1 ((9:30 a.m.)

2 MR. NOSEWORTHY, CHAIRMAN: Before we get started
3 I wonder could I ask counsel if there are any preliminary
4 matters, counsel?

5 MR. KENNEDY: Not that I'm aware of, Chair.

6 MR. NOSEWORTHY, CHAIRMAN: Okay. If there are
7 none, perhaps we could just continue on with the cross of
8 the industrial customers of Ms. McShane. Good morning,
9 Ms. McShane.

10 MS. McSHANE: Good morning.

11 MR. NOSEWORTHY, CHAIRMAN: How are you? Good
12 morning, Mr. Hutchings.

13 MR. HUTCHINGS: Good morning, Mr. Chair. Thank you,
14 Good morning, Ms. McShane.

15 MS. McSHANE: Good morning.

16 MR. HUTCHINGS: I do have the two calculations that we
17 discussed late yesterday and we'll get to those in a few
18 moments and we can have a few questions on those.
19 Before we get to that though, just to try to put our
20 discussions of yesterday in a little bit of context, could you
21 tell me what you would define as being business risk for
22 any given enterprise?

23 MS. McSHANE: Business risk is the variability in
24 operating revenues and the probability of losing part or all
25 of the capital that's invested.

26 MR. HUTCHINGS: And that business risk, I presume,
27 simply arises from the nature of the operations that a
28 particular enterprise is carrying on.

29 MS. McSHANE: Correct.

30 MR. HUTCHINGS: Does that business risk change with
31 the capital structure of the company carrying on the
32 enterprise?

33 MS. McSHANE: In principle, no. They are independent.
34 There is some interdependence in a sense that if the
35 financial risk to a company is very high, there may be a
36 tendency for managers to focus, to have to focus too much
37 on the financial parameters of the company in lieu of
38 focusing on operating a business.

39 MR. HUTCHINGS: Okay. So that's the risk of financial
40 distress.

41 MS. McSHANE: Yes.

42 MR. HUTCHINGS: Yes, okay. And I guess it's fair to say
43 that that generally presents itself in very highly leveraged
44 companies.

45 MS. McSHANE: It would ... there is always a risk there,
46 but, yes, the financial distress itself is apt to be actually
47 incurred at, in highly leveraged companies.

48 MR. HUTCHINGS: Okay. So the risk of it occurring is
49 greater in highly leveraged companies.

50 MS. McSHANE: Yes.

51 MR. HUTCHINGS: Yes, okay, alright. I wonder if we could
52 go now to the pre-filed evidence of Dr. Vilbert (phonetic),
53 and I want to ask you to look at **Exhibit MJV-1**, to that
54 evidence. I take it you've had an opportunity to look at this
55 evidence, have you, Ms. McShane?

56 MS. McSHANE: Yes.

57 MR. HUTCHINGS: Okay. The exhibit that's before us
58 purports to be based upon your recommended cost of
59 equity and the implied ATWACC. Are you familiar with
60 the term ATWACC?

61 MS. McSHANE: Yes.

62 MR. HUTCHINGS: Okay. And what do you understand
63 ATWACC to represent?

64 MS. McSHANE: The after-tax weighted average cost of
65 capital.

66 MR. HUTCHINGS: Okay. Would you agree that column
67 seven in this exhibit represents a correct arithmetical
68 calculation of the ATWACC based upon the assumptions
69 that appear in the previous columns?

70 MS. McSHANE: The math is correct but none of the
71 assumptions are correct.

72 MR. HUTCHINGS: Okay. When you say none of the
73 assumptions are correct, well let's start and look at them
74 individually. Looking at the first group of figures, at the
75 forecast capital structure in 2000, your recommended return
76 on equity, which I think you told us yesterday is your
77 recommendation for 2002 as an appropriate return is 11.25
78 percent. Is that correct?

79 MS. McSHANE: The point of departure is ...

80 MR. HUTCHINGS: Okay. Now, before you start with
81 "but," can you give me a yes or a no. Is ...

82 MS. McSHANE: Yes, the recommended return is 11.25 but
83 ...

84 MR. HUTCHINGS: Alright. Now ...

85 MS. McSHANE: But the ...

86 MR. HUTCHINGS: ... carry on, yeah.

87 MS. McSHANE: But the point of departure is a capital
88 structure of 60/40, so if I were going to fill in this table, I
89 would come down to the third heading where it says "At 40
90 percent equity capital," and I would replace virtually every

number in there with ... the 9.75 is not my recommended return on equity at 40 percent equity.

MR. HUTCHINGS: Yes. We understand that after our discussions of yesterday, that you're actually recommending 11.25.

MS. McSHANE: Correct.

MR. HUTCHINGS: Yes, okay.

MS. McSHANE: So it seems to me that you have to start by, if you want to carry through this analysis, that you have to start by putting the appropriate numbers in that line and coming up with what the implied after-tax weighted average cost of capital is assuming 11 1/4 percent return on equity, a 40 percent common equity ratio, a cost of debt less the guarantee fee to come up with the implied after-tax weighted average cost of capital, not the numbers that are in there, so I find it very difficult to ...

MR. HUTCHINGS: Alright.

MS. McSHANE: ... to make any sense of these numbers because the premises I think are incorrect.

MR. HUTCHINGS: Okay. Well, I think it may reflect some misunderstanding on our part of your position, but my understanding was, from your pre-filed evidence and your evidence of yesterday, that your recommendation for a rate of return on equity for Newfoundland and Labrador Hydro with its existing debt equity ratio in 2002 was 11.25 percent.

MS. McSHANE: That's correct, including the one percent guarantee fee.

MR. HUTCHINGS: Yes, I understand that. And that, the effect of the one percent guarantee fee makes the cost of debt 8.35 as ...

MS. McSHANE: Yes.

MR. HUTCHINGS: ... opposed to 7.35. Okay, alright. So if we can though go back to the top line at the forecast capital structure in 2002 and deal with the second line below that, 11.25 percent, are we in agreement that the 11.25 percent is in fact correct, even on the assumption of an 85/15 debt equity arrangement?

MS. McSHANE: That's what I've recommended, yes.

MR. HUTCHINGS: Yes, okay. So the 11.25 is there. The percent of equity is 15.27 and I think that's a given. Is that the appropriate number to use there?

MS. McSHANE: The numbers are not incorrect but again, I mean, the premise is not correct, because what is being assumed here is that by putting all of these numbers together, that you actually arrive at what would be the true cost of capital to a company with 85 percent debt, 15 percent equity. What my analysis was doing was to acknowledge that a company that has an 85/15 capital structure is, by reference to the capital structures maintained by the typical utility over-leveraged, and therefore in the real world the cost of capital that it would incur would be higher than necessary, so my recommendations have taken the cost of capital that would apply to an appropriately financed utility and essentially concluded that the ratepayers of Newfoundland and Labrador Hydro should pay no more than that. So I have not actually calculated the after-tax weighted average cost of capital for a company that's financed 85/15. If I had, if I had gone through the approach that I was suggesting to you that I might do, which is to start with the 40 percent equity financed capital structure and calculated the implied after-tax weighted average cost of capital ... trying to see what document Vilbert used as the tax rate ...

MR. HUTCHINGS: Represents the tax rates in column six, 40 percent.

MS. McSHANE: Sorry, okay, that's fine, and in the example that I worked out for myself, did the same, used the same tax rate. That the actual after, before-tax weighted average cost of capital at an 85/15 capital structure would be approximately 10 percent, and I'm not recommended that the Board approve a weighted average cost of capital that is consistent with that, but rather a weighted average cost of capital which is consistent with a 60/40 capital structure and therefore has a lower overall cost of capital.

MR. HUTCHINGS: Okay. I just want to confirm that I understand what you were saying in reference to the, what I thought I heard you say was the appropriate before-tax weighted average cost of capital in that situation would be 10 percent?

MS. McSHANE: I don't know if I like the word "appropriate." It would be the approximately actual.

MR. HUTCHINGS: Okay, alright. So the 8.66 percent here as implied BTWACC, you would say should, in reality, be around 10.

MS. McSHANE: That's correct.

MR. HUTCHINGS: Okay, alright. With an implied BTWACC of 10 percent, what would be the required return on equity?

MS. McSHANE: Approximately ... if you assume that the cost of debt is the 8.35, it would be approximately 20 percent.

(9:45 a.m.)

MR. HUTCHINGS: Alright. So as I understand your position now, the existing situation of Hydro with an 85/15 debt equity ratio would imply on a stand-alone basis that it would need roughly a 20 percent return on equity.

MS. McSHANE: Yes.

MR. HUTCHINGS: Okay.

MS. McSHANE: According to the after-tax weighted average cost of capital methodology that's presented here, that would be what would be indicated, yes.

MR. HUTCHINGS: Yes, okay. And I suspect that in reality even a 20 percent rate of return on equity wouldn't be a practical solution to Hydro's problem, would it?

MS. McSHANE: No. I think that the practical solution is to determine what the overall cost of capital would be if it were appropriately financed, allow that overall cost of capital and there should be enough return to compensate the debtholders (phonetic-one word?-marked only once) to pay the guarantee fee and to have left over a reasonable return on the equity.

MR. HUTCHINGS: But the cost of debt that's shown on the line which we've been looking at, the one that starts with 11.25 percent, is shown as 8.35 percent, and that includes the guarantee fee, correct?

MS. McSHANE: Yes.

MR. HUTCHINGS: So in reality Hydro's solution to its problem of being over-leveraged has been to pay for and obtain a guarantee, correct?

MS. McSHANE: Yes.

MR. HUTCHINGS: So some portion of Hydro's risk has been taken up by the guarantor, that being specifically the default risk on the debt.

MS. McSHANE: Correct. That's true.

MR. HUTCHINGS: Okay. So do not the numbers that appear on that line nonetheless in total represent the entire business risk of Hydro?

MS. McSHANE: When you say the numbers that appear on that line, I don't understand what you mean by that.

MR. HUTCHINGS: Well ...

MS. McSHANE: The numbers that would appear on ... if we ... if you go through this analysis with Dr. Vilbert's methodology, what he's saying is that whether or not Hydro's capital structure changes, that its after-tax weighted average cost of capital stays the same over a broad range of capital structures.

MR. HUTCHINGS: Correct.

MS. McSHANE: Okay. Now, we may have a disagreement as to whether that's true, whether indeed over a broad range of capital structures it stays the same, and we may have a disagreement over whether it's relevant in this case because Hydro doesn't even pay income taxes, so, you know, we're starting with a premise that effectively is moot because they're not taxable in the same way an investor-owned utility is, but just following through his approach, he would say that if I say that weighted average cost of capital should be, after tax, his number is 6.83, and if I change the 9.7, I'm sorry, if you go down to the third line, at 40 percent equity capital, and if you use 11 1/4 in place of the 9.75 and you use, let's say, 7.35 in place of the 8.35 ...

MR. HUTCHINGS: Yeah. Well that's the line below you actually. The next line down uses the 7.35.

MS. McSHANE: Okay. Oh, I'm sorry. Well let's use that line because we don't have to change as many numbers that way. Okay. So we'll just change that on the last line, the 9.75 to 11 1/4, and so we would come up with something a little bit higher than the 6.48. It would be, I think, about 6.9 percent. But following the logic of the methodology, then that number, coming up to, back to the first line, should be the same. It should be 6.9 percent. And then the implied before-tax weighted average cost of capital would be 10. something percent as opposed to the last line where it's, the 8, 9 percent range. I'm not being precise because I don't have the exact return on equity in there, but the point being that what I'm asking the Board to do is not to approve a before-tax weighted average cost of capital, if you will, that reflects the higher capital structure according to Dr. Vilbert's methodology, but rather the one that is consistent with an appropriately financed utility.

