a function of business and financial risk, and that we would adjust accordingly. Those are my notes in the absence of a transcript, in any event. Wouldn't that be ... wouldn't that be there in both these models, Ms. McShane and yours in that sort of acknowledgement?

DR. VILBERT: It should be. The recommendation, as I understand it, from Ms. McShane, was that the appropriate cost of equity for Hydro at 15 percent equity was 11.25 percent, and that that same rate of return on equity was appropriate at 40 percent equity compounding. To me, that means that she didn't adjust the rate of return for changes in the financial risk as you increase the amount of equity in the capital structure, so the first answer to your question is, yes, we should both do that. For some reason, she elected not to in this case, and that's what I was critiquing her about in her evidence.

MR. NOSEWORTHY, CHAIRMAN: I understood, somewhat that indeed she was making an adjustment for financial and business risk in her model as well, so that the recognition, to me, would be there in both, but I would be subject to going back and sort of reviewing that testimony again. I thought that was there in both models, it was just applied in different ways.

DR. VILBERT: In fairness to Ms. McShane, she did say, I believe, in the hearing, that what she believed was changing was the debt guarantee fee and that she set up a model in which the return on equity was constant and the return on debt was constant, and the thing that was varying, the capital structure changed, was the debt guarantee fee, but to keep the return equity constant with changes in capital structure ignores one aspect of financial risk. It's true that the debt guarantee fee is likely to change with capital structure if it were done on an actuarially fair basis, which is to say estimated besides being set by the shareholder, but it's not true, in my opinion, that the returned equity, the appropriate risk adjusted return on equity would be constant at 15 percent equity in a capital structure and 40 percent equity in a capital structure. Those two things just don't, they just don't work.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Dr. Vilbert. We'll move now to questions on matters arising and ask Hydro, please, to begin?

MS. GREENE, Q.C.: Thank you, Mr. Chair. I have no questions.

MR. NOSEWORTHY, CHAIRMAN: Thank you. Newfoundland Power?

MS. BUTLER, Q.C.: No, Mr. Chair, no questions.

MR. NOSEWORTHY, CHAIRMAN: Consumer Advocate, please, Mr. Fitzgerald?

MR. FITZGERALD: No questions, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: Counsel, Mr. Kennedy?

MR. KENNEDY: No questions, Mr. Chair, none.

MR. NOSEWORTHY, CHAIRMAN: Okay. Redirect, Mr. Hutchings, please, any?

MR. HUTCHINGS: Just a couple of quick points, Mr. Chair. Dr. Vilbert, in your discussion with Commissioner Powell you were exploring some other ways of dealing with the question of rate shock, and you raised the possibility that one could publish the full rate, what I would call the full rate, that is to say with an appropriate, shall we say, return on equity now and move toward that over a period of time. What would be required in this hearing if that procedure were to be followed?

DR. VILBERT: Well, then you would open up the door to all of the kind of things that we avoided by deciding that three percent was all that was going to be asked, and so you would have to then determine the risk of Hydro relative to the benchmark sample companies and determine what then the appropriate rate of return would be for the capital structure that actually exists and so forth, so it would make it messy again.

MR. HUTCHINGS: Okay. Just referring briefly to your last discussion with the Chair. Is the effect of maintaining the 11.25 percent return on equity over the range of capital structures from 15 to 40 percent illustrated anywhere in your supplemental evidence?

DR. VILBERT: Yes, it is.

MR. HUTCHINGS: Can you point us to that?

DR. VILBERT: I think it's in my supplemental, using the most recent example.

MR. HUTCHINGS: I was looking at **MJV-7** but I'm not sure whether that's the one you had in mind.

DR. VILBERT: Yes, that's the one I'm pulling up. If you look at ...

MR. HUTCHINGS: That's the working paper we have there.

DR. VILBERT: That's the work paper.

MR. HUTCHINGS: It's the previous page.

DR. VILBERT: One more.

MR. HUTCHINGS: One more back there.

DR. VILBERT: What I tried to illustrate here is the contrast between the ATWACC method and the method Ms. McShane adopted, which I interpreted to mean to leave the BTWACC constant. Starting at the top, she recommends that 40 percent equity, as I understand it now, 11.25 percent rate of return on equity at 40 percent, and that comes up with an ATWACC of about seven percent, a little over, which as I comment, was really higher than even a utility like Trans Alta that's in the process of deregulation so that's quite high ATWACC just on a relative basis. Then as you decrease the amount of equity in your capital structure, keeping the return on equity cost in, you see that the ATWACC is decreasing, and it gets down to five, nine, six percent at the forecast 2002 capital structure of 15.27 percent equity. That's a little bit higher than my original testimony because, as Ms. McShane has said in her hearing, that she was allowing the debt guarantee fee to change, and you'll see that the debt guarantee fee in Column 7 goes from zero at 40 percent equity to 1.16 percent at 15.27 percent equity in order to keep the rate of return on equity at 11.25 and the rate of return on debt at, it's not on here, but at eight three ... oh, I'm sorry. Eight, five, one, so ...

MR. HUTCHINGS: Keep the BTWACC constant, is that ...

DR. VILBERT: Yeah, that's BTWACC is constant in this example. If you go to the ATWACC situation now accepting for a moment that the 708 is the correct number, you can see that a risk adjusted rate of return on equity would have to go up pretty substantially, Column 4, as you get to 15 percent equity ratio. The point is that the compensation for equity on a risk adjusted basis should really be, if you believe 708, should really be 19 percent at 15 percent equity as opposed to 11.25, so the effect of financial risk is quite substantial. Of course, you can reverse this process, and I think I've done that on **Exhibit 3**. Let me just check. If you look at **Exhibit 3** on my direct or my written, this is the original five, eight, nine that was inherent in her recommendation of 11.25 with a one percent debt guarantee fee so that the cost of debt is eight, three, five, and you'll see that as you increase the amount of equity in the capital structure and you go to Column 4 you'll see that the return on equity, that adjustment for financial risk goes from 11.25 requested down to eight, two, seven at 40 percent, so again, the effect of financial leverage, financial risk is substantial on the return on equity. Now, I'm not arguing that five, eight, nine is the right number, I'm just illustrating if you adjusted for financial risk from her original recommendation the effect on equity.

MR. HUTCHINGS: Okay, so from **Exhibit MJV-3**, accepting the ATWACC principles, a return on equity of 11.25 percent at 15.27 percent equity is the equivalent of 8.27 percent at 40 percent equity?

DR. VILBERT: Yes, and if you look at the first column you see that the ATWACC at five, eight, nine is constant throughout. Now, the revenue requirement is the second column, which is the BTWACC column, and note there that the revenue requirement now as a function of the capital structure, which is to say as you go to more equity, the revenue requirement, instead of being an eight, six, six, inherent in the original recommendation 11.25 goes down to 7.6. That number multiplied times the rate base gives you the interest and return on equity charge, and so by increasing the amount of equity in the capital structure you can reduce the revenue requirement that ratepayers would have to pay.

MR. HUTCHINGS: Thank you, Dr. Vilbert. That's all I have, Chair.

(12:00 noon)

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.

Hutchings. That would conclude Dr. Vilbert's testimony. Thank you, Dr. Vilbert, very much. It is 12:00. I'll ask the Consumer Advocate now if he's in a position to introduce Dr. Kalymon or would you prefer to wait until 2:00?

MR. FITZGERALD: Well, Mr. Chairman, we're encouraged by the lightening speed that this witness has been dealt with, but the effect of that is that it's compressed the time that we have to prepare Dr. Kalymon, and that wouldn't be a problem but there is updated information that ... Dr. Kalymon has updated his data as of November 9th, and this information hasn't been circulated to the parties yet, so I thought it might be appropriate if we made copies of this now, circulate it to the parties so they have an opportunity to look at it over the lunch break and then commence at 2:00.

MR. NOSEWORTHY, CHAIRMAN: Fine.

MR. HUTCHINGS: Mr. Chair, if I might. There was the footnote that Dr. Vilbert referred to. If we do wish to have that marked we can do that and have it reproduced and distributed. I think it was in response to a question from Mr. Kennedy, so I would ...

MR. NOSEWORTHY, CHAIRMAN: That would be appropriate.

MR. KENNEDY: In light of the fact the witness quoted verbatim, perhaps we could put it in as an exhibit, and we'll give it the initials of the witness at the time when it gets distributed.

MR. HUTCHINGS: That's fine. We'll make those arrangements.

MR. NOSEWORTHY, CHAIRMAN: Thank you. Mr. Fitzgerald, do you have requisite copies of that?

MR. FITZGERALD: I was going to impose on the Board's resources, perhaps, in a pinch here, just to get a couple of copies for counsel.