MR. HUTCHINGS: Your position then is that even with the provision of the provincial guarantee, you don't regard Hydro as being an appropriately financed utility?

MS. McSHANE: All I'm saying is that according to this philosophy, that the weighted average after-tax cost of capital stays the same but the before-tax weighted average cost of capital is higher, and this is what the after-tax weighted average cost of capital methodology is all about, and so all I'm saying is that, no. I'm not asking the Board to approve a cost of capital that's consistent with those numbers. I'm asking the Board to say here's the appropriate cost of capital, it's approximately 8.85 percent, it goes up if you change the capital structure to this level because of the implication here of the tax, and there's no reason for ratepayers to pay that amount.

MR. HUTCHINGS: Your last phrase there, it goes up ... can you just repeat what you said?

MS. McSHANE: I think I said it goes up because of the tax ...

MR. HUTCHINGS: And what is it that goes up because of the tax?

MS. McSHANE: The before-tax weight ...

MR. HUTCHINGS: Before-tax weighted average cost of capital.

MS. McSHANE: Weighted average cost of capital. So in other words you have to, according to this methodology, you end up adjusting the debt component of the capital structure by one minus the tax rate.

MR. HUTCHINGS: Okay. But you accept that according to this methodology the ATWACC remains constant.

MS. McSHANE: Yes. That's what this methodology would say.

MR. HUTCHINGS: Okay.

MS. McSHANE: And I was just going through and following the logic of this table to say that if that's true, then the implied after-tax weighted average cost of capital at 40 percent equity should be the same as at 15 percent equity.

MR. HUTCHINGS: Yes.

MS. McSHANE: But that the before-tax weighted average cost of capital, according to this methodology, would be higher if there was actually only 15 percent equity in place for a company which doesn't pay taxes.

MR. HUTCHINGS: Yes. So as equity increases, the before-tax weighted average cost of capital will decrease.

MS. McSHANE: According to this methodology, that's correct, but if we're not starting from the higher cost of capital to begin with, if we're not saying to the Board, please approve a pre-tax or a before-tax average weighted cost of capital of 10 percent now and when we get to 40 it'll only be 8.85, what we're saying is we recognize that the cost of capital is higher to ratepayers, so we're not asking to be compensated for having 85/15 capital structure according to this methodology. We're simply asking to have the cost of capital set at a level consistent with capital structures and cost of capital that would be incurred by appropriately financed utilities.

MR. HUTCHINGS: Is it correct of me to conclude then that in respect of the year 2002, with an 85/15 debt equity ratio, your recommended return on equity should be 20 percent?

MS. McSHANE: No, it's not, because it's not based on ... it's based on an overall cost of capital on the premise of an appropriately financed utility.

MR. HUTCHINGS: Well, I mean, but do we not have to deal with how Hydro is in fact financed in 2002?

MS. McSHANE: We have to deal with it but at the same time we have to deal with it in a way that makes sense, and to me it doesn't make sense to ask the ratepayers to incur an equity cost of 20 percent when, if the utility were financed in a way consistent with business practice in the industry, the cost of equity would be 11 1/4.

MR. HUTCHINGS: So in terms of the business risk of Hydro in 2002, is it correct to say that the 11.25 percent does not adequately compensate equity holders?

MS. McSHANE: Overall the stakeholders are approximately, would be approximately compensated through the return on equity, the guarantee fee and the cost of debt, as indicated in this other table that I presented for you.

MR. HUTCHINGS: Okay.

MS. McSHANE: So the question to my mind is to make sure that the total return which is deemed appropriate for an appropriately financed utility is determined and the various amounts can be distributed to those stakeholders in the manner represented in this table that I gave you called "Cost of Capital Analysis."

MR. HUTCHINGS: Okay. I want to get to that in a moment, but just so I'm clear on what you're saying now, with 11.25 percent on equity, a one percent guarantee fee, and a cost of debt of 7.35 percent, in 2002 all the stakeholders are approximately compensated appropriately, is that ...

MS. McSHANE: Can you just repeat it? I think I understood what you said. I just want to make sure that I don't say yes to ...

MR. HUTCHINGS: Okay. With an 11.25 percent return on equity ...

MS. McSHANE: Yes.

MR. HUTCHINGS: ... a one percent guarantee fee ...

MS. McSHANE: Yes.

MR. HUTCHINGS: ... and a 7.35 cost of debt, in 2002 all of the stakeholders are approximately compensated appropriately.

MS. McSHANE: They would be, yes.

MR. HUTCHINGS: And arithmetically, once we accept that, the implied ATWACC for 2002 is 5.89 percent. Is that not correct?

MS. McSHANE: Well the implied ATWACC starts with ... if you're going to take this approach, you have to start with where you started, which is with determining the cost of capital for proxy companies, so you start with the after-tax weighted average cost of capital for those companies. So, no, the appropriate point of departure for this methodology, since we start with companies that are regulated on and maintain capital structures of approximately 60/40, it's their after-tax weighted average

cost of capital, if you will, that becomes the benchmark. That number, as we've discussed earlier today, is about 6.9 percent, which then, in this approach, becomes a proxy for the after-tax weighted average cost of capital for Hydro, even though Hydro doesn't pay tax, not the 5.89, because that wasn't where we started.

(10:00 a.m.)

MR. HUTCHINGS: Is it not appropriate in the analysis to regard the debt guarantee as standing in the place of the additional equity which the stand-alone IOUs rely upon to maintain their debt rating?

MS. McSHANE: Some of it, yes.

MR. HUTCHINGS: What do you mean by some of it?

MS. McSHANE: The debt guarantee fee is in principle a fee for incurring the financial risk.

MR. HUTCHINGS: The default risk.

MS. McSHANE: Right. And as long as the equity earns an 11 1/4 percent return, then the amount of the guarantee fee is approximately correct, but if you actually went through the analysis and said, okay, what I want to do is determine what the cost of equity is assuming no financial risk at all, all the financial risk has been passed off to the guarantor, and what's the cost of equity if I've got no financial risk? I could come up with that number. And then I ... and I know what the cost of debt would be if I have a guarantee, and then I could determine what implicitly the guarantee fee would have to be to make sure that the guarantor is appropriately compensated for taking all of the financial risk. But that's not the only way of looking at this. The other way of looking at this is to say, and this is the approach that I've taken, is to say what is the cost of capital to an investor-owned company, and it's approximately 8.85 percent. What is the cost of debt to Hydro with the guarantee fee but before, sorry, before the guarantee fee, what can I raise the debt at because I've obtained a guarantee, and basically determine whether the overall compensation as among the three parts, debt guarantee fee and return on equity is similar to the overall cost of capital that would be incurred by a reasonably financed utility, and it is.

MR. HUTCHINGS: So where we've come to is that your view of the ATWACC of Hydro is in the range of 6.9 percent.

MS. McSHANE: That's what ... this is not my evidence.

MR. HUTCHINGS: No, and I understand that.

MS. McSHANE: This is Dr. Vilbert's evidence.

MR. HUTCHINGS: Uh hum, yeah.

MS. McSHANE: But if I go through this analysis, I start with a proposition that I'm using proxy companies which are investor-owned companies because those are the only companies that actually have market data, the analysis would indicate that their implied ATWACC is 6.9 percent, that would be applicable to Hydro if you ignore the fact that they don't pay taxes, and therefore, according to this methodology, the implied after-tax weighted average cost of capital stays the same if I move to a 15 percent common equity ratio and implicitly then the before-tax weighted average cost of capital is about 10.2 percent. That's the fallout of the model.

MR. HUTCHINGS: Okay. So if I understand what you're telling me, if I plugged in, in the third line in this table here where we had 11.25 percent, and an implied ATWACC of 5.89, plugged in the 6.9 there, arithmetically we would come up with something like 20 percent as the recommended return on equity.

MS. McSHANE: On line, which line is that, I'm sorry?

MR. HUTCHINGS: It's the second line below at the forecast capital structure in 2002.

MS. McSHANE: That's what the implied return on equity would be according to this methodology. (inaudible) recommended 20 percent.

MR. HUTCHINGS: But your view of the business risk of Hydro implies a 6.9 percent ATWACC, is that correct?

MS. McSHANE: My view of the risk of Hydro as a stand-alone utility would imply ... again, if you assume that it was tax paying, 6.9 percent. This is similar to other utilities in a similar business risk position.

MR. HUTCHINGS: Okay. Let's turn to your exhibits, and we should probably mark these for the purpose of identification on the record, the cost of capital analysis, I might suggest, KM-1.

MR. KENNEDY: **KM-1**, yeah.

EXHIBIT KM-1 ENTERED

MR. HUTCHINGS: And determination of revenue requirement under rate base methodology for a hypothetical utility, KM-2.

EXHIBIT KM-2 ENTERED

MR. HUTCHINGS: Perhaps before I ask you a specific question on the cost of capital analysis, Ms. McShane, you might wish to just take us through this and explain how you have followed through the steps that are outlined here. I do this simply because everyone just got this this morning, so.

MS. McSHANE: Absolutely, not a problem. I started by

estimating what the cost of capital would be to a representative Triple B rated utility in Canada with a representative capital structure of 60 percent debt and 40 percent common equity. The cost of debt to a Triple B rated utility would be approximately 7 1/4 percent, and that represents about 125 bases points over a six percent Canada yield, six percent 30-year Canada yield, and an 11 1/4 percent return on equity calculated using the various tests that I typically use to estimate a fair return on equity, which would give us a cost of capital of 8.85 percent. That would be the cost of capital that would be incurred by Hydro on a stand-alone basis. Hydro has, as you pointed out, a guarantee, and they pay a guarantee fee. They also have a capital structure which only has about 85, 15 percent equity and 85 percent debt. What I was trying to determine was if the cost of capital should be approximately 8.85 percent, and no higher than that, and the shareholder receives a normal return on the equity that is in place, that being 11.25 percent, and the debtholders receive their interest costs at 7 1/4 percent, what's left over for the guarantee fee, and that is about 1.18 percent, which, to my mind, is reasonably close to the one percent that is actually paid to the Provincial Government. So, in my opinion, paying the one percent guarantee fee to the province and paying a normal rate of return on equity to the existing equity appropriately compensates all of the capital providers in Hydro.

MR. HUTCHINGS: Okay. The item under cost in the second table as it relates to guarantee fee has two asterisks on it and refers to a note down below, calculated as one divided by .85, can you just explain the rationale of that calculation?

MS. McSHANE: Certainly. I start with the proposition that the overall cost of capital should be 8.85, the bottom line on the table. Are you with me on that?

MR. HUTCHINGS: Yes.

MS. McSHANE: I know that the ...

MR. HUTCHINGS: I accept that that's the proposition we're starting with, yeah.

MS. McSHANE: Okay, that's fine. I'm not going to make you agree with things you don't want to agree to. I know that the cost of debt is about 7 1/4 percent, so I multiply the 85 percent proportion of debt times the 7 1/4 percent cost, and that gives me the weighted cost of debt. I know that the proportion of common equity is 15 percent approximately and that I'm recommending a return on that equity of 11 1/4 percent, so that if I, so that the weighted component of equity is thus 1.69 percent. So if I take the two components that I now do now, the 6.16 and the 1.69 and add them together, that gives me 7.85 percent, which leaves a one percent weighted component available for the guarantee fee, but since there's 85 percent debt in the capital structure to which that guarantee fee needs to apply, I would take the one percent and divide it by the percentage of debt in the capital structure to come up with a cost rate, if you will, of 1.18 percent, which is analogous to the one percent guarantee fee that's currently being paid.

MR. HUTCHINGS: So essentially that's just backing in to the 1.18, assuming the 85 and ...

(10:15 a.m.)

MS. McSHANE: Yes, it is, and the point being that all of the stakeholders are appropriately compensated. If the guarantor and the common equity holder were different entities, then you would have to go beyond this obviously to make sure that each was appropriately compensated for the specific components of risk that they're assuming, but in this case since they are the same entity, it's not as critical to divide up the guarantee fee and the return on equity as long as in total the cost of capital is appropriate and all of the stakeholders are appropriately compensated.

MR. HUTCHINGS: I'm still puzzled by your need to add that caveat when we talk about this. I mean, if, as you recommend, the 11.25 is the correct number for equity, doesn't the guarantee fee automatically fall out no matter who it's being paid to?

MS. McSHANE: The 11.25 percent is the return on equity that would be applicable at a 60/40 capital structure. I have done the analysis to determine whether or not, given this guarantee fee at the level that it is at, whether the 11 1/4 percent return for a 60/40 capital structure is reasonable, and given the level of the guarantee fee, it is a reasonable return on common equity.

MR. HUTCHINGS: Okay. I've heard your explanation on that, and that deals with the issue that we spoke of yesterday in terms of the ability to calculate or estimate the appropriateness of the guarantee fee, and as I said yesterday, I don't think that's essentially being put in issue in practical terms here. If we can turn now to **KM-2**, and on the same basis I'd ask you to just take everyone through that, given that we've only seen it this morning.

MS. McSHANE: And I apologize in advance if this wasn't exactly what you wanted because in retrospect, going back and thinking about what you asked for, I have to admit I wasn't 100 percent sure that we were on the same wavelength, so I'm hoping that this covers what you had intended for me to produce, and basically what I tried to do in this table is to show for an investor-owned utility how you would arrive at the total revenue requirement that would be incurred to service capital, and you would start with the proposition that the capital structure in place is, in this hypothetical utility, 60/40 debt equity, and that the

cost of debt is 7 1/4 percent and the cost of equity is 11 1/4 percent, and again, similar to the table that we just looked at, we would calculate the weighted cost of each of those components and arrive at a cost of capital of 8.85, but an investor-owned utility has to pay income taxes as well, so the total revenue requirement for the capital providers has to be grossed up by the amount of income tax that must be incurred in order for the utility to actually achieve the 11 1/4 percent return on equity, and if you assume that the utility incurs income taxes at a 40 percent rate, the total revenue requirement for capital providers is not 8.85 but 11.85, and then I've created here a very simple income statement which shows that if you take the 11.85 total revenue requirement for the capital providers, you deduct the interest expense, which is 4.35, which can be found on the upper table as the weighted cost of debt, you then subtract that from the 11.85 which gives you the pre-tax revenue available to the common equity holders of 7.5 percent. And the next line represents the additional income which was required to pay the related income taxes on the earnings, if the tax rate is 40 percent, of three, which gives you the required after-tax return on equity of 4.5, which then in total would, the 4.5 required after-tax return on equity added to the 4.35 interest expense gets you back to the 8.85 return on capital.

MR. HUTCHINGS: Looking at your first table under the "Assumptions," the weighted cost of debt that's shown there as 4.35, is that a before or after-tax cost?

MS. McSHANE: That is a before-tax cost.

MR. HUTCHINGS: Okay. Looking at the equity item of 4.5, is that before or after tax?

MS. McSHANE: That is an after-tax cost.

MR. HUTCHINGS: And what would the effective after-tax cost of debt be?

MS. McSHANE: Well, the after-tax cost, if there's a tax, at 40 percent, you would calculate by taking the 4.35 and multiplying it by one minus the tax rate, which would give you two six.

MR. HUTCHINGS: I think that's where we were yesterday. I just wanted to touch for a moment on our discussions of yesterday as to Hydro's situation if it were in fact to reach a 60/40 debt equity ratio, and we were talking about that in terms of that being a stand-alone position for Newfoundland and Labrador Hydro, but the discussion, I think, was complicated a little by the notion that there was, according to your evidence, a distinction between a provincial Triple B rating and a corporate Triple B rating. Am I correct in that?

MS. McSHANE: There may be, yes. I mean, in terms of spreads, the spreads may be lower for provincial ratings on occasion and have been recently but they do vary and there may be no spread. It's something that you have to evaluate at different points in time to determine whether there's actually any interest savings from raising debt at the provincial rate as opposed to the corporate rate.

MR. HUTCHINGS: Okay. So the appropriate consideration at that time would be to determine whether the advantage of the provincial Triple B rate could be purchased by getting a guarantee from Government at a cost that would be less than the additional interest costs associated with the corporate rate. Is that correct?

MS. McSHANE: Yes. At 60/40 you wouldn't pay any more for the guarantee fee than the interest savings, because you've now got six, you've got 60/40 capital structure and you're basically at a point where you can stand on your own, you don't need to depend on a guarantee for the offloading of financial risk.

MR. HUTCHINGS: Right, but if at that time there is, let us assume, a 40 bases point difference between the corporate and the provincial yield and Government is prepared to provide a guarantee at a cost of 30 bases points, it would represent a sound business decision on Hydro's part to go with the guarantee, would it not?

MS. McSHANE: Yes.

MR. HUTCHINGS: Is there some difference between that situation and the current situation where Hydro can obtain the guarantee fee for one percent and avoid the necessity of having to increase its equity and hence its revenue requirement by trying to get to a point where it can stand alone?

MS. McSHANE: I don't understand why you say it's increasing its revenue requirement.

MR. HUTCHINGS: Would we not be increasing revenue requirement as we go to 60/40 debt equity and 11.25 percent return?

MS. McSHANE: You'll be increasing it if you go to an 11.25 percent return, that's correct, but that's reasonable and appropriate. You will not be increasing your revenue requirement any more than you would be, you should be paying if you have 85/15 with the guarantee appropriately priced in a normal return on equity. So, no, I don't agree that as you move towards 60/40 that if ... that if the Company comes in, let's say it comes in in 2003, and this Board says, yes, we're prepared to allow you a normal return on equity and the one percent guarantee fee continues to be paid, the overall cost of capital we'll allow you to charge your customers is 8.85 percent, as I get to 60/40 and I re-assess the value of the guarantee, I will not be asking for an increase in the revenue requirement for cost of capital. It should stay approximately the same because I've started with the premise that the overall cost

of capital should be equivalent to that which is appropriate at 60/40. So I'm just shifting over time where the various elements of it go but I'm not changing the overall total cost.

(10:30 a.m.)

MR. HUTCHINGS: So your position would be then that Hydro can move to a 60/40 debt equity ratio, get an 11.25 percent return on its 40 percent equity, and not charge ratepayers any more than the 12 or $13 million they're now paying for the guarantee fee annually?

MS. McSHANE: Not charge them any more?

MR. HUTCHINGS: Uh hum.

MS. McSHANE: Well, certainly they would charge them less because, I mean, the discussion we were having is, first of all, we only have 60 percent debt at 60/40, and second of all we're talking about a significantly lower percentage. We're talking about only the interest savings at that point, so we're not talking about 12 or $13 million.

MR. HUTCHINGS: No, no. I understand that as the debt goes down, then the interest is going down as well.

MS. McSHANE: Absolutely. So, I'm sorry, did I miss the question?

MR. HUTCHINGS: Your position is then that Hydro can move to a 60/40 percent debt equity ratio, eliminate the existing guarantee fee and not thereby increase the revenue requirement.

MS. McSHANE: Let's understand where the point of departure is.

MR. HUTCHINGS: Assuming the point of departure is the appropriate rate of return.

MS. McSHANE: Yes. If the point of departure is 8.85, and I'm sort of using that number, not as a precise number but just sort of as a shorthand way of saying 60 times 7 1/4 plus 40 times 11 1/4, that as Hydro moves toward actually achieving 60/40, that barring, you know, changes in the cost of equity, but assuming that the capital market conditions stay the same and the relative cost of debt and equity stay the same, that it would not incur and ask ratepayers to pay for more for capital than 8.85.

MR. HUTCHINGS: As Hydro increases its equity, obviously the, and is regulated in this fashion, it begins to bear the risk or the ratepayers, I guess, begin to bear the risk that the required rate of return on equity may increase. Is that fair?

MS. McSHANE: Sorry, I didn't understand the rest of your question.

MR. HUTCHINGS: Okay. As you mentioned in your previous answer, you were making your statement on the assumption that the market conditions didn't change and that the rate of return, required rate of return on equity remain the same.

MS. McSHANE: Yes.

MR. HUTCHINGS: Okay. If in fact the required rate of return on equity for reasons of market conditions increases ...

MS. McSHANE: Yes.

MR. HUTCHINGS: ... then there would be an additional amount required to meet that and that would be expected to come from the ratepayers, correct?

MS. McSHANE: Yes, and that would be true for any utility.

MR. HUTCHINGS: Yes.

MS. McSHANE: This isn't anything outside the ordinary. It's ...

MR. HUTCHINGS: Okay. And that's ...

MS. McSHANE: It's the way capital markets work.

MR. HUTCHINGS: Yes, uh hum. And that's a risk that the ratepayers take with reliance by Hydro upon a return on equity.

MS. McSHANE: I guess in, if you're looking at the risk that any ratepayer takes, irrespective of what the utility is, I mean, there is a risk that the required return on equity will change, there is a risk that the cost of debt will change.

MR. HUTCHINGS: How would you rate the relative risks of the rate of return on equity increasing and the risk of the percentage of the guarantee fee changing? Which is more likely to change?

MS. McSHANE: Which is more likely to ... well, I guess the guarantee fee has been sort of predetermined at a specific rate and hasn't been altered, so just from a factual standpoint there's more chance that the rate of return on equity is going to change, but in total the compensation for the business and financial risk that's implicit in the return on equity should increase in total.

MR. HUTCHINGS: But is it a sound business decision to go for the riskier equity or to accept the fixed charge associated with a guarantee fee?

MS. McSHANE: I don't think that the charge ... the charge with respect to the guarantee fee cannot in the long term be fixed because it has to, if you take the position that the Company should move towards capital structure ratios that are consistent with operating as a commercial *(sic)* viable entity which cannot in the long term fall back on another party to bear its risks, then it seems to me that you have to

re-evaluate from time to time what you're paying in the guarantee fee to ensure that in total the cost of capital are appropriately compensated.

MR. HUTCHINGS: Okay. I see the point that you're approaching there. I'd like to look briefly, if we may, at **page 42 of your pre-filed evidence**. Starting at line 24, you're dealing with the issue of an adjustment for financing flexibility in your estimate of the appropriate rate of return for Hydro, and over onto the top of page 43 you speak of the allowance being intended to cover three distinct aspects, the first being flotation costs comprising financing and market pressure costs arising at the time of sale of new equity. Is it fair to say that that concept has no application in the case of Hydro, which would not in fact be issuing equity on the market?

MS. McSHANE: Yeah, I think I said that on the top of page 44. It says, "As a Crown corporation, Hydro does not raise capital in the public equity markets, therefore, it would not incur out-of-pocket equity financing and market pressure costs. However, both the cushion or safety margin for unanticipated capital market conditions and the fairness (inaudible) integral components of the economic cost of equity. Both should be recognized in the allowed return on equity for a regulated utility irrespective of ownership." I think that's been accepted by numerous regulators as an appropriate addition to the, what I call the bare bones market derived cost of capital.