MR. NOSEWORTHY, CHAIRMAN: Thank you. We'll reconvene at 2:00.

(break)

(2:00 p.m.)

MR. NOSEWORTHY, CHAIRMAN: Good afternoon, Dr. Kalymon. Before we get started I'll ask Counsel to address preliminary matters, please.

MR. KENNEDY: Yes, Chair, one preliminary matter to my matter which is I see that has been filed, the flip note Exhibit that Dr. Vilbert referred to during his testimony and for the purposes of the record we should enter that as an Exhibit and it would be MJV No. 1, Chair.

EXHIBIT MJV NO. 1 ENTERED

There's also an Exhibit that's there for Dr. Kalymon but I'll leave it to the Consumer Advocate during the cross to actually enter that in at an appropriate time. With the panel's indulgence, Chair, I'd also like to report on the meeting between counsel that was conducted on Friday afternoon just past, November 9th. There were a number of items discussed. One such item was the ... there was an attempt to try to change the order, if you will, of some of the witnesses and to delay the commencement of the cost of service experts. However, due to some scheduling conflicts with the cost of service experts, that was unable to be achieved. So the cost of service experts are, unless the Board otherwise orders, in keeping with the Board's previous order PU-18 to commence on November 26th. And it is hoped, of course, that the cost of service experts will take no more than the two weeks that have been scheduled for that purpose, which would be the second week commencing on December 3rd. However, on the off chance that the cost of service experts spill into the third week, I believe counsel have, or if they haven't, should speak to their individual experts to ensure their availability for at least the beginning of that third week which would be the week commencing on December 10th to ensure that they're present if that's what's required during cross-examinations. So I guess that's a long winded way of saying that everything remains the same as far as the cost of service experts are concerned.

The second issue which I have in my notes which was discussed was the appearance of Mr. Drazon (phonetic) which is the expert witness for the Town of Labrador City. In discussions with Mr. Hearn, he was requesting that Mr. Drazon not testify until the completion of Mr. Osmond's testimony. In keeping with the schedule, as I just indicated for the cost of service, in anticipation that, particularly now that Mr. Roberts may be finished before we break next week, I'm at Wednesday, that we may in actual fact start Mr. Osmond next week and that certainly we would be able to complete him in the third week of December after the cost of service. He should certainly be finished his testimony before December 18th and therefore, that was the date chosen for Mr. Drazon's appearance, December 18th. And so, with the Board's indulgence, request confirmation that that's appropriate, that Mr. Drazon be given a particular date on which he knows that he can appear and that that therefore can be communicated to Mr. Hearn.

The third item I had was the actual sitting hours of the panel. This has been discussed, as you're aware, a couple of times previously with the panel and there's a request by counsel for all parties that the Board consider extending the sitting hours, and specifically a request for an extension to 4:30 each day for the purposes of basically just hearing more evidence in each day in an effort to speed along the process. On that point, there's clearly reservations as Board counsel, that I would advise the Board to be cautious about extending its hours, for the sole reason of fatigue and of being unable to absorb the information that's being put forward to the Board through the witnesses. And, also, that over the next two weeks, we have an abbreviated week this week and an abbreviated week next week and so whatever efficiencies might be gained through that I think would be marginal and it might be an issue better addressed for the purposes of the cost of service experts, and then looked at again after the cost of service experts are completed to see where we are in our schedule. And, I guess, all counsel would look for some direction from the panel in that regard concerning sitting hours as well. And I believe that's all the items I had, Chair, arising from that meeting that need to be discussed at this time.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Counsel. I'll take those matters, I guess in particular, the focus would be around the sitting hours, and I'll take that under advisement and the panel will discuss it during the break and I'll report back after the break. Is that satisfactory? Are there any other items, Counsel?

MR. KENNEDY: No, Chair, that's all the preliminary matters I have. I don't know if Hydro has reportings on undertakings, quite possibly.

MR. NOSEWORTHY, CHAIRMAN: Okay, Ms. Greene.

MS. GREENE, Q.C.: Thank you, Mr. Chair. I do have a list of undertakings from Friday to circulate at this time. Mr. Chair, there were three undertakings provided on Friday. The first related to the Letter of Understanding from the Department of Works, Services and Transportation relating to the VHF radio, and you will recall that was filed on Friday in the afternoon. The second undertaking was a request of Board counsel with respect to the cost effectiveness of the satellite phone system and that also was provided on Friday. The third undertaking was to Commissioner Powell with respect to providing a revised organizational chart to show the deletion of two directors' positions in the production division, and those revised charts will be filed in the next day or so. So those were the three undertakings that were given on Friday.

I also have a document in relation to a previous discussion and an undertaking and it relates to Mr. Hall's testimony. At the time that he testified he was asked with respect to the revised ... where the ROE outlook was for 2002 and when it would be ready. It was released on Friday past by RBC Capital Markets and I have a copy of that report dated November 9th, which we just received today, this morning. I have copies to distribute at this time

As the copies are being distributed, I would like to point out that page 11 is shown as a blank on this and this is the way it was actually sent to us. So it's not an error, there is nothing on page 11. And you go from page 10 to the small print on the unnumbered page at the back.

And I guess this last document should be marked.

MR. KENNEDY: Yes, it would be U-Hydro. I don't know the number, Counsel, yet, I'll just wait for the Board Secretary to advise us what the next one is.

EXHIBIT U-HYDRO NO. 24 ENTERED

MS. GREENE, Q.C.: Thank you, Mr. Chair, that concludes my preliminary points.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. Greene. Mr. Fitzgerald, are you in a position to proceed with Dr. Kalymon?

MR. FITZGERALD: Yes, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: You are, okay. I'll ask you, Mr. Fitzgerald to proceed with your direct examination, please.

MR. FITZGERALD: Thank you, Mr. Chairperson. Dr. Kalymon, on the 10th of August 2001, there was certain pre-filed evidence filed in your name at this Board. Do you adopt this evidence as yours?

DR. KALYMON: Yes, I do.

MR. FITZGERALD: And, recently, you have updated this evidence in part as of November 9th. You adopt this revision as yours as well?

DR. KALYMON: Yes, I do.

MR. FITZGERALD: Mr. Chairperson, I'd like to enter the latest revision as a document, perhaps **BK No. 1**, which represents a revision of the earlier pre-filed testimony.

EXHIBIT BK NO. 1 ENTERED

MR. FITZGERALD: Dr. Kalymon, turning to **BK No. 1**, perhaps if you could, you could highlight the revisions which have been made to your evidence of August 10th as reflected in this document.

DR. KALYMON: Yes, this document reflects a number of updates. I reviewed the conditions in the financial markets and there are a number of facts that I would like to put on the record first that led me to revise my page 13 of my evidence and some of my recommendations. The first issue that I'd like to highlight is that the current ten year Canada bond rate is at 4.86 percent based on the trading yields reported on November 9th. This compares to page 5, line 24 of my evidence which states that the bond rate was 5.70 percent at the time which is August the 1st. That was the time of the preparation of my originally filed evidence. So, the ten year Canada bond rate has come down quite substantially since the time of the preparation of my evidence. The second fact that I'd like to point out is the Treasury Bill rate for Canada Treasury Bills of three months is currently at 2.15 percent. This is, again, as of a report of November 9th. This is compared to the 4 percent which appeared in my evidence on page 6, line 15 which was the prevailing rate as of August 1st. So, again, a very substantial ... actually, I wouldn't call that substantial, I'd call that a dramatic change in the condition of the short-term interest rates.

The next piece of update would be related to the trading yields on long-term Province of Newfoundland Bonds, which were at 6.21 percent reported on November 9th, with a spread over Canada of 86 bases points. This relates to the reported 6.71 percent for August 1st which is recorded on my testimony on page 14 at line 5. These are very long-term rates. These are close to, I think it's around 27 years. So it indicates that the long-term rates have also come down, the longest rates have come down. The medium term rates have come down substantially and then in the short term, rates have come down the most. That's basically what has happened since the preparation of my evidence.

(2:15 p.m.)

I think the overall statement would be the cost of money has definitely been reduced based on the entire yield curve. This also relates to the short-term funds, commercial paper three months. November 9th the rate is at 2.22 percent. I referenced in my testimony at page 14, line 19, the August 1st rate was 4.13 percent. So this would be related to the short-term cost of debt. All of these changes in particular, in particular the change in the 10 year Canada Bond rate which I use as one of my central indicators of the cost of equity capital based on the risk premium approach, leads me to change my recommendation and move it down to the 8-1/2 to 9 percent range for the cost of equity capital. This, with a midpoint of 8.75 percent. This compares to my previous recommendation for the cost of equity capital which appeared on page 36, line 12 of my evidence in which the recommended range of cost of equity was 8.75 to 9.25 with a midpoint of 9 percent. Basically, although the company is not requesting returns on equity at this range, I believe that the indicated cost of equity is relevant if the Board wishes to set limits on what might be reasonable in the medium term if the company starts over achieving its proposed target. And I'll say a little more on that in my next update. So, based on the conditions in the capital markets, I think equity money is less expensive today than it was two months ago and I'm reflecting that in my recommendation to move the recommended cost of equity down from my previous recommendations.