MR. HUTCHINGS: In respect of the bare bones market derived cost of capital that you speak of, you are using comparable companies, and is it not fair to say that those costs have been incorporated into the returns that those companies are already showing?

MS. McSHANE: In which regard? Are you talking about in each and every test that's conducted here or ... there are several tests that I use to estimate the cost of equity. Two of them are market derived tests which effectively measure the cost of equity by reference to the market value. That return in turn and the regulatory model used throughout Canada and the United States takes that return and applies it to book value. The return itself, as derived from market value, doesn't include any of these costs, no. It's simply a cost in, by reference to market value which, if applied to book value, needs to be increased to a certain extent above that minimum level to reflect the factors that have been discussed on pages 43 and the top of 44.

MR. HUTCHINGS: So your problem in terms of accommodating financial flexibility is the application to book value of the market derived numbers you've ...

MS. McSHANE: Yes, because in ...

MR. HUTCHINGS: ... arisen ...

MS. McSHANE: ... principle what application of market derived values would be is to derive the market value towards book value, and what I've suggested here is that if truly regulation is to simulate competition, then there needs to be some recognition that book value is not the end state of market value since there is a tendency for values of companies to, market values of companies to approach their replacement cost, and given that the replacement cost of electric utilities in particular tends to be above book value, there's some need for an adjustment to the bare bones cost of equity to compensate for that, the difference between replacement cost and book value, if indeed we are trying to simulate the competitive mode.

MR. HUTCHINGS: I mean, if we ... we do ... you do recognize that there are elements of the so-called financing flexibility costs that are not incurred and will not be incurred by Hydro.

MS. McSHANE: Yes, I do.

MR. HUTCHINGS: I wanted to return to a point you were discussing with Ms. Butler yesterday related to the $70 million dividend and your discussion with her as it related to the notion that leaving the dividend deemed to be unpaid in the current situation would not in fact change Hydro's position as to its revenue requirement. If I understand the discussion, your suggestion was that three percent is essentially a derived number based upon an amount of revenue requirement which would avoid rate shock.

MS. McSHANE: That's my understanding, yes.

MR. HUTCHINGS: So Hydro's approach here has been essentially to determine the maximum amount of revenue requirement it can put in place without causing rate shock and from that deriving a three percent return on equity.

MS. McSHANE: I think that's a fair way of doing it, of characterizing it. They would have determined what the overall revenue requirement would have been assuming the full cost of capital and then determining what return on rate base would effectively avoid rate shock.

MR. HUTCHINGS: So if the revenue requirement now is $320 million or whatever it may be for 2002, if the Board were to deem the dividend not to be paid, that would remain the same and the rate of return on equity would increase slightly.

MS. McSHANE: That's correct. In other words, the return on rate base should be the same as applied for, I believe is 7.4 percent, and what we would simply be doing then is taking and splitting the 7.4 percent differently as among, as between debt and equity, and the indicated return on equity at a 7.4 percent return on rate base, and let's say if one assumed the dividend hadn't been paid, the capital

structure would look like sort of 75/25 debt equity, then the return on equity that would be indicated as a result of deeming would be about 4 1/2 percent instead of three, but still you're well below what would be viewed as a reasonable rate of return on 25 percent equity.

MR. HUTCHINGS: I wonder, Mr. Chair, if we might take the break a few minutes early this morning and I may have a few questions afterwards or I may be close to the end.

MR. NOSEWORTHY, CHAIRMAN: Sure, that's fine, Mr. Hutchings. We'll break till just after 11. Thank you.

(10:45 a.m.)

(break)

(11:05 a.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you. Would you continue, Mr. Hutchings?

MR. HUTCHINGS: Thank you, Mr. Chair. Ms. McShane, I just want to look briefly, in conclusion, at your exhibit **KM-1**, the cost of capital analysis.

MS. McSHANE: Yes.

MR. HUTCHINGS: Looking at the table at the top, where you have simply a debt and equity component in the capital structure, am I understanding your position correctly to be that the cost of capital which you have shown here as 8.85 in this example, would in fact not change as the capital structure changed?

MS. McSHANE: No, I'm not making that assumption. What I'm making, the assumption that I'm making is that this is an approximately optimal capital structure and approximately minimal cost, and therefore that cost of capital is the appropriate cost of capital that should be borne by the ratepayers.

MR. HUTCHINGS: Okay, so leaving out the bottom table and the guarantee fee simply for the purpose of illustration, what would the effect be on the overall cost of capital in general terms if your stand-alone utility from the top table changed its debt structure to 70/30? What direction would the total cost of capital move?

MS. McSHANE: Generally speaking, I think that the cost of capital of 70/30 capital structure would be somewhat higher because what would happen is that a utility which would be optimally capitalized at 60/40 and be able to achieve a Triple B rating would not be able to achieve a Triple B rating at 70/30, and therefore it would incur a significantly higher debt cost as well as a higher equity cost so the cost of capital would likely be slightly higher at a 70/30 capital structure than it would at a 60/40.

MR. HUTCHINGS: Okay, and equally then if the structure changed to a 50/50 debt equity structure and assuming that that would be something that any required regulator would approve, what would be the effect on the overall cost of capital?

MS. McSHANE: For, in particular for an investor-owned utility which does pay income taxes, it is likely that the cost of capital would also be higher slightly at a 50/50 common equity ... a 50/50 debt equity capital structure because of the debt, sorry, the interest ... try again, because of the taxes that have to be paid on the 50 percent of common equity and the fact that an increase from the, from an equity ratio of 40 to 50 would not decrease the cost of debt to the same extent that it would decrease if we went from 60 percent to 70 percent debt.

MR. HUTCHINGS: Okay, so it's not a straight line relationship as debt increases.

MS. McSHANE: Which is not a straight line?

MR. HUTCHINGS: The ...

MS. McSHANE: The increase in the cost of debt?

MR. HUTCHINGS: The increase in the cost of debt.

MS. McSHANE: No.

MR. HUTCHINGS: No, okay, absent the tax effect, that is to say assume that you have a Crown owned utility that does not have to pay the tax, what would be the effect of moving from the 60/40 to the 50/50?

MS. McSHANE: If you had about 50 percent you probably might be able to improve your debt cost by 25 basis points, and the change from a 40 to a 50 percent common equity ratio typically would be associated with about 7 1/2 basis points decrease in the cost of equity for every percentage point increase in the common equity ratio, so it would be approximately the same. I would say there would not a significant change in the, in the cost of capital.

MR. HUTCHINGS: Okay, just so I'm clear. I think I heard you say in the course of your calculation that you were looking at a 7 1/2 basis point change for each one percent change in equity?

MS. McSHANE: Yes.

MR. HUTCHINGS: Does that run across the entire gamut or is that in any particular range?

MS. McSHANE: No, that would be sort of between the ranges of 40 and 50 and would be higher, a bigger increase as you moved outside the 40 percent range and down to 30 and below.

MR. HUTCHINGS: Uh hum, and if you were moving in the other direction?

MS. McSHANE: From 50 above?

MR. HUTCHINGS: Yes.

MS. McSHANE: It would, it would be sort of a declining curve as you move up. In other words, the cost of equity would decline at a declining rate as the equity ratio increases.

MR. HUTCHINGS: Okay, the numbers that you're quoting, is there some accepted industry source for that, or is it just a rule of thumb, or ...

MS. McSHANE: I would say that it's based primarily on the results of a number of empirical and theoretical studies which have focused on changes in capital structure between equity ratios of 40 and 50.

MR. HUTCHINGS: Okay.

MS. McSHANE: I don't have the specific names of those, but I could get them if you want.

MR. HUTCHINGS: I don't know that we need to get the studies themselves. Are they specifically related to utilities?

MS. McSHANE: Yes.

MR. HUTCHINGS: Okay, and are they American or Canadian studies?

MS. McSHANE: American, we only have about six utilities in Canada which are publicly traded these days, so it's hard to do much of a study on the implied changes.

MR. HUTCHINGS: Uh hum, I understand. Okay, on a theoretical level, why should it be that the return to equity moves in that way as you change the amount of equity in the capital structure?

MS. McSHANE: In that way, you mean that it's below a certain level, that the cost of equity increases at an increasing rate and above a certain level it tends to decrease at a decreasing rate?

MR. HUTCHINGS: Yes, uh hum.

MS. McSHANE: Just because if you go from, for example, 50 ... or 60 to 70 percent equity that you've already essentially achieved some optimal level of protection against financial risk and adding additional equity doesn't reduce the cost of equity by as much as it would if you're moving your equity ratios down below a certain level where you're reaching closer and closer to financial distress.

MR. HUTCHINGS: Okay, so in terms of risk analysis, does the overall risk of the company change while this change in capital structure is occurring?

MS. McSHANE: Does the overall risk of the company change if the capital structure changes?

MR. HUTCHINGS: Uh hum.

MS. McSHANE: The financial risk will change, yes, so the overall risk changes.

MR. HUTCHINGS: Okay, we talked about the definition of business risk this morning. How would you define financial risk?

MS. McSHANE: The financial risk goes to the probability that the investor, the common equity investor will underachieve his expected return because his return is subordinate to the requirements of the fixed income security holders, debt holders.

MR. HUTCHINGS: Yes.

MS. McSHANE: And then once, he has to basically wait until those, those stakeholders are compensated for him to receive any compensation himself, so it's a question of, you know, how much of the income has to be paid to the fixed income holders before the common equity shareholder gets anything.

(11:15 a.m.)

MR. HUTCHINGS: Okay, in that context I can understand your point as to the financial risk changing when the debt equity structure changes. How does that affect the overall risk of the company, the business risk?

MS. McSHANE: It doesn't affect the business risk, but the overall risk of the company is not the business risk. The overall risk of the company is the totality of the business risk and the financial risk.

MR. HUTCHINGS: Okay, so on your definitions, then we have a, there are two elements, a financial risk and a business risk ...

MS. McSHANE: Correct.

MR. HUTCHINGS: And those together can be additive and ...

MS. McSHANE: In a sense, yes, I know ...

MR. HUTCHINGS: ... come to the total risk of the company.

MS. McSHANE: Correct.

MR. HUTCHINGS: Okay, is it fair to say that all of the shareholders, all of the stakeholders share the business risk?

MS. McSHANE: Yes, but the debt holders share in the business risk with the equity holders.

MR. HUTCHINGS: Yes, okay, and if there is a guarantor then the guarantor has some share in the business risk.

MS. McSHANE: Correct.

MR. HUTCHINGS: Okay, is the same true of the financial risk?

MS. McSHANE: Yes, there is a sharing of that risk as well.

MR. HUTCHINGS: Is it the same risk, or is it a different risk for debt holders and a separate one for equity holders?

MS. McSHANE: It's different in the sense that the bond holders get paid first, and the shareholder requirements are paid last, so to the extent that there are different types of bonds, some of them may be subordinated to others. There may actually be a difference as to, you know, the risks that are borne by individual types of bond holders, but effectively the bond holders are ahead of the shareholders, and they have fixed payments that they're entitled to.

MR. HUTCHINGS: Is it fair to regard the financial risk as simply derivative of the business risk?

MS. McSHANE: I don't know what you mean by that.

MR. HUTCHINGS: Is not the financial risk simply a sharing among the stakeholders of the total, of the business risk of the company?

MS. McSHANE: I don't think that that's really fair to say. I think that by levering the firm you add a risk that it would not be there if you were 100 percent equity financed, so you're adding financial risk by taking on debt.

MR. HUTCHINGS: Okay, and is it your position that that applies over the entire range of capital structures or just in a certain part of that range.

MS. McSHANE: It applies over the whole range of capital structures and it would apply differently depending on what range of capital structure you're in, and you know, part of the reason that we focus on capital structures within a certain range and, in effect, create an industry standard for utilities is to ensure that, you know, an appropriate level of financial risk is assumed and, you know, not too much and not too little, thus making sure that the ratepayers are not disadvantaged by, you know, too much or too little equity.

MR. HUTCHINGS: Okay, so just so that I can understand your position, is it your view that any change in the debt equity structure would result in a change in business risk?

MS. McSHANE: Any change in the capital structure will result in a change in the business risk. No, no, the business risk is the risk that's associated with the assets. The financial risk is the risk that's associated with adding leverage to the firm, so if I add leverage I'm not changing the business risk, I'm adding financial risk.

MR. HUTCHINGS: But your position is that the risk to equity holders, for instance, changes in any case of a change in the debt equity ratio.

MS. McSHANE: To some extent, yes, it does, and depending on where you are, more or less.

MR. HUTCHINGS: Okay, alright, I think I understand your position now. Thank you.

MS. McSHANE: Thank you.

MR. HUTCHINGS: And Mr. Chair, those are all my questions.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Hutchings, thank you, Ms. McShane. We'll move on now to the cross-examination by the Consumer Advocate please. I assuming, Mr. Browne, that Mr. Fitzgerald is the ...

MR. FITZGERALD: It will be myself, Mr. Chairman, thank you.

MR. NOSEWORTHY, CHAIRMAN: Thank you.

MS. McSHANE: I'm going to try to move around a little bit here so I can see you.

MR. FITZGERALD: Are you positioned?

MS. McSHANE: Okay.

MR. FITZGERALD: Good morning, Ms. McShane.

MS. McSHANE: Good morning.

MR. FITZGERALD: The parameters, I guess, of what I'm going to be going over with you is those aspects of your pre-filed evidence relating to your different approaches to analyzing rate of return for a company. Overall, in your pre-filed evidence, you indicate that an appropriate rate of return for Hydro in the test year is between 11 percent and 11.5 percent, is that correct?

MS. McSHANE: Yes.

MR. FITZGERALD: And mid-range being 11.25.

MS. McSHANE: Correct.

MR. FITZGERALD: Now obviously, for whatever reason, Hydro is not applying to this Board for a rate of return in that range.

MS. McSHANE: Not for this test year, no.

MR. FITZGERALD: No, not for this test year. In fact they're looking for the three percent figure which we're all familiar with.

MS. McSHANE: Yes, they're looking for a return on rate base of 7.4 which, based on their actual capital structure, is equivalent to a three percent on equity.

MR. FITZGERALD: Okay, and do I understand that your estimate, or in the final analysis when you arrive at your 11 1/4 figure, as a mid-range, that is based on information that

you have, and it's forecast for the test year, 2002, only, is that correct?

MS. McSHANE: Yes, that would be, that would be fair. In other words, between today and the next time the company comes back and seeks a normal rate of return on equity, capital markets may change, and they may change significantly, and obviously at that time we would determine what an appropriate rate of return under those capital market conditions was.

MR. FITZGERALD: Okay, if I could just turn to page 55 of your evidence please. Okay, at the top, the table there, and this is ... you have just referred me to this actually, and you say with the weighted, or the cost (inaudible) rather, for equity at three percent, the debt at 8.35 percent, gives a total weighted cost for a return on rate base of 7.4 percent. That's what this table illustrates.

MS. McSHANE: Yes, it does.

MR. FITZGERALD: Yes, okay, and you were asked a question here, you say ... the question ... I'm reading this from line two, it says the Board has traditionally expressed the allowed return on rate base in terms of a range, is such a range appropriate for Hydro, and could you read your response there please?

MS. McSHANE: No, not in the present circumstances. The function of the return on rate base range is to determine whether a utility has over or under-earned a reasonable return on rate base. If the utility exceeds the upper end of the range, it is deemed to have over-earned and is obligated to refund the excess to customers. If the utility's return falls short of the lower end of the range, it has the ability to seek relief from the Board. For Newfoundland Power, the range in the return on rate base adopted by the Board in Order **PU-36**, 1998 to 1999, was 36 basis points.

MR. FITZGERALD: Okay, thank you. If you recall yesterday, Ms. Butler, on behalf of Newfoundland Power, took you through an exhibit. I think it was **NP-3**. I don't necessarily need to see that right now, but if you recall, it was a, it was a schedule of actual and forecast margins for Hydro from 1993, I believe, to about 1997. Do you remember that table?

MS. McSHANE: Yes.

MR. FITZGERALD: And do you recall from, you know, reviewing that table, that in fact there were years when Hydro exceeded its forecast margin?

MS. McSHANE: I don't understand what you mean by exceeded its forecast margin.

MR. FITZGERALD: Okay, let's go look at **NP-3** then if we could. Actually, if you could allow us to see the top as well, Mr. O'Rielly. At line 42, and the 1992 final cost of service column, we have a figure of $10 million, $10,825,000. Could you explain to the Board what that figure represents?

MS. McSHANE: I'm not positive what it means, but based on the title of the column, it would appear to be what the margin that was allowed based on the 1992 cost of service, at a 1.08 times coverage.

MR. FITZGERALD: Okay, and the next immediate right hand column gives us 1992 actuals, and we have a figure there of $17 million.

MS. McSHANE: Yes.

MR. FITZGERALD: I took that to mean that that is a variance over and above what was allowed, or what actually happened, I should say.

MS. McSHANE: I mean that's what it looks like. I mean I am not familiar in depth with these numbers, so I don't know what's specifically included in each of these years, but from what I understand, this was an attempt to try to provide values as close as possible to what the utility only margins would have been in each of those years.

MR. FITZGERALD: Let's move then to the column in 1996. There is a figure here of $20 million, $20.6 million. My eyes are ...

MS. McSHANE: Yeah, the numbers are a little small.

MR. FITZGERALD: I'm sorry, it's the 1997 column, and this figure is expressed as approximately $31 million? Can you see that number?

MS. McSHANE: Yes.

MR. FITZGERALD: That again is in line 42, which represents the margin?

MS. McSHANE: Yes.

MR. FITZGERALD: The immediate right hand column after that, or following the $31 million is a variance column that indicates, I believe that's approximately $10.6 million.

MS. McSHANE: Yes, I see that.

MR. FITZGERALD: Yes, does this represent an upward variance, the $10 million, over and above the margin?

MS. McSHANE: That's my understanding of ... it's certainly ... yes, it's a (inaudible) variance.

MR. FITZGERALD: Okay, so is this evidence then that in the past Hydro has exceeded its forecast margin, sometimes by as much as $10 million?

MS. McSHANE: It has in the past exceeded the 1.08 times margin, yes.

MR. FITZGERALD: Yes, okay, which was the amount that

they had justified, if I could put it that way, before this Board.

MS. McSHANE: That was the amount that in 1992, from my understanding, the Board said was at the time a reasonable target.

(11:30 a.m.)

MR. FITZGERALD: Would you agree that it is this ... that the Board here should be vigilant that excess earnings don't occur?

MS. McSHANE: Yes.

MR. FITZGERALD: And what mechanism can be imposed to ensure that?

MS. McSHANE: Well, I guess, you know, I think what we have to do is to distinguish between whether in principle a range should be set, and whether, in fact, for these particular circumstances it makes any sense to set a range. If the Board wants to, as a matter of principle, continue to set ranges, which it has for Newfoundland Power ... I mean I don't have a problem with it doing so, it just, it just seems to me that in these particular circumstances, since the company is only asking to earn a three percent return on equity, that the likelihood of it coming anywhere near to a return on rate base that would be fully compensatory, is nil, so that, you know, setting a range based on a reasonable rate of return on rate base is sort of moot, particularly given that the company is likely to be back before this Board within two years.

MR. FITZGERALD: Of the two alternatives, that is imposing a range, not imposing a range, which would be safer for the Board?

MS. McSHANE: I guess, if the Board really believed that there was a significant chance that within the period of time before Hydro comes back to the Board, that it would, that Hydro would exceed a reasonable range, it could do so as long as it recognized that the reasonable range needs to be set not on the basis of the 7.4 percent that's been requested as sort of a midpoint in the range, but rather a value that reflects, as I said, a reasonable return on rate base, and in fact, I think there was data requested, I responded to which actually expressed that range in the context of the return on rate base that I was recommending. I can't remember the number.

MR. FITZGERALD: Okay.

MS. GREENE, Q.C.: NP-139?

MS. McSHANE: No, that's not it. **CA-31**. **CA-31** was intended to provide a basis for determining what an appropriate upper end of the range might be under the current circumstances.

MR. FITZGERALD: So do I take it then your answer to my question of the two alternatives, that it would be safer for them to compose a range or not?

MS. McSHANE: Well I think it's sort of like putting on suspenders and a belt, but clearly that this, if the Board felt that there was some chance that Hydro was in the next two years going to exceed a reasonable return on rate base, it could determine what the upper end of the range should be, but the likelihood of the company even approaching based on its forecast of return on equity that upper end of the range is so remote that it's, as I said, it's sort of like using suspenders and a belt.

MR. FITZGERALD: Well, you do recall an exhibit from yesterday and we'll go to it if you don't recall it, that for financial planning purposes, we understand that Hydro is anticipating that they'll have a return on equity in 2004 in the range of 11 1/4. Do you recall that exhibit?

MS. McSHANE: Sorry, I don't think that that's ... well they're expecting to come and ask to be allowed to earn a return on equity in that timeframe. It's not that they have decided that they're going to be able to based on the rates that are in place today. Those are totally different circumstances.

MR. FITZGERALD: It's an indication of an intention of Hydro, is it?

MS. McSHANE: It's an indication that Hydro intends to come back to the Board in that timeframe and seek at that time to be allowed to earn a normal return on equity. It's not that it's saying that with the rates that it expects to have in place coming out of this hearing that it would be able to earn an 11 to 11 1/2 percent return.

MR. FITZGERALD: Okay.

MS. McSHANE: At the time the company comes back and seeks to earn 11 to 11 1/2, or whatever the numbers turn out to be at that time, then, yes, if the Board were to then set a normal rate of return, it would be reasonable for it, if the Board were to use the same approach that it uses with Newfoundland Power, to set a range at that time.

MR. FITZGERALD: So you wouldn't have any big problem though, if the Board decided to overdress and wear a belt and suspenders at the same time?

MS. McSHANE: As long as the Board recognizes that the, in principle the upper end of the range needs to be reflective of what a reasonable rate of return on rate base for Hydro would be, not that it takes, you know, applied for 7.4 percent and says, well we'll just add 50 basis points to that and say well if they earn over, you know, 7.9 percent, then they've over-earned, because clearly, at that point Hydro has not come close to earning a compensatory

1 return on rate base.

2 MR. FITZGERALD: Okay, just a side issue on this, 3 referring to your pre-filed evidence at page 10, your 4 treatment, if I can call it that, of the Rate Stabilization Plan.