A further update that is related, is that I reviewed the revision as of October 31st by Mr. Roberts and specifically I'm speaking of his schedule ... 10A, I guess is the schedule and the revised October 31st testimony. In that schedule, there appeared interest rates that would pertain to the company's debt. And in that schedule there were a couple of revisions, two revisions that related to actuals for the year 2001. There were also two forecasted rates which related to the year 2002. I believe that one of those rates, the one that pertains to the long-term debt to expire potentially is projected to be a 30 year issue and it's stated under the revision as being at 6.66 percent. In the light of the current trading rate for long-term Province of Newfoundland Bonds, which would be the same cost structure because of the guarantee for Newfoundland Hydro, I think that number should be revised down to about 6.21. There is no reason for a 45 bases point margin in my view in that particular example.

The final update, revision, that I would like to make is that as a result of the changed estimate by the company of its debt and slight changes in its capital structure, my calculations that appeared on page 13 needed to be modified. The changes that I have just filed, I guess, BK No. 1, that is my revised page 13 of my testimony which basically is just a modification based on the following changes. If you consider the issue of the funded debt, the ratios that were originally filed by the company were slightly revised from 83.18 to 83.38, so I have incorporated that in my revision of page 13 for the percentage of funded debt, relatively minor change. A more substantive change is the company's projected cost of debt is lower for ... instead of 7.345 as originally filed, it is 7.134 as per Mr. Roberts' modified filing. So I have adjusted my calculations accordingly. I have also changed the pre-funded but because of the slight adjustment to the funded, the pre-funded level is modified to the 23.38 showing on my BK No. 1, relatively minor.

The other revision that I made on that chart is, again, in capital structure, the funded equity under the revised numbers of October 31st dropped from 15.27 to 15.07 and I have incorporated that into that table. The guaranteed portion, a residual guaranteed portion is then changed to 23.38. The other substantive change to page 13, table on 13, is the original midpoint target was 9 percent. I have lowered that to 8.75 percent in light of the current capital market recommendations on what an appropriate cost of equity should look like for a company with this level of business risk. That changes my overall ... sorry, that also changes the fee number that appears under guaranteed from 1.655 to 1.616. All of those changes imply that the overall target return on rate base would drop from the 8.168 that I have in that table to 7.945 which appears in my revised BK No. 1.

Again, I would point out that the company is not applying for a level of 7.945, it's applying for a lower return on a rate base. I think that the relevance of this number is that I think at that level if the return on rate base starts to approach that level or exceed that level, I think that would be the upper range of I think what would be reasonable. I do not have any information suggesting that this will be achieved in the test year or in the subsequent year. But I would suggest as a caution, that the Board consider this as a reasonable upper limit of where the return on rate base should ... might move before the Board wants to reconsider, may want to reconsider the whole basis of the rates that are currently being approved. This number also, just to put it into context, there was discussion by Ms. McShane I think in the record, that suggested numbers like 9 percent and other ... or maybe no limit at all. I would object to that strongly. I would suggest that there would be substantial over earning at those sort of numbers and that a number like 7.94 might serve as an upper bound on reasonableness, even though I recognize that the company is only requesting a lower return rate base for setting the rates as of test year.

The only other revision that I would make is just to point out that with the recalculated target return on rate base, that number also influences my recommendations which very specifically appear on page 36 of my evidence at the end of my evidence on page ... sorry, page 36, line 13 where ... I guess there's two changes. One is on line 12 where my recommended provision of 8.75 to 9.25 should be revised downward to 8.5 to 9.00 and on line 13, the number, the target return of 8.168 should be lowered to the revised level of 7.945. That is the substantive impact of these modifications or updates in light of current capital conditions and in light of the updated application by the company. I think that is all.

MR. FITZGERALD: Thank you, Dr. Kalymon. Is that the extent of your revisions?

DR. KALYMON: Yes, it is.

MR. FITZGERALD: Mr. Chairperson, before presenting Dr. Kalymon for cross-examination, I'm wondering if he can be given U-H No. 24 which has just been filed. That's the RBC Capital Market document which may be useful to him. Thank, you, Mr. Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Fitzgerald. We'll proceed now with Hydro's cross-examination, Ms. Greene, please.

MS. GREENE, Q.C.: Thank you, Mr. Chair. Dr. Kalymon, on page 1 of your pre-filed evidence you stated that you had appeared at a number of regulatory meetings in Canada and I think the number stated there is 28, is that correct?

DR. KALYMON: I believe that's right, yes.

MS. GREENE, Q.C.: In looking at your resume that was attached to the schedule. I noted that in those proceedings you had appeared for regulatory boards at a number of occasions, a significant number of occasions, is that correct?

DR. KALYMON: Yes, that's correct.

MS. GREENE, Q.C.: I believe you've also appeared for the Board of Commissioners here in Newfoundland with respect to an application by Newfoundland Power in the past, is that correct?

DR. KALYMON: On several occasions, yes.

MS. GREENE, Q.C.: And I believe you've also appeared for the Consumer Advocate in the past here in Newfoundland with respect to an application by Newfoundland Power, is that correct?

DR. KALYMON: Yes, that is correct.

MS. GREENE, Q.C.: Have you appeared for utilities, making an application as well in the past? That wasn't quite as clear from your resume.

(2:30 p.m.)

DR. KALYMON: I have appeared for utilities. A number of years back on a couple of occasions I appeared on behalf of Alberta Government Telephone which is no more Alberta Government Telephone but it was, I guess, a similar ... in the similar context. It was Crown owned at the time and I appeared on two occasions for AGT, as it was called at the time, now a part of Telus. I also appeared for one of the Ontario telephone companies, one of the smaller Ontario telephone companies, on their behalf. But most of my evidence, I think my broadest number of appearances would have been on behalf of the Ontario Ministry of Energy with regard to pipeline hearings. I have also appeared on behalf of Interprovincial Pipelines at numerous hearings but not as a cost of capital witness.

MS. GREENE, Q.C.: Do you see ... first, I should tell you, there was an issue previously in this hearing with respect to the ability of an expert to appear for different interests in the same jurisdiction. Do you, from your perspective of an expert witness, having appeared on behalf of regulatory boards as well as utilities and consumer groups, see a difficulty in an expert witness appearing for different parties or interests, even in the same jurisdiction?

DR. KALYMON: It is extremely challenging and I think the fact is that I have done it on numerous occasions because ... well, because I believe that I am testifying to what I believe is the cost of capital, and if that is accepted by my client, then I don't think I have a problem. Having said that, I guess I would add that as an expert witness, I like to pride myself as being an expert and not bringing in my biases. That's what I believe.

MS. GREENE, Q.C.: Turning now to Section 2 in your pre-filed evidence which deals with the risk in capital structure. I wanted to explore with you your opinion that you have provided in this section on page 9. And I would ask you, please, if you could read lines 14 to 17 of your pre-filed evidence.

DR. KALYMON: "On balance of factors, it would be my overall assessment that the business risks of Hydro are similar to that of other electrical utilities such as New Brunswick Power, Nova Scotia Power and Newfoundland Power, which enjoy effective regulatory monopolies within smaller and less diversified economies. The business risks of electric utilities in Ontario and Alberta are substantially higher due to the level of competition which is being mandated in these markets."

MS. GREENE, Q.C.: So, with respect to your opinion on the business risk Hydro faces, do I take it from your pre-filed evidence, you view the risk of Hydro as similar to those utilities you've listed on page 9 of your pre-filed evidence?

DR. KALYMON: It isn't a very precise science, but within my judgment I would say similar, yes.

MS. GREENE, Q.C.: Turning to your recommendation with respect to the capital structure for Hydro, if you could please bring up page 11 of the pre-filed evidence. And here, Dr. Kalymon, just to ensure that everyone understands your opinion, I wonder if you could read in lines 14 to 17 that's shown there on page 11, please.

DR. KALYMON: Line 14 reads, "Given that the provincial guarantee is in place, it would be my recommendation to the Board that the capital structure of Hydro be allowed to gradually evolve over a number of years to the stand alone level of 40 percent equity and 60 percent debt, which would permit Hydro to achieve an investment grade rating on its bonds."

MS. GREENE, Q.C.: And that, Dr. Kalymon, is the same recommendation as Ms. McShane and Mr. Hall with respect to the long-term capital structure target for Hydro?