5 MS. McSHANE: Yes.

6 MR. FITZGERALD: At line 18.

7 MS. McSHANE: Yes.

8 MR. FITZGERALD: Would you mind reading that into the 9 record for us please, starting at line 18 to line 25?

10 MS. McSHANE: The component of the RSP which is 11 recovered annual from, refunded to customers, was treated 12 as a surcharge, or it owed to customers as a separately 13 identified refund, not as part of base rates, that's currently 14 structured the embedded cost of debt as applied to the 15 unamortized balance of the RSP. However, going forward, 16 I recommend that the unamortized balance of the RSP be 17 treated the same as rate base items, i.e., the overall cost of 18 capital or return on rate base should be applied to the RSP.

19 MR. FITZGERALD: Okay, that's fine, thank you.

20 MS. McSHANE: I'm sorry.

21 MR. FITZGERALD: That's okay, you were on a roll there. 22 So line 20 says, as currently structured, the embedded cost 23 of debt is applied to the unamortized balance of the RSP. 24 Could you remind me, and the Board what the embedded 25 cost of debt is?

26 MS. McSHANE: Do you mean in theory?

27 MR. FITZGERALD: No, in numbers. Is this the debt figure 28 that has been referred to in the approximate range of 8.35 29 percent?

30 MS. McSHANE: Why I'm stuttering a bit here is I don't 31 recall whether or not it's the overall cost of debt including 32 the guarantee fee or not. I guess, I don't remember.

33 MR. FITZGERALD: How much of a variation would that 34 give us?

35 MS. McSHANE: One percent, because the guarantee fee 36 is one percent.

37 MR. FITZGERALD: So then when you say further in this 38 paragraph, however, going forward I recommend that the 39 unamortized balance of the RSP be treated the same as rate 40 base items, and that's, I understand from the table that we 41 saw on page 55, that the return on rate base is 7.4 percent.

42 MS. McSHANE: For the test year.

43 MR. FITZGERALD: For the test year. Is that below the 44 embedded cost of debt?

45 MS. McSHANE: Yes, it is.

46 MR. FITZGERALD: Is there any reason why you're 47 recommending that it should be?

48 MS. McSHANE: Because I'm recommending a principle, 49 and the principle was it should be financed in the same 50 manner as other rate base items. The fact is that the 51 company has requested an overall return on rate base in 52 the test year which is below its cost of capital. In the long 53 run it presumably will be asking for, and being given the 54 opportunity to achieve a reasonable return on rate base, 55 and therefore, for the future, the return that would be 56 applied to the RSP would be the reasonable overall return 57 on rate base.

58 MR. FITZGERALD: Okay, I'd like to turn now to your ... 59 you have three approaches, or models, if I could put it that 60 way where you provide the Board your evidence regarding 61 the analysis of determining a proper rate of return for 62 Hydro, and these tests, as I understand it, a comparable 63 earnings test, discounted cash flow test, and the risk 64 premium test.

65 MS. McSHANE: Correct.

66 MR. FITZGERALD: Correct.

67 MS. McSHANE: Yes.

68 MR. FITZGERALD: Okay, turning first then to the 69 comparable earnings test, and I believe you refer to that at 70 page 52 of your testimony.

71 MS. McSHANE: That has the, page 51, sorry, page 53 ... 72 page?

73 MR. FITZGERALD: It's page 52, I'm sorry.

74 MS. McSHANE: Sorry, page 52, has the summary of the 75 results of the ...

76 MR. FITZGERALD: Right, so you have the comparable 77 earnings test here as indicating a rate of return of 12.5 to 78 12.75 percent. Page 28, Mr. O'Rielly, please. Page 28, line 79 8, and can you just read the second, the third sentence 80 there, Ms. McShane?

81 MS. McSHANE: A fair and reasonable return?

82 MR. FITZGERALD: Yes please.

83 MS. McSHANE: Falls within a range bounded by the cost 84 of attracting capital and the returns achievable by firms of 85 similar risk to utilities, (inaudible) comparable earnings 86 standard.

87 MR. FITZGERALD: Okay, and the comparable earnings 88 standard we've just seen, you've indicated would give a 89 rate of return of between 12.5 and 12.75?

90 MS. McSHANE: Yes.

91 MR. FITZGERALD: Okay, and this word, bounded by the

cost, that's the upward bound, would you agree with that?

MS. McSHANE: Yes.

MR. FITZGERALD: And you would have this Board rely on the comparable earnings test as a reliable outside boundary for determining rate of return?

MS. McSHANE: Yes.

(11:45 a.m.)

MR. FITZGERALD: Okay, if I could refer you now to your response to **CA-132**. You were asked the question, cite any recent Canadian regulatory jurisdiction decisions which have applied the comparable earnings standard unadjusted for market book ratios which are proposed to this Board. And your answer?

MS. McSHANE: It says basically that in recent years that most regulators have given primary weight to the equity risk premium test, and have overlooked the comparable earnings standard.

MR. FITZGERALD: If they're overlooking the comparable earnings standard, why would you expect this Board to not overlook it?

MS. McSHANE: For the same reason that I believe that it is time that other regulators in this country return to looking at the comparable earnings standard. I think in large part what happened was that there was a severe recession in the early nineties in Canada, and a significant period of restructuring which produced returns for industrial companies that were considerably below what had been achieved by these same companies in the 1980s, and there was a significant change in the rate of inflation between the eighties and the early half of the 1990s, and my view is that in large part the move away from comparable earnings reflected the fact that there was a significant change and regulators view the results of the comparable earnings test to not be reliable because there had been a major shift in economic fundamentals. We'll now we're in 2001 and we have experienced a period now of ten years of relatively low inflation and growth rates in the economy that are expected to continue on average in the future and the earnings that have been achieved over the past business cycle are at levels that given the outlook for the economy today are consistent with what we expect for the economy in the future, and I don't think that we have any more of the same problems with comparable earnings that we had when regulators started to move away from it. I think the other reason that regulators did move away from the comparable earnings test in part was because to a large extent they started to implement formulas for setting the rate of return and there was, my sense is that there was a general feeling that the initial returns that were set under a formulaic approach had to be set using the same test that was going to form the basic parameters for changing the return in subsequent years. I don't believe that that's true. I mean I think you can set the base return on the basis of the results of multiple tests, and simply use one objective parameter, if you will, the interest rates, the forecast interest rates in the future. I don't think that using simply interest rates to change the ROE precludes you from looking at all the tests to set the return in the initial decision, if you will.

MR. FITZGERALD: Okay, having said that though, would you agree that if this Board were to consider the comparable earnings test, that this would be the first time in a number of years that a regulatory board in Canada has not overlooked that ...

MS. McSHANE: I would say that would be a fair remark, yes.

MR. FITZGERALD: Your risk premium test, I believe you refer to it at page 32 of your pre-filed ... and I believe in a general sense that your evidence at page 55 indicated, I think it's at page 55, I may not have that right, indicated that the risk premium test applied to Hydro should give a range of rate of return of 10.5 to 10.75 percent for Hydro. Page 52.

MS. McSHANE: Page 52, alright.

MR. FITZGERALD: Yes. Now your evidence at page 32, you ... just ... at line 10, when you're giving your evidence regarding the risk premium test, you say, analysis of historic risk premiums should not be limited to the Canadian experience. Correct?

MS. McSHANE: Yes.

MR. FITZGERALD: Now does the Canadian capital market not have historically different levels of interest rates than the US?

MS. McSHANE: Historically, yes. Prospectively no, not to the extent that was historically the case. In fact that's one reason that you would not simply look to the Canadian experience because history is different from what we expect in the future, and the fact that long-term forecasts of Canadian interest rates show that they could be quite similar to the levels of US interest rates is one reason that you would look to the US experience as an estimate of what investors might expect for the future, because afterall, that is the objective. The objective is to determine what investors expect, not to determine what investors have achieved.

MR. FITZGERALD: Regarding the reliability of forecasting and prospective analysis, we'll get into that a little later, but you do agree that historically the Canadian capital markets have had different levels of interest? I think you just agreed with me on that.

1 MS. McSHANE: I think I said it in the, in the testimony at
2 page 33, and as a specific reason, and I am looking beyond
3 the Canadian experience. If you look at lines 7 to 14 at page
4 33. With respect to the historic long Canada bonds return,
5 the achieved averages reflect yields that exceeded those on
6 US treasuries by close to one percent. That differential no
7 longer exists. The structural changes that have occurred in
8 the Canadian bond market warrant looking beyond the
9 Canadian historic risk premiums. The recent similarity
10 between Canadian and US government yields lends further
11 support to reflecting the US equity risk premium experience
12 in the estimate of the equity market risk premium.

13 MR. FITZGERALD: Looking at other differences. The
14 Canadian interest rates generally have been higher than
15 they have been in the US, correct?

16 MS. McSHANE: I believe that's what I just said, yes.

17 MR. FITZGERALD: And tax rates are generally higher than
18 US rates?

19 MS. McSHANE: Which tax rates?

20 MR. FITZGERALD: Canadian tax rates are generally
21 higher?

22 MS. McSHANE: Personal income tax rates?

23 MR. FITZGERALD: Corporate tax rates. Both?

24 MS. McSHANE: Pardon me?

25 MR. FITZGERALD: Both levels of taxes.

26 MS. McSHANE: Well, corporate tax rates tend to be
27 higher, personal income taxes tend to be higher on interest.
28 Tax rates on capital gains are pretty close and taxes on
29 dividends are lower in Canada than in the US.

30 MR. FITZGERALD: And what about the treatment in
31 Canada versus the US regarding capital gains, there is a
32 difference?

33 MS. McSHANE: There is, the effective, I think the effective
34 tax rates are pretty similar at the moment. There is an
35 exclusion of a certain portion of the capital gain in Canada
36 before the tax is calculated, but effectively given the
37 changes in the capital gains tax rates in the US, they are
38 fairly similar at the present.

39 MR. FITZGERALD: The opportunities for investors in the
40 US versus the opportunities for investors in Canada, would
41 you identify a difference there ... if they were to prefer, let's
42 say, a home grown investment, if a Canadian was to invest
43 in a Canadian company and an American was to invest in
44 an American.

45 MS. McSHANE: Well, in that sense, if you mean that all,
46 if all Canadian investment were to be limited to the
47 Canadian market, I mean the Canadian market is quite small,
48 so the investments within Canada are, the opportunity for
49 investments within Canada is smaller than with the US,
50 which is one reason that Canadians invest to a great extent
51 outside Canada.

52 MR. FITZGERALD: Okay, so the risk premium test as I
53 understand you've portrayed it in your evidence, you have
54 selected the US market with the exception of any others to
55 arrive at your figure of 10.5 to 10.75 percent.

56 MS. McSHANE: When you say to the ... you mean that's
57 the only market I looked at in addition to the Canadian
58 market?

59 MR. FITZGERALD: Yes.

60 MS. McSHANE: Yes.

61 MR. FITZGERALD: You gave no consideration, did you
62 say to European markets?

63 *(12:00 noon)*

64 MS. McSHANE: No, one of the reasons is purely for lack
65 of data. We don't have long-term data going back that far.
66 I think there's data back to 1977. I don't view that as being
67 sufficient data as to provide a longer term view of history,
68 it wouldn't cover enough variation in different economic
69 and capital market events. The other reason is because the
70 US market is the benchmark market throughout, considered
71 to be the benchmark market throughout the world, and
72 third, the observed propensity to, for Canadians to invest
73 beyond domestic borders favour the US. The US economy
74 is much closer in fundamentals to ... I forget which one I
75 said first ... the US and Canadian markets are very close
76 fundamentally, so the US market would be the first,
77 probably the first choice for an investor who is seeking
78 something that wouldn't, which would take advantage of
79 the greater diversity of opportunities, investment
80 opportunities, but not seek to increase his risk, basic risk
81 exposure.