DR. KALYMON: It is essentially the same. There is a question of whether you include the no cost capital related to benefits, but it's a relatively minor adjustment. I think these levels of equity would be required to achieve investment grade rating.

MS. GREENE, Q.C.: Looking at page 13, and I guess we have to look at your revised page 13. You just referred to one of the issues in your answer, the treatment of employee benefits that's shown here under equity. That assumes, does it, that the Board accepts Hydro's proposed treatment for employee benefits that there be an accrual for those benefits so that it would be pre-funded?

DR. KALYMON: I think the capital structure should be consistent with the proper accounting treatment for such benefits. I'm not testifying to the accounting treatment but I believe this is the direction in which the treatment of employee benefits is moving and I would support that.

MS. GREENE, Q.C.: So I take from your answer, you agree with Hydro's proposal that it be an accrual basis for the employee future benefits?

DR. KALYMON: I don't think I have reviewed the issue of accrual of employee benefits. I believe that the accounting treatment of what is considered liability should be consistent with the accounting standards that are required with this regard.

MS. GREENE, Q.C.: And if the Board were not to accept Hydro's recommendation, then there would have to be an adjustment to your table on page 13, is that correct, if it were done on a cash basis as opposed to an accrual basis which is what Hydro is proposing.

DR. KALYMON: I'm sorry, could you restate that question? I think there was two different premises, I just want to make sure I have them clear.

MS. GREENE, Q.C.: I was trying to understand the table on page 13 because you'll see you've mentioned on line 21 that the Board should restrict future rate base returns to the level indicated. And I was trying to ensure that we all understood the purpose of the assumptions or what the assumptions were for the table. So going back then to the issue of employee benefits first, the table that you have included on your page 13 treats employee benefits on the basis as proposed by Hydro, which is that they are pre-funded because there's an accrual for them, is that correct?

DR. KALYMON: That is correct. I've taken the application as being consistent with proper accounting treatment, yes.

MS. GREENE, Q.C.: And I was just saying, if for some strange reason, the Board didn't accept Hydro's proposal, which at this point I certainly can't foresee, that there would have to be an adjustment in the table, because there would be no pre-funded liability with respect to employee benefits.

DR. KALYMON: If there were no pre-funded liability, then it would need to be adjusted, yes.

MS. GREENE, Q.C.: With respect to your sentence that begins on line 20, and I'd like to read the sentence. "While this level of return exceeds that projected under the proposed rate structure for the test year 2002, the Board should restrict future rate base returns to the levels indicated." And I wanted to explore that sentence with you. I guess you've just agreed that if the treatment of employee benefits is changed, then the table needs to be changed. I would assume you would also agree that if the Board, in its wisdom, determines that the ... and if it were an issue for this hearing, that the appropriate rate of return exceeded 8.75 percent in the table, also would need to be changed as well.

MS. GREENE, Q.C.: Yes, of course. The target is set based on the assumptions. If any of the assumptions were to be modified, then clearly that needs modification.

MS. GREENE, Q.C.: I just wanted to make that point because your sentence that I just read was very black and white. If any of the assumptions in the table changes then, of course, the total rate base return would have to be adjusted as well in the future?

DR. KALYMON: Well, the statement is my recommendation based on the present conditions and the nature of the situation as presented to me. Clearly, the Board may find different results in a variety of different areas and I cannot forecast what the Board chooses to do in any of these dimensions. I'm simply making my recommendation based on what I see is a reasonable return on rate base in the current capital market conditions.

DR. KALYMON: And if the assumptions underline the table change, then the table would have to be revisited.

DR. KALYMON: Yes, I think that's a tautology almost, yes.

MS. GREENE, Q.C.: In looking at your determination of what the appropriate return on equity should be for Hydro, it's correct to say that you applied the three same types of tests as Ms. McShane did, is that correct; the risk premium method, the comparable earnings and the discounted cash flow approach?

DR. KALYMON: Well, I must suggest ...

MS. GREENE, Q.C.: You may have applied them differently, but the test ...

DR. KALYMON: Well, I think the degree of deviation is so substantive that almost it cannot be said that I used the same tests. In particular, I would point out that one cannot say that about the comparable earnings test because I even qualify it to make sure that it's clear that I call it the adjusted comparable earnings test which is a completely different creature than the comparable earnings test which was being applied by Ms. McShane. My comparable earnings test adjusts for market to book ratios, which I consider to be a prime reason why Ms. McShane obtains results that are substantially different and higher, I would say, than my own. So, in that one respect ... but I could keep going, I think the points of difference are multiple. Use of forecasts by analysts would be a prime example. So I really would have a hard time accepting that I use the same tests as Ms. McShane.

MS. GREENE, Q.C.: In terms of how regulatory boards approach ... I'll try my question another way. Do they normally approach with respect to the risk premium method, the adjusted comparable earnings and the discounted cash flow methods? Is that a traditional approach for most Canadian jurisdictions, or in all Canadian jurisdictions?

DR. KALYMON: A traditional approach in ... I think, yes. I mean the focus on the return on equity is certainly well established in regulatory practice. The attempt to assess what an appropriate return on equity is also very traditional. I think many regulatory findings in recent years have given much more weight to the risk premium test and a linkage of returns to the bond rates. And unadjusted comparable earnings have almost been universally rejected or ignored in Board decisions. So I would agree that the focus on return on equity is consistent with perhaps regulatory practice and the use of various mechanisms like risk premium tests and DCF approaches are very common. I would say the use of unadjusted comparable earnings is just not there any more in regulatory findings.

MS. GREENE, Q.C.: With respect to the ... I take it then from your answer that while these are the three primary methods that are used or have been used in the past, obviously, there's a lot of judgment goes into the test because we get experts coming up with different opinions using the same type of test, is that a fair statement?

DR. KALYMON: Actually, no, your premise is ... again, you repeated the premise that all three were being used. And my point in my previous response was that the comparable earnings test unadjusted for market to book ratios has been found to be completely bias in its results. It results in overstatement of the required returns by investors. And even in Ms. McShane's testimony, she accepts that it is not the cost of capital. And I believe that it's quite clear that regulatory boards have the mandate to establish the cost of capital to the degree that they are setting returns on a fair basis. So, the comparable earnings test which you said suggested in the premise was accepted, is not accepted and it is nothing to do with how you apply it. There is an inherent upward bias to that approach which I explain technically in some of my evidence, but I could explore further. So it is not simply how you apply it. If you use a technique that's inherently inconsistent with the principles of regulation, you can't possibly reach a reasonable conclusion.

MS. GREENE, Q.C.: Let's exclude the comparable earnings test. There are still other tests. Would experts applying that same two tests, which you state are the two preferable tests, always come up with the same answer on the recommended return on equity for a company? I'm speaking generally now, not with respect to Hydro.

(2:45 p.m.)

DR. KALYMON: The methods are not so completely well determined that I could make that statement with absolute confidence. However, the challenge to an analyst is to apply several different tests until one starts to understand what the nature ... what is happening. And some results are patently and obviously inconsistent with market data. When you see companies trading at substantial premiums to book, and they are regulated companies, it is a very clear signal to me that the results and the returns are excessive and exceed the cost of capital. So I think there are some very objective standards that can be applied. And it is not simply an analyst's choice.

MS. GREENE, Q.C.: I guess you would agree that the cost of capital is often an issue before regulators as to what is the appropriate return on equity for any particular company in a general rate application?

DR. KALYMON: I think this is an issue that is in front of boards very often, yes.

MS. GREENE, Q.C.: And usually there are different opinions put forward, whether it be from the perspective of the consumer groups, or the utility, or the regulatory board on the appropriate return on equity?

DR. KALYMON: There are different opinions expressed. However, to suggest that the truth is completely arbitrary, I disagree. I think there are some of the ...

MS. GREENE, Q.C.: I wasn't suggesting that, Dr. Kalymon.

DR. KALYMON: Okay. Well then, maybe I don't understand the question. I think the question was whether one can say unequivocally what the cost of capital is, and the answer is within a range, yes. And if you come above a range, then it is patently obvious that is wrong.

MS. GREENE, Q.C.: And the experts can even disagree within that range you're talking about, is that correct? That's why we have hearings where there is different experts propose different opinions. I've actually read a number of regulatory decisions in the last number of months and I was quite taken by the fact that we have different recommended rates of return depending on the expert.

DR. KALYMON: The word expert can be applied to somebody who understands the principles. And the second issue is questions of bias. I think if you are simply representing one side, it may introduce a bias that is unsubstantiated by the facts of the case. And a bias, for example, would be to suggest the comparable earnings unadjusted for market is a reasonable test or reasonable standard. It isn't. And it is obviously not the cost of capital. So, I find, for example, an expert witness like Ms. McShane using the pejorative bare bones cost of equity. Well, what is the other, a full juicy steak? I'm not sure, but it is not an expert witness speaking. Cost of equity is the cost. You do not say the cost of an automobile is anything but its cost, and the cost of equity is the cost of equity. There is no such thing as bare bones. That is nonsense, and we shouldn't be using pejoratives. If we were expert witnesses we would simply talk about the costs.

MS. GREENE, Q.C.: In your answer I take it, and I may not be reading you correctly, that you would not agree that some of the people who have been accepted as expert witnesses in this jurisdiction or others are expert in your opinion?

DR. KALYMON: I do not question the expertise of individuals. I have a concern about the issue of bias and whether it is focused on the up side or not.

MS. GREENE, Q.C.: And given all of that, it is clear that boards regularly receive different opinions from experts in your view or experts in other people's views as to what the appropriate return is even for the same company, the same proceeding, isn't that correct?

DR. KALYMON: I think they do but it's obvious why, because the purpose of the testimony and the approach used. For example, the use of analysts' forecasts. There is a substantial amount of information about analysts and their boyishness in the past year or two about stocks and stock prices and the reasons for it, because of their linkage to investment banking and the underwriting activity, I'd be very concerned about accepting that type of an expert person as being unbiased. I think the issue is not expertise, the issue is bias.

MS. GREENE, Q.C.: And that is a decision for the regulatory board to make in any proceeding, whether it's a general rate application or a court matter, isn't it?

DR. KALYMON: I presume so, yes.

MS. GREENE, Q.C.: In this particular application, you'll agree that Hydro is not asking for what would be a normal commercial return on equity?

DR. KALYMON: Yes, I agree with that.

MS. GREENE, Q.C.: And I assume you have no difficulty in the sense of saying that 3 percent would be too high that Hydro is asking for, for the return on equity, is that correct?

DR. KALYMON: Yes, I believe that 3 percent is below the cost of equity capital if considered on the basis of a commercial enterprise.

MS. GREENE, Q.C.: I think you were here this morning when Ms. Butler questioned Dr. Gilbert and this question is similar to that one. Would you agree also that it's not necessary for the Board at this particular time to decide the specific rate of return that would apply to Hydro if it were seeking a commercial rate of return?

DR. KALYMON: I'm sorry, I lost my train of thought. Would you mind repeating that, please?

MS. GREENE, Q.C.: And I'll rephrase it a different way. Hopefully, it might be clearer.

DR. KALYMON: I just didn't catch it, I'll try again.

MS. GREENE, Q.C.: I've been told I speak quickly, so I'll slow down. We've just established that Hydro is asking for 3 percent return on equity which is a ... you have agreed that's lower ... it's the lower return than Hydro would be entitled to if the normal principles applied and the company were asking for a commercial rate of return, is that correct?

DR. KALYMON: Yes, I believe my evidence says that.

MS. GREENE, Q.C.: My question to you is would you also agree that in light of that it is not necessary for the Board to determine the specific rate of return that would only apply in any event at this time in this current market when Hydro is not asking for that normal commercial rate of return.

DR. KALYMON: Well, that I disagree with. And the reason I disagree with that is ... well, for several reasons. The first reason as being ... I think I already tried to put on record earlier, the 3 percent return is there in order to set target rates. If Hydro does not come back to this Board for an extended period of time, the actual achieved could be substantially different than the requested. So, I think it is important that at least a reasonable limit is set, that would establish when a boundary is being crossed, and I would suggest that the 7.945 is my recommendation for where that boundary should be. If there are changes within that, then I think it could be acceptable, but beyond that I think the premise of the application should be looked at again. So, I think in that respect it is relevant, although it is not directly relevant to the setting of the rates that are being proposed at 3 percent.

MS. GREENE, Q.C.: So your concern is with respect to a cap on earnings. If ...

DR. KALYMON: If the rates are maintained and if circumstances change with regards to cost structures, or demand, or other factors that could result in different levels of earnings, I notice in reviewing the performance, it's quite volatile and it can vary and swing quite a lot from forecast. I think this was also explored in cross-examination and therefore, one should have some safeguards in that respect. So, I disagree strongly with Ms. McShane's testimony that says that the sky is the limit, let it roll. I think it should have bounds and in that respect I think the number is meaningful.

MS. GREENE, Q.C.: Dr. Kalymon, were you present when it was determined that Hydro would have to reapply to the Board for a rate change in 2004 because of major capital coming on line?

DR. KALYMON: I understand that something in that nature is being discussed or proposed. My concern would be in the interim, number one. And number two, I do not know how binding that particular commitment is. So in either regard, I would presume the Board would want to safeguard

the consumers in the interim and for the period until such a re-review does in fact occur.

MS. GREENE, Q.C.: Mr. Chairman, that would be a convenient time to break.

MR. NOSEWORTHY, CHAIRMAN: Thank you. We'll break until ten after.

(break)

(3:15 p.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you, just before we begin with Dr. Kalymon, again cross-examination, there are a couple of items that I would like to address which would have been raised by Mr. Kennedy at the beginning of the afternoon in relation to the meeting of counsel that occurred last Friday. Indeed there were a number of issues, one being the cost of service, which generally speaking, I think remains in place and to be frank with you, I think we're generally speaking on, on schedule. It may be that following Dr. Kalymon, Mr. Roberts and Mr. Osmond would be the next two witnesses on the schedule and it may very well be that we maybe looking at sometime after the cost of service to complete, Mr. Osmond. That may or may not be the case, that remains to be seen, but in any event we are proceeding along with the schedule in terms of cost of service and I think for reasons of timing and indeed the scheduling of cost of service experts that, that, I acknowledge that that remains in place and that's the preference of all concerned. With a view to the second item, it's a matter of, I think, trying to respond to the request from Labrador City with regard to Dr. Drayson *(phonetic)* and schedule a specific time. I understand that December 18th was agreed upon as a day for Dr. Drayson and that the Board would wish to confirm that. With a view to, I guess, the main item here, which is indeed the extension of the sitting hours, I believe the Board looked at a number of areas in setting these days, and one certainly is the fatigue factor, day in and day out. Somebody mentioned this was a marathon not a sprint, and certainly that's what it is. There's a consideration in respect of that, I think, by all concerned. We've discussed this in detail. Also there is to be some time set aside during the business day, frankly, to deal with other issues that are outside the hearing and I'm sure you have those in your law practices as we do have here. The third being to allow some personal time, I guess, for appointments. Quite frankly during working days when we're relying on others for various things, I've got a temporary cap that's been decaying in my mouth for about three weeks now. I'd like to at some point in time get to a dentist. Those factors, quite frankly, remain intact today. I think, generally speaking again we're on schedule and with a view to that and also with a view to the abbreviated weeks, this week and in particular next week, and looking at our own schedule, we have come to the conclusion that we're not, at this point in time, for that two week period certainly, in a position to change the time of completion at the hearing day at four o'clock. So that would remain in place. With a view to the time, the weeks that have been set aside for the cost of hearing *(sic)*, we certainly are prepared to go to 4:30 and indeed 5 o'clock, if it's appropriate and needed on any given day. We would also commit to revisiting after the cost of service, with a view to any extension in the daily sitting time that might be required at that, at that stage. So that's essentially the decision that the Board has come up with, and I trust that's satisfactory. If there are no ... Ms. Greene looks like she has something to add.

MS. GREENE, Q.C.: Yes, it's not to do with the comments that you just made but it is to do with the schedule, and Mr. Kennedy did not refer to it when he was giving the update on the meeting that occurred on Friday, probably because no decision had been reached, but I really feel that I should advise the Board of a potential issue with the schedule and that relates to the capital budget. It's quite clear right now that we are not going to get an order by the end of the year arising from this hearing. I had raised the issue with other counsel. We frankly have not resolved that issue. Hydro's intent will be to ask the Board to deal with the capital budget as a separate matter prior to year end, and I do anticipate filing an application in that regard and that may well affect the schedule that we've talked about, and I really felt I had to give some notice to the panel, even though Mr. Kennedy, hadn't mentioned it and I appreciate why because we hadn't resolved it. Its still an outstanding issue among counsel, but Hydro feels very strongly about the status of the capital budget and we feel we have no choice but to bring an application before the Board, which I will be doing before the end of the week.

MR. NOSEWORTHY, CHAIRMAN: That's fine. We'll deal with that then, Ms. Greene. Okay. Thank you very much and we'll proceed now with Mr. Fitzgerald, if he could continue please. Oh, I'm sorry, Ms. Greene, if you'd continue please.

MS. GREENE, Q.C.: You forgot the last half hour. I am finished, thank you, actually, Mr. Chair. I have no further questions for Dr. Kalymon.