82 MR. FITZGERALD: Okay, all those reasons that you've
83 just indicated why you would select the US markets, you
84 haven't mentioned that it happens to be the market that
85 outperforms all others.

86 MS. McSHANE: It has outperformed the Canadian market
87 for sure.

88 MR. FITZGERALD: Do you know if it has outperformed
89 the European or the Japanese?

90 MS. McSHANE: Since I don't have data going back that
91 far ... (inaudible) clearly has not outperformed, it clearly
92 outperformed markets like the German market which had
93 basically a significant rupture during the 20th century, and
94 probably has outperformed in the long-run, the Japanese
95 market which has, we probably all know, the Japanese

economy has been in sort of a tailspin for the last, last number of years.

MR. FITZGERALD: By selecting the market that has outperformed all the others, would you think that that perhaps exhibits an upper bias in your selection?

MS. McSHANE: No, I think that I haven't selected that market exclusively. I haven't given a hundred percent weight to that. I have recognized that the Canadian market has underperformed relative to other markets in the world, and I have looked at the returns on the US market in relation to what forward looking expectations are, so I believe that I have appropriately reflected the performance of the US market in arriving at what is an estimate of investor expectations for future market returns, which is, again, the objective of the exercise.

MR. FITZGERALD: Okay, but you have exclusively used for the risk premium test, the US market. We don't have ...

MS. McSHANE: In addition to the Canadian market.

MR. FITZGERALD: And it's clearly outperformed the Canadian one.

MS. McSHANE: It clearly has and there's clear evidence that the Canadian market has underperformed.

MR. FITZGERALD: Now the third model or approach to analyzing what a fair rate of return would be is referred to as the discounted cash flow approach.

MS. McSHANE: Yes.

MR. FITZGERALD: This approach would provide a slightly higher rate of return that the risk premium approach. I believe your evidence indicates that you have a range between 11 and 11 1/4.

MS. McSHANE: Yes.

MR. FITZGERALD: Now these, this approach, and correct me if I'm wrong here, this approach relies heavily on forecasting, forecasting growth?

MS. McSHANE: It relies heavily on investment analysts' forecast of growth. The discounted cash flow model either requires an independent estimate of investors growth forecast, or it requires the analyst, him or herself to make that forecast. I have chosen to use, directly use the analyst's forecast of growth as the best estimate of what investors expect and therefore those growth expectations are implicitly embedded in the dividend yield component of the discounted cash flow test.

MR. FITZGERALD: Okay, there is no historical reliance, or is that in the history?

MS. McSHANE: There is historical reliance in the sense do I use historic growth rates?

MR. FITZGERALD: Yes.

MS. McSHANE: No.

MR. FITZGERALD: Okay, if I could have a look at Schedule 7 appended to your pre-filed evidence please? Okay, this table is marked the TSE 300 DCF Based Market Risk Premium Study, and I just want to take, for example, the year 1993, and it indicates there that the TSE growth is 10.0, first quarter. Now this table is generated in the year 2001.

MS. McSHANE: Yes.

MR. FITZGERALD: Correct, now the information where we see 1993, 1Q, I'm assuming that's the first quarter.

MS. McSHANE: Yes.

MR. FITZGERALD: And across from that, the 10.0.

MS. McSHANE: Yes.

MR. FITZGERALD: That's the forecast, is it not, of the TSE growth?

MS. McSHANE: That is what investment analysts forecast the long-term growth for the TSE companies would be in 1993.

MR. FITZGERALD: Okay.

MS. McSHANE: That's what they were forecasting them to be at that point in time.

MR. FITZGERALD: Right, it turned out not to be that though, is that correct?

MS. McSHANE: It would be ... I mean we don't know what the long-term growth is, and you can take various growth rates that have been achieved at specific points in time, and they're never going to match exactly because these growth rates as developed by analysts are intended to be normalized long-term growth rates which effectively ignore recessions and booms in the economy, so anytime you actually measure a growth rate over a period of time, you can't avoid going from a particular point in the business cycle to another particular point in the business cycle, so there is really no way that you can take an analyst's forecast of longer term growth and any specific achieved growth rate over some period and try to compare them.

MR. FITZGERALD: Okay, I think I understand what you have just said. This document though, the Schedule 7, is a document that indicates that the expected growth in 1993, the first quarter for TSE would be 10.0 percent.

MS. McSHANE: Well, let's understand what this is, and just because of the way you phrase it, I just want to make sure we understand what this number means. It doesn't mean that analysts expected the TSE earnings to grow by

ten percent.

MR. FITZGERALD: Sorry, they did or did not?

MS. McSHANE: They did not expect earnings of the TSE 300 companies to achieve growth of 10 percent in that quarter of the year.

MR. FITZGERALD: Uh hum.

MS. McSHANE: What they were doing is forecasting, they were forecasting at that point in time, what the long-term growth in the earnings of the TSE 300 would be.

MR. FITZGERALD: Yes, okay.

MS. McSHANE: So there is nothing on this schedule which even provides us with an estimate of, you know, what the longer term growth rates have been, so unless, you know, we have something which said, okay, here's what the expected growth, long-term growth in 1990, here's what they expected back in 1993 that long-term growth would be, and here's where we are in 2001, and over that period, 1993 to 2001, they become close to 10 percent. I mean that's the kind of comparison that you have to do.

MR. FITZGERALD: Yeah, well maybe we could do that if we look at **CA-139**, and it would be helpful to have both documents before you at the same time. I don't know if we can do that on the screen but ...

MS. McSHANE: The schedule, I can do it.

MR. FITZGERALD: **CA-139**.

MS. McSHANE: Okay.

MR. FITZGERALD: Okay, now if I look at **CA-139**, and look at 1993, because we are looking at 1993 in relation to your Schedule 7, the actual TSE dividend growth, a five year period, is negative 14.1 percent. That's what we now know occurred.

MS. McSHANE: Okay, but first of all, this is dividend growth, right, and these are earnings growth rates in the schedule, so we're not comparing apples and apples.

MR. FITZGERALD: Well, okay.

MS. McSHANE: And I think that I would take, even if we were, I would take you back to my earlier comment which was that these are intended to be normalized growth rates, not taking into account, or trying to smooth over the effects of recession or economic boom, and clearly the period that we're comparing isn't really correct either because we're talking about growth forecasts made in 1993 for the long-term, so we would be looking beyond 1993.

MR. FITZGERALD: Granted.

MS. McSHANE: Right.

MR. FITZGERALD: Granted, but we are seven or eight years later.

MS. McSHANE: Yeah, but the number you were pointing me to was negative 14.1.

MR. FITZGERALD: For 1993.

MS. McSHANE: Right, so the achieved growth in dividends in 1993, wasn't that ...

MR. FITZGERALD: Well, it's still ...

MS. McSHANE: But the forecasting is being done in 1993 for the forward period, not for a period ending in 1993.

MR. FITZGERALD: Well, perhaps we should go back then to the model, the discounted cash flow approach model. What do we plug into the formula? Do we plug in dividend growth?

MS. McSHANE: We plug in what investors' expectations of longer term growth in cash flows to them are. Typically the model is expressed as growth in dividends, but in principle, if the model works then earnings, dividends, and book value growth should all grow at the same rate, and the earnings form the basis for ... you can't have dividends without earnings ... so typically ...

MR. FITZGERALD: They're not one and the same? I'm sorry, they're not one and the same?

MS. McSHANE: Dividends and earnings?

MR. FITZGERALD: Yes.

MS. McSHANE: Dividends are paid out of earnings, so you have to have earnings to pay dividends.

MR. FITZGERALD: Okay.

MS. McSHANE: So it's very typical to look at, because there are no forecasts made in, or consensus forecasts in dividends, the typical approach is to look at the long-term forecast in earnings with the expectation that the growth in dividends should parallel the growth in earnings.

MR. FITZGERALD: Okay, okay, is it, you've already indicated, of course, that this theory, the DCF theory is based on forecasting.

MS. McSHANE: The DCF theory is based on being able to capture investor expectations which investor expectations are forward looking, and therefore, to the extent that we have direct estimates of investor expectations, those would be the most appropriate input to the model. It's been recognized that investor expectations are ... I'm sorry, investment analysts' forecasts are a better measure of investor expectations than historic growth rates.

MR. FITZGERALD: Okay, is it possible that investor analysis growth rates are upwardly biased?

MS. McSHANE: There is a possibility that in this particular regard, the schedule that we're looking at, Schedule 7, that there is optimism in those forecasts. That has been taken into account in developing the risk premium because there is a recognition that there is optimism. However, I would just say that you need to recognize that the optimism, the model is made up of two parts. It has the dividend yield component which takes the dividend and divides by the price and adds to that the growth expectation. The price itself is, embedded in the price is the estimate, is the investor's estimate of growth expectations, so if investors are optimistic, that's going to result in a lower dividend yield than otherwise, so there tends to be an offset, if there's optimism, in the forecast of growth because the dividend yield also reflects the optimism, but to the extent that they don't completely offset each other, that perhaps the dividend yield is not as, you know, lower by the same amount of the optimism in the growth rates, my estimate of the risk premium which uses these models as one parameter, takes that potential upward bias into account.

(12:15 p.m.)

MR. FITZGERALD: There is upper bias?

MS. McSHANE: There is some optimism which, the upward bias is in the sense that it's been recognized that compared to what's been achieved in growth that these estimates are usually, or have been in the last several years, optimistic.

MR. FITZGERALD: Indeed, I was just, if I could refer you to the article that you have filed, it's at **CA-133**, Freid and (inaudible). It looks like an academic journal.

MS. McSHANE: Sorry, which article are we looking at?

MR. FITZGERALD: I'm sorry, it's the article by Freid. It's entitled, *Financial Analysis, Forecast of Earnings*, and I believe you filed it in response to an IFR.

MS. McSHANE: This is from the *Journal of Accounting and Economics*?

MR. FITZGERALD: Yes, and at page 92. I'm referring now to page 92, the second paragraph, and this is really in agreement, I guess, with your last point. This journal discusses the financial analysis forecasts, and the last sentence of that second paragraph on page 92, they state, "The finding of some bias conforms to the persistent optimism of FAF", meaning Financial Analysis Forecasts, "reported by previous studies".

MS. McSHANE: Yes.

MR. FITZGERALD: So that's ... and further, the first sentence in the paragraph, "The bias of each model is provided by the fourth bottom panel in the table which shows the mean relative error measured over all cases. The results indicate some tendency for financial analysis forecasts to overestimate the next year's earnings".

MS. McSHANE: Yes, and then it says, "Yet the bias of FAF is present only in six of the eleven years, and except for the first three years, it appears to be quite small".

MR. FITZGERALD: Mr. Chairman, I'm wondering if that's a place for us to break.

MR. NOSEWORTHY, CHAIRMAN: I'll take your direction on that. We'll reconvene at 2:00, thank you, Ms. McShane, thank you, Mr. Fitzgerald.

(break)

(2:00)

MR. NOSEWORTHY, CHAIRMAN: Thank you. Good afternoon. If you were out lunchtime hopefully you're not too soggy this afternoon, uncomfortable to sit through an afternoon again. I'd like to ask counsel if there are any preliminary matters, Counsel, before we begin?

MR. KENNEDY: No, not that I'm aware of, Chair.

MR. NOSEWORTHY, CHAIRMAN: Ms. Greene, are there any undertakings?

MS. GREENE, Q.C.: No, Mr. Chair, there were no undertakings that were recorded yesterday so I have none to speak to today.