MR. NOSEWORTHY, CHAIRMAN: No, I didn't forget, it's just this fatigue question *(laughter)*. I'll move on to Newfoundland Power, Ms. Butler, please for cross-examination.

MS. BUTLER, Q.C.: Thank you, Mr. Chairman, and good afternoon Dr. Kalymon. I too want to follow up a little bit on the issue of business risks, and I note in your pre-filed evidence, I don't think we need to actually look at a particular page, but you do discuss the general economic conditions which prevail before you make your recommendation on a, an appropriate rate of return.

DR. KALYMON: Yes.

MS. BUTLER, Q.C.: Specifically, of course, you had originally recommended a return on equity of 8.75 to 9.25 is now 8.5 to 9.0. Can you tell me to the extent of your new opinion, is, obviously you've re-addressed this ... what change, if any, relates to the conditions worldwide and events of September 11th.

DR. KALYMON: I think that September 11th has some impact but the most direct influence on me, in terms of changing my recommendation, was the fact that the 10-year Canada Bond rates and, and the various other interest rates have come down substantially from the time of the filing. This means that very, very specifically the risk premium test signals even lower required returns. Investors are settling for much, much lower returns. Does, does September 11th have any impact on that? I think the answer is yes. I think September 11th has created, I mean, it was, it's a disaster in its own right but economically it created a slow down in the economy and because there's a slow down in the economy there simply is not the demand for capital, there is not the requirement and therefore basically slow downs of the economy imply that the cost of money is going to be decreasing and it has so it, it definitely has that implication. The other impact of this, of September 11th is what's known as the flight to safety. The concept of moving your investments into safer investment, into safer venues. So, one part of that is moving it into bonds and another part is to move it into the lower risk part of the equity spectrum, so that companies that are, that enjoy monopolistic like positions are regulated, are more attractive relative to where they were before. This is, this is also a consequence of September 11th because of the, the investor need for security. So all these things add up to a lower cost of capital in the sense that investors freely will put money in at much lower returns than they were willing to settle for before that, in certain areas, like into bonds and into low risk utilities. They will not put their money into high risk equities.

MS. BUTLER, Q.C.: Thank you. Dr. Kalymon, relative to the issue of business risk, you're obviously familiar with the Rate Stabilization Plan which exists for Newfoundland Hydro?

DR. KALYMON: Yes, I am.

MS. BUTLER, Q.C.: Because you refer to it at your, in **your testimony pre-filed at page 8**, I wonder if we might look at that Mr. O'Rielly, and this is the original testimony, of course. Line 5, maybe if you could just read the first sentence there, Dr. Kalymon, please.

DR. KALYMON: In terms of forecasting risk, Hydro essentially avoids most of the short-term risks associated with input fuel costs, water levels and demand levels through the operation of the Rate Stabilization Program.

MS. BUTLER, Q.C.: Would it be correct to say, Dr. Kalymon, that without the Rate Stabilization Plan, Hydro's financial results could be significantly impacted by variations in fuel costs, water levels, and demand volumes?

DR. KALYMON: It, it clearly depends on what, on what replaces the Stabilization Program, so, but it can create more volatility in returns. I mean, it's not all downside because it could be upside. If you, if you forecast demand on the low side then you'll actually achieve much better results. If you forecast them on the high side, then you, you'll suffer on the negative side, so it creates volatility, but it doesn't necessarily change your ultimate performance.

MS. BUTLER, Q.C.: Well, that assumes that it's replaced with something?

DR. KALYMON: Well, even if it's replaced with nothing, I was actually answering it in the context of just facing all of the risks.

MS. BUTLER, Q.C.: Yeah, okay, well let's just assume for the moment that it is replaced with nothing, that the Rate Stabilization Plan, in my hypothetical situation, is actually eliminated. Does that not make Hydro more risky?

DR. KALYMON: Well, I think you need all the premises because it depends on what forecast levels are accepted. Does that mean you have a margin for demand? Do you have a margin for other aspects? It, it really does depend. You can't answer that in the absolute, but, but roughly speaking it does contribute to its stability of earnings, even though, as I point out in my testimony, it, it creates volatility in cash flow, but earning stability is more important for an organization like this, than, than the cash flow stability, so it would increase the risk to a certain degree.

MS. BUTLER, Q.C.: Thank you. Now we've already heard you say today in answer to one of Ms. Greene's questions, and this was relevant to page 36 of your testimony, starting at line 11 ... right. These are the figures that are now changed, of course, from 8.75 to 9.25 to 8.5 to 9.0, but you're referring to this band relative to the deemed equity component of 40 percent. If the rate ...

DR. KALYMON: Correct.

MS. BUTLER, Q.C.: Yeah, if the Rate Stabilization Plan was eliminated, would it impact your recommendation for a return on equity?

DR. KALYMON: A lot depends on what exactly it is replaced by. I mean, I have made, I have not made alternative assumptions. It can move, one, towards the higher rather than the lower end of the spectrum, for example, but it really does depend a lot on what it is replaced with.

MS. BUTLER, Q.C.: And if it's replaced with nothing?

DR. KALYMON: Well, it can't be replaced by, with nothing because it has to do with how, how the forecasts are treated, you know, is there margins in forecast, etcetera, etcetera. So it can't be replaced by nothing. It has to be replaced by something, but it would tend to increase the risk.

MS. BUTLER, Q.C.: Okay, now are you familiar with Dr. Bowman, who is the cost of service expert for the Consumer Advocate?

DR. KALYMON: Yes, I am.

MS. BUTLER, Q.C.: And are you aware of his recommendation on the Rate Stabilization Plan?

DR. KALYMON: Yes, I am aware that he is very concerned about the operation of that Rate Stabilization Plan as it affects rates and inter-generational fairness and other dimensions of that, of that sort. I do want to point out that if a rate, if the Rate Stabilization Plan becomes excessive, if the size of it becomes excessive, it actually creates financial risk rather than lowering financial risk, because if, for example, you know, if it was operating within a $50 million limit, now it's to be operated with a $100 million limit ... at some point you run the risk of not being able to actually recover all of those deferred costs, so the concept of the Rate Stabilization Plan as lowering risk would be true if it was a plus one year, negative another year and stabilized, but if it is running one directional, then it actually can create financial risk in its own right.

MS. BUTLER, Q.C.: Well, let's have a look at, specifically at what it was that Mr. Bowman's pre-filed said on the point and it was page 5, line 21. Thank you, starting with (c). He specifically says, Dr. Kalymon, that the Board should eliminate the Rate Stabilization Plan. Were you aware of that?

DR. KALYMON: Well if I, if I read it correctly it, I think it says right after the sentence, "the Board should eliminate the Rate Stabilization Plan. The elimination of the RSP should be gradual in order to spread the rate impact over time".

MS. BUTLER, Q.C.: Oh yeah, no question, but he is, he is recommending the elimination of the plan.

DR. KALYMON: He is, but the question is over what time period and how, what is it to be replaced with? I'm not sure, I think there is a concern that, that it is creating instability because of the factors that Mr. Bowman is pointing out, but how much additional risk will be caused, maybe it may not cause a lot of risk if it in fact just keeps it moderate instead of letting it soar to a very, very high level. It might be unrecoverable.

MS. BUTLER, Q.C.: Well, let me ask you Dr. Kalymon, do you agree with Mr. Bowman's recommendation at lines 21, page 5 to line 2, page 6?

DR. KALYMON: Could I review that. I, I ...

MS. BUTLER, Q.C.: Oh, it's just the elimination of the Rate Stabilization Plan over time.

DR. KALYMON: Sorry, on that page 5. Well I, I think I am not really looking at the rate design issues in this case. I have not spent a lot of time on it. I will testify that with regard to cost of capital, if there is a complete and abrupt elimination of a Rate Stabilization Plan, it can create increased risks. In the present context, I have not been asked, nor have I done a rate design review of this company, so I'm not sure whether that is necessarily correct or incorrect. I don't have a recommendation on it.

MS. BUTLER, Q.C.: Okay. Thank you, I guess though what I need to ask you relative to this, if as you've indicated I think fairly to me this afternoon, eliminating the RSP would create greater risk, then would that in general terms result in an increase in the appropriate return on equity?

DR. KALYMON: I think I basically agreed with that premise, except that I am concerned about the level of the Rate Stabilization Plan. If it is too high then it may be creating risk already, is a concern; and secondly, I'm not sure what it's going to be replaced with, how it's going to be phased out, and what the other mechanisms might be brought to bear, but otherwise I agree.

MS. BUTLER, Q.C.: Thank you. The next issue I want to address is actually the capital structure and again Ms. Greene did ask you some questions about this point. In your **pre-filed testimony, page 11**, lines 6-9, it is a sentence there I believe that, I think Ms. Greene actually had you read it. It's in reference to the business risks of hydro and the capital structures of comparable electrical utilities.

DR. KALYMON: Yes.

MS. BUTLER, Q.C.: Okay. Now, I gather your recommendation ... yes, you can see it there, line 15, is that Hydro be allowed to gradually evolve over a number of years to the stand alone level of 40 percent equity?

DR. KALYMON: Yes, if the mandate is to, is to move this company to a market based stand alone type of a structure, that is correct.

MS. BUTLER, Q.C.: And what is the time period when you say at line 15, over a number of years?

DR. KALYMON: Well, to be very honest with you, I am not concerned about the capital structure of Hydro as it is today. It can stay that way for a long time and consumers will never be negatively impacted. The reason I say that is that with the provincial guarantee, I as a financial witness, have no concern that, that there is going to be financial instability in this company. Now the provincial guarantee is not a standard commercial practice that you see in privately owned utilities, however, I have absolutely no concerns about the financial stability. In other words, if I saw a privately owned utility with this capital structure, I would say that one has to move in a panic because consumers might never be served properly and because there may be failure as we see in over-leveraged airline industries who are suffering negative consequences, but that is absolutely no concern of mine. I have no concerns of that nature in this hearing and therefore the move, if the province wishes to move this towards a stand alone operation without the non-conventional form of support, capital support, then I would suggest, recommend that the 40 percent level is something they should be moving towards, but the time schedule is not, there is no urgency on it because it is completely viable financially, from my point of view, under the form of support that currently exists.

MS. BUTLER, Q.C.: Well, again, thank you but regrettably, I don't think you've answered my question. This is your specific recommendation at line 14, to the Board that the capital structure of Hydro be allowed to gradually evolve over a number of years to the stand alone level of 40 percent. So my question, I guess, is what did you have in your mind when you said "over a number of years"?

DR. KALYMON: Well, I think, I think if you read the whole statement it says "allowed to gradually evolve". It does not say forced to move to, it says "allowed". In other words, the option is with the province, the owner of Hydro, I, like I said, I do not believe the time is critical. I do not have a specific time recommendation for you. I'm just saying that if that transpired, then Hydro should be permitted to do that because it would move it towards a more stand alone type of an operation and if that is the type of mandate that has been given, then that would be my recommendation, but I do not have any number of years that I specifically would be recommending because I'm not concerned that this, that this company is not properly supported by the capital structure and an unorthodoxed, but still the capital structure is well supported and the stability is there.

MS. BUTLER, Q.C.: Because of the guarantee?

DR. KALYMON: That is correct.

MS. BUTLER, Q.C.: But again, in an effort to be as helpful as possible to this Board, who may very well accept your recommendation as well as others to allow Hydro to gradually evolve to 40/60 debt, I'm sorry, yeah 40 percent equity, 60 percent debt ratio, can you be of any further assistance in terms of what time period may be appropriate, given their current debt equity ratio?

DR. KALYMON: The truth is that I can't, and the reason I can't is for the reasons that I've just mentioned, it is not a concern to me. I was asked to look at the capital structure of this company to see whether it was appropriate, and most of the time the issue on capital structure is the financial viability of the operation. One never wants to jeopardize the ability of a company to serve its customers. So you want to make sure the capital structure is appropriate so that they can always get the capital they need to serve the customers. I don't have that concern with the current situation, because it has a provincial guarantee. If the owner chooses to infuse equity in an indirect manner, then it's not a particular concern, but I say allowed to move because I think it would not be contrary to financial rationality to have that happen. The other part of why I don't have a firm time schedule of any concern is that my suggestion is that their returns allowed be such that they effectively, if you like, deem such a structure anyways, so if that's the case I become indifferent in terms of the time schedule on which they're moving.

MS. BUTLER, Q.C.: And this is as a result of the dividend that's being proposed for this, for the test year. Is that what you mean when you say you're essentially saying that they should deem a capital structure?

DR. KALYMON: No. I was, I was saying it with regard to my exhibit 13, page 13, which is the core of my recommendation on return on rate base. If you look at the structure, the nature of the recommendation, it basically deems a structure that is reasonable and allows a return that's reasonable and then it offers flexibility on how the province chooses to meet that. It would basically, if it increases the equity component, there is adjustments, but basically the overall return on rate base would not really shift in any material way. So in that regard, there is no concern on capital structure. In other contexts, the concern over capital structure is that the consumer might be overpaying because of a capital structure that is too rich in equity, for example, as the usual concern and in this case I don't have such a concern. Or on the other side instability, if you don't have enough, but I'm not concerned about either direction so the timing could be very flexible.

MS. BUTLER, Q.C.: Okay, but just, well one final time back to page 11, Mr. O'Rielly, if I might, and your line 14 again, given what you've told us this afternoon, Dr. Kalymon, and you've mentioned several times that you have no concerns, I wonder why you would bother to make a recommendation?

DR. KALYMON: I think I was asked to look at what would, would be required for this company to achieve a stand alone commercial basis of operation, and if, if it is to evolve to that type of an organization, then it will have to move towards a more ... a higher equity component and, and limit the debt percentage. And that is why I'm making that recommendation that if that is the general goal, then that should be the direction of movement.

MS. BUTLER, Q.C.: Okay, well I accept that you can't help us with the reference there to number of years, but can I ask you then relative to the recommendation that Hydro be allowed to gradually evolve to that stand alone debt equity ratio, you're clearly familiar with the dividend that's proposed for the test year?

DR. KALYMON: Yes, I am.

MS. BUTLER, Q.C.: And will such a dividend support your recommendation of gradually evolving over a number of years to 60/40 debt equity ratio?

DR. KALYMON: No it will not, but it, it doesn't affect the return. I'm concerned about the cost to consumers for one part of this proceeding, which is the cost of capital, and whether the province chooses to pay out the dividend or not will not affect the amount of cost that it imposes from, from the way I look at the situation and therefore, paying yourself a dividend but guaranteeing the debt is really just a, a matter of some, of image, if you like, but it is not substantive. The province remains committed to guarantee the debt which, in most context is viewed essentially like psuedo-equity, if you put in debt, but you guarantee it, that's pretty close to equity, it's a psuedo-equity, so you know, you can look at the province having only 15 percent on the books, or you can look at the province having 100 percent equity, because they guarantee the entire debt. So, in other words, you know, if another organization fails, and there's debt on the books, then the, the owner is not responsible for the debt beyond what they've put into the company, but if for example, you know just completely theoretically, if Hydro completely failed, the province would have to completely pay off the entire debt. So that's actually a very, very substantial commitment that most equity holders do not make, and therefore the, the real economic capital structure of this company is actually a lot higher than the observed equity component on the books.

MS. BUTLER, Q.C.: Dr. Kalymon, you do agree, however, that the payment of the $70 million dividend in the test year is a backward step towards a recommended capital structure of 40 percent equity, 60 percent debt?

DR. KALYMON: Yes, I do.

MS. BUTLER, Q.C.: And how does the payment of such a dividend of that proposed for the test year compare to the behaviour of a privately owned utility, or an IOU, as the term has been used in this proceeding?

DR. KALYMON: A privately owned utility also has the power to pay dividends within the limits of retained earnings. The big difference between this case and a privately owned utility is that that money is effectively replaced by debt which is then guaranteed which, which is almost like not paying yourself in the first place, because you still have the liability, you still have the liability, if you pull that 80 million out, but you effectively have to replace it with something, it gets replaced with debt which is now guaranteed, well you're still basically on the hook for that 80 million, you haven't really pulled the money out, which is very different than a privately owned utility. If you pulled 80 million out of a privately owned utility, that's 80 million less to cushion any risk problems that occur in the company. That's not happening here. That's why I view that only as an accounting issue and one of cosmetics, I guess, is the word I was looking for earlier, but not substantive. It isn't a true withdrawal of equity when you guarantee that replacement money with your own guarantee.

MS. BUTLER, Q.C.: But what I hear you saying, Dr. Kalymon, is that there really is no comparison, in a sense that an IOU would not pay out a $70 million dividend in the same circumstances, because it's not replacing it with debt to be guaranteed by its shareholder?

DR. KALYMON: This is not the type of behaviour you generally see in a privately owned utility because of various other restrictions. There can be debt covernance, there can be, it, well the main reason they usually don't do it is because they like to keep the equity in to earn their returns. That's usually the normal context of keeping equity in so that they earn the returns that are allowed, but that's another issue. I mean each company has its own circumstances. I'm saying generically we are in a different situation here.

MS. BUTLER, Q.C.: Maybe, but on the same page, line 4, Dr. Kalymon, you've indicated that the revised mandate for the regulation of Hydro requires that it be treated similarly to a privately owned utility?

DR. KALYMON: It is to be treated similarly to a privately owned utility and to me the most important aspect of that is that the rates charged by the company reflect cost and no more and no less. That's the main, or the most important aspect of that, so if you, if there are returns allowed that are within the economic range, then I think it, it would be proper in saying that it was being treated that way. Now, if a privately owned utility, let me make another point, if a privately owned utility said I will guarantee all of the debt of my company, then they, that is a viable strategy under which you could actually reduce the nominal equity in the company substantially, as long as the party providing the guarantee is credit worthy, is credible and is not simply a shell. So you can envision a capital structure that is of that type, it's just that it doesn't occur because, it doesn't occur because it actually is more equity in some ways than just having a fixed amount at risk and not guaranteeing the entire capital structure of the company.

MS. BUTLER, Q.C.: Dr. Kalymon, relevant to this revised mandate for the regulation of Hydro, you say yourself requires that it be treated similarly to an IOU, you're also familiar with Hydro's social policy, because they are referred to in your testimony as well.

DR. KALYMON: I am aware that there are issues surrounding questions like cross-subsidization and other dimensions, yes.

MS. BUTLER, Q.C.: Okay. You're aware of the deficit which Hydro runs in the rural systems and that it is approximately $31.7 million?

DR. KALYMON: I have, I have heard that testimony. I've reviewed that. I'm aware of it, yes.

MS. BUTLER, Q.C.: Okay, and that deficit is then collected from other customers.

DR. KALYMON: Yes, that is my understanding.

MS. BUTLER, Q.C.: And Mr. Wells, in his testimony, indicated that the decision to undertake that social policy issue was one of government as shareholder, and not of Hydro itself. I don't know if you were here for that evidence, but do you accept that that was the direction of the shareholder?

DR. KALYMON: I have, I was not here for Mr. Wells' testimony. I believe that it's, that it's an explicit, I believe that there is explicit legislation to the, with regards to the, to the rural subsidy. That is my understanding, although I have not reviewed that in detail, but that is my understanding that that was a specific piece of legislation that mandates that type of a rate design. Rate designs are mandated by different levels. I participated in a cross-Canada, the Trans Canada Pipeline hearings in which the, the rates for Quebec were set, Quebec City were set at the same rate as was charged in the Toronto, so that wasn't legislated. It was a decision on rate design that was made by the National Energy Board, so there are various examples of this type of cross-subsidization, and I presume this is another example of that.

MS. BUTLER, Q.C.: But relevant to the revised mandate for the regulation of Hydro, are you familiar with any IOU that undertakes such a significant social policy issue on behalf of shareholders and recovers it form ratepayers?

DR. KALYMON: I'm sorry, could you repeat that question. I want to understand it properly.

MS. BUTLER, Q.C.: Sure, and I'm tying it into line 4 of your evidence there on the screen. Relative to the revised mandate for the regulation of Hydro that it be treated similarly to an IOU, are you familiar with any IOUs that undertake such a significant social policy issue, that is as our $31 million deficit, on behalf of shareholders and recovers it from customers?

DR. KALYMON: I guess the subtlety is on behalf of shareholders. There are numerous examples of rate designs that are not, quote, "fully exactly correct" in terms of cost allocation and I'm familiar with the telephone company situations that have persisted in the past. I'm very aware of the, of the gas pipeline rates that exist and, and I'm sure I can name a number of other examples, but I guess the issue is whether because the government owns the Hydro, whether they have the right to act as government independently or that can be considered independent of acting as a shareholder, I certainly have never come across an example of where a shareholder chooses to implement a policy for its own because, for its own benefit, but the problem is there are two roles for the government, they own the Hydro, they also have the mandate to determine social policy for the province, so I guess I have a hard time saying exactly who's making the decision. Is it the shareholder or is it the government?

MS. BUTLER, Q.C.: Well, I guess we can take it up on the screen if you wish, but I can tell you that Mr. Wells in his testimony on September 24th, page 31, lines 48 and 49, clearly indicated that the decision was one of the shareholder. Page 31, Mr. O'Rielly.

DR. KALYMON: I can't speak to Mr. Wells' opinion, his testimony will have to stand on its own merit. I wasn't here for the, I don't know if it's in context, and I don't know what his beliefs are.

MS. BUTLER, Q.C.: Mr. O'Reilly, page 31, lines 48 and 49. There you go. If we can just go down to the bottom of the left-hand column, Mr. O'Rielly, then I can get the question, okay. Deep into line 44, "Do you agree that the subsidization of the deficit which is incurred in some areas by other customers is a matter of social policy directed to you by government?". "Oh definitely, yeah, it's the government that made that decision."

DR. KALYMON: Well, the government acting as a legislative body presumably has the power to make that decision. I guess the question is, is that the shareholder, is that the government acting on its legislative mandate. I don't see any, I don't see any contradiction with what I'm saying to what Mr. Wells said.

MS. BUTLER, Q.C.: No, I don't see necessarily the contradiction, but let me ask you this. Do you accept that Hydro's behaviour in the pursuit of that social policy objective is inconsistent with its desire to be treated as an investor owned utility?

DR. KALYMON: Not necessarily so. Investor owned utilities usually are only concerned about their investors and their shareholders and to make sure that the bottom line is correct. I mean, I'm over simplifying, but in essence that's what, they are generally concerned about and the question of rate design is, is a secondary issue which, which I've seen, I've seen privately owned utilities basically agreeing with various types of design policies that promote social objectives, that aren't even legislated but are sometimes mandated by boards or there's general concurrence and the reason is that a private owned utility doesn't have to necessarily resist unless it truly creates a problem in terms of the functioning of the business or in their ability to earn returns from a financial point of view. And I'm not suggesting they don't have any social conscience, I mean it could be that directly as well.

MS. BUTLER, Q.C.: Just to finish, Mr. Kalymon, an area before we break, if I might. At page 15 of your testimony, lines 5 to 7, we saw that you were recommending the return on equity now 8.5 to 9 percent, that was for the test year?

DR. KALYMON: Yes, that is correct. The testimony is basically designed for test year.

MS. BUTLER, Q.C.: Okay. And in the test year the debt equity ratio, not the deemed capital structure, but the actual debt equity ratio is forecast to be approximately 83/17?

DR. KALYMON: That is correct.

MS. BUTLER, Q.C.: Would your evidence be the same in relation to the the recommended return on equity if the capital structure were 40 percent equity, 60 percent debt?

DR. KALYMON: Well these, these returns are the returns that are appropriate at that level of debt and equity. They are not appropriate if the equity is only 15 percent. That's why I go through a deeming process in my testimony earlier and come out with an overall recommendation on rate base which would be consistent with a reasonable return to capital, but these quoted returns are only appropriate if one is deeming or actually has approximately that level of equity in the organization which I feel is appropriate here, by the way, because of the guarantee.

MS. BUTLER, Q.C.: And the return on equity Hydro is proposing in its test year is three percent?

DR. KALYMON: It is on a book basis, but I will, I will remind the Board that the guarantee effectively increases the equity component that is effectively in this organization, to a much more substantial number.

MS. BUTLER, Q.C.: And that number is?

DR. KALYMON: I've, it is a viable organization and I'm suggesting to you that it is, you can deem it as if had 40/60 because all the characteristics of a 40/60 are there. It has viability in terms of being able to raise capital in the market, it has a credit standing, etcetera, so the three percent is the visible portion of the equity but the guarantee has an imputed equity that is higher, that makes it higher.

MS. BUTLER, Q.C.: Dr. Kalymon, if the Board approved your recommendation of a return on equity of what is now 8.75 percent, do you know how rates to consumers would increase above that which Hydro is proposing in test year?

DR. KALYMON: I have not done that calculation but clearly if it requires the six or seven percent increase at three, then it has to be higher in, if one moved immediately to full recovery.

MS. BUTLER, Q.C.: So that we're clear, as expert for the Consumer Advocate in this hearing, you're advocating a higher return on equity with the result that consumers would actually pay more than what Hydro is seeking in this application?

DR. KALYMON: No, I was asked by the Consumer Advocate to assess what a fair and equitable return would be if this organization were to be treated on a commercial basis. I believe the term is "allowed to earn a fair and equitable return". I don't believe there is a mandate to force an applicant to ask for a fair and equitable return, but I was asked to determine what is a fair and equitable return and that is what I determined, but I'm not suggesting that if the applicant did not apply for it that that is something that should be forced.

MS. BUTLER, Q.C.: Thank you and Mr. Chairman, I'm at the end of that section, so it'll be a good place to break unless you wanted to go to 4:30 today.

MR. NOSEWORTHY, CHAIRMAN: No *(laughter)*. Thank you.

MS. BUTLER, Q.C.: Thank you.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much. We'll conclude for the day and reconvene at 9:30.

(hearing adjourned to November 14, 2001)