MR. NOSEWORTHY, CHAIRMAN: Thank you, very much. I'll ask Mr. Fitzgerald to continue with his cross with Ms. McShane, please?

MR. FITZGERALD: Thank you, Mr. Chairman. Ms. McShane, I wonder if we can go back to a topic we were discussing this morning regarding the range on the return of rate base which, I believe, not to put words in your mouth, but you, at one point, might have said, in this particular case, might be relevant?

MS. McSHANE: Yes.

MR. FITZGERALD: Okay. **CA-31**, if you could have a look at that, please? Okay. At line 18. You say "A review of the rates," that's Hydro's rates, obviously, "would be triggered if the return on rate base exceeded 10.2 percent." 9.2 plus 1.0. If Hydro did achieve that range have you calculated what that would translate into on a rate of return on equity?

MS. McSHANE: On a rate of return equity? No, I guess I haven't done that.

MR. FITZGERALD: I would suggest to you, and subject to check, obviously, that that would allow a rate of return on equity for Hydro for the test year of something in the

1 range of 30 percent.

2 MS. McSHANE: Well, this was supposed to be an
3 illustration at a 70/30 capital structure. And if I were to do
4 it at 85/15 I would recommend something different than
5 that.

6 MR. FITZGERALD: So something lower?

7 MS. McSHANE: Yes. Because effectively, what you'd
8 have is 85 percent of your debt whose cost is effectively
9 fixed. I mean, there would be some variation for new ... on
10 new issues, and 15 percent of equity. So if you look at an
11 85/15 and said that a reasonable range for the return on
12 equity would be, let's say, 200 basis points, then, on either
13 side, then if you put that together with 85 percent debt and
14 allow a 25 basis point differential. I mean, there's no magic
15 to this and it's just trying to come up with something that's
16 reasonable. Then you could say that the upper end of the
17 range would be 85 percent, and if you allowed a 25 basis
18 point differential on the debt that would get you to 855.
19 And 15 percent return ... I'm sorry, 15 percent equity times
20 upper end of the range, 13 and a quarter, then that would
21 get you to about nine and a quarter percent return on rate
22 base. So that would represent the level at which you would
23 start, you would consider issuing a refund to customers.

24 MR. FITZGERALD: Okay. So when I look at **CA** or when
25 the Board looks at **CA-31**, obviously, the review that you
26 refer there at line 18 and 19, that has no application to the
27 case at hand?

28 MS. McSHANE: Not this year, no.

29 MR. FITZGERALD: Okay. Now, on the theme of the
30 reasonable rate of return I'm wondering if I could ask you
31 to look at your pre-filed evidence at page 35?

32 MS. McSHANE: Yes, I see that.

33 MR. FITZGERALD: Okay. See the footnote there?

34 MS. McSHANE: Yes.

35 MR. FITZGERALD: The question I have for you is, could
36 you tell us who does the bulk of trading of common equity
37 in the markets, are they institutional or retail investors?

38 MS. McSHANE: The primary would be institutional, but
39 retail investors have become a larger part than typically in
40 the past. But institutional investors are the investors who
41 move large blocks of stock, and therefore, those who
42 effectively move the market.

43 MR. FITZGERALD: Okay. Could I translate that to mean
44 that their movements, if you will, determine the price of the
45 common equities?

46 MS. McSHANE: More so than individual investors, yes.

47 MR. FITZGERALD: Okay. So, when I look at this footnote
48 that's included here at page 35 for illustrative purposes, it
49 says "To illustrate, according to a September, 1998 pole
50 reported by the Wall Street Journal the average annual
51 return investors expect from stocks over the next ten years
52 was 16 percent." Now, the investors you're referring to
53 there are not institutional investors, are they?

54 MS. McSHANE: No. They're individual investors.

55 MR. FITZGERALD: Right. So, you're not suggesting, are
56 you, by this footnote, that this Board should seriously
57 consider equity risk premiums to be 10 to 15 percent or
58 something in that range?

59 MS. McSHANE: What I'm saying is that if you look at
60 what the investment analysts are projecting as far as
61 growth rates, and the investment analysts come out of the
62 same institutions as the institutional traders, and you
63 compare that to what the retail investors are saying, they
64 expect that there is a consistency between what the
65 investment houses are saying, on the one hand, and the
66 retail investors are thinking on the other hand. No, I'm not
67 asking the Board to approve a risk premium of number that
68 shows up in the schedule that we were talking about before
69 lunch, which was Schedule 7, where the indicated risk
70 premium in 2000, based on earnings forecast and dividend
71 yields is, you know, been in the range of 8.2 to nine and a
72 half. It does provide an input, however, into an estimate of
73 what the expected risk premium is. And you know, the fact
74 that it doesn't come out ... that I don't say that is it that
75 number verses any other specific number doesn't mean that
76 it's not a valuable piece of information into determining
77 how expectations compare to history.

78 MR. FITZGERALD: Your reference to Schedule 7, we have
79 determined this morning, I guess, that that is a forecasting
80 set of figures, if I can put it that way?

81 MS. McSHANE: The growth rates represent investments
82 analysts, yes.

83 MR. FITZGERALD: Yeah.

84 MS. McSHANE: It's forecast of earnings, long-term
85 earnings growth. Of course, forecasts typically take into
86 account what history has been. I mean, and to the extent
87 that history is relevant in developing forecasts those will
88 be built ... those historic earnings will be built into the
89 forecasts of what is to come.

90 MR. FITZGERALD: I'd ask you, please, now to refer to
91 page 49 of your testimony?

92 MS. McSHANE: I have that.

93 MR. FITZGERALD: Okay. I may have given you an
94 incorrect reference there. Just allow me a second. I'm
95 sorry, if you could actually read into the record for me,
96 please, line 25 to 31?

MS. McSHANE: "The application of the comparable earnings test first requires the selection of a group of Canadian industrials of generally similar risked utilities. The selection should conform to investor perceptions of the risk characteristics of utilities which are generally characterized by relative stability of earnings, dividends and market prices." Did you want me to continue?

MR. FITZGERALD: If you would.

MS. McSHANE: Okay. "These were the principal criteria for the selection of the Canadian industrial companies from consumer oriented industries resulting in a sample of 17 companies."

MR. FITZGERALD: And when you refer there to this selection process vis-a-vis the comparable earnings test, this is your selection process, is it?

MS. McSHANE: Yes.

MR. FITZGERALD: Yes, that's on the screen. Yeah, okay. Then if I could ask you to refer to **CA-134**, please

MS. McSHANE: Yes, that's on the screen.

MR. FITZGERALD: Okay. Now, just sort of drills down a little bit more to just exactly what the selection process was with these 17 comparables. If you could read commencing, please, if you would, from line 12 to line 19?

MS. McSHANE: "Stability of earnings, dividends and market prices were the principal criteria governing the selection of low risk industrials from the universe. This universe of 95 Canadian companies is comprised of all firms with (1) sufficient historical book in market data over the study periods, (2) common equity of 50 million or greater, and (3) 125,000 common shares or more traded annually. From this universe all firms that had cut their dividends by more than 25 percent or had not paid dividends since the beginning of the most recent point to point business cycle, 1991, or eliminated leaving 35 companies."

MR. FITZGERALD: Now, could you inform the Board what type of company is likely to reduce or not pay dividends?

MS. McSHANE: Well, a company that's not likely to pay dividends is a company that is in growth mode. A company that has reduced its dividends may do so for a number of reasons. (1) because its earnings have deteriorated to the point where it no longer can sustain dividends, or (2) because it has changed its strategy at some point and decided that instead of paying out funds in dividends that it will use the funds to finance growth opportunities, or (3) it might have cut dividends because it's decided instead to repurchase shares rather than to pay dividends as a strategy of compensating its investors.

MR. FITZGERALD: So, you wouldn't equate this cutting their dividends by ... companies that cut their dividends by 25 percent or had not paid dividends as necessarily companies that have poor earnings?

MS. McSHANE: Not necessarily. But the idea is that companies with stable earnings are companies that will tend to have stable dividends. So there will be a tendency to cut companies whose earnings are unstable by virtue of the fact that you're eliminating companies with a poor dividend history. The idea was that utilities are typically companies that pay dividends consistently over time and that was considered to be a major characteristic of a utility. And as a result, it was important that I choose characteristics that were compatible with the characteristics of utilities.

MR. FITZGERALD: Practically speaking, though, if you leave out these companies from your selection universe who have had poor earnings haven't you then excluded from your comparable earnings test companies that have low rates of return?

MS. McSHANE: You may have excluded some companies whose returns are low from the universe. That doesn't mean they would have ended up in the sample, anyway, because ...

MR. FITZGERALD: Well, certainly they wouldn't have at all if you ...

MS. McSHANE: No. I mean, I agree with you, they can't end up in the sample if they're not in the universe. But the way the criteria are designed, if one of the other criteria is stability of earnings, which it is, and cutting dividends is inconsistent with stability of earnings, then those companies wouldn't have ended up in the sample, anyway. I mean, they would have started out in the universe, but wouldn't have ended up in the sample of comparable companies.

(2:15)

MR. FITZGERALD: If I could ask you now to refer to page 50 of your pre-filed evidence?

MS. McSHANE: Yes.

MR. FITZGERALD: Line 7.

MS. McSHANE: Yes.

MR. FITZGERALD: And I'll spare you reading it, I'll just read it there. "Over the past point to point business cycle, `91 to `99, the experience returns on equity of this sample of 17 industrials average approximately 12.5 to 12.75 percent." That's correct, obviously?

MS. McSHANE: You read that very well.

MR. FITZGERALD: Thank you.

1 MS. McSHANE: You may read for me any time.

2 MR. FITZGERALD: I may offer that again. Now, could
3 you have a look, please, at **CA-142**? Now, here are the 17
4 industrials, I believe, that you referred to?

5 MS. McSHANE: Yes.

6 MR. FITZGERALD: That's indicating their rate of return is
7 12.5 to 12.75?

8 MS. McSHANE: Yes. These are the market to book ratios
9 on **CA-142?**

10 MR. FITZGERALD: Yes.

11 MS. McSHANE: Yes.

12 MR. FITZGERALD: Okay. And I'd like you to, perhaps,
13 tell us what you observe there in the column for the year
14 2000, what the median marketable ratio was for these 17
15 companies?

16 MS. McSHANE: 2.4 times.

17 MR. FITZGERALD: Now, wouldn't it be true that if
18 investors are willing to pay 2.4 times the book value,
19 doesn't this suggest to you that the possibility that the
20 required return by investors are below the observed return
21 on book equity of 12 and a quarter, 12.75?

22 MS. McSHANE: The market derived cost of attracting
23 capital may be below the comparable earnings test result,
24 but the companies achievable returns on book equity are in
25 the range laid out on page 50, and provided, in detail, on
26 Schedule 16. These are a measure of the opportunity cost
27 as in the context of the way in which utilities are regulated
28 and that is on original costs. These are the achievable
29 earnings by low risk industrials measured on original cost
30 book value.

31 MR. FITZGERALD: Isn't the market price bid up by
32 investors, though, new investors, is that ...

33 MS. McSHANE: The market price of the stock may be bid
34 up by investors, but these are the returns that are
35 achievable on book value and this is the way returns are
36 set in ... under original cost rate base regulation, and as
37 such, they provide an estimate of the opportunity cost, by
38 reference to a measure, which uses the same methodology
39 as the application of the return on rate base.

40 MR. FITZGERALD: Okay. These aren't the required
41 returns, though, are they?

42 MS. McSHANE: This is not the cost of attracting capital,
43 no. This is not the investor required return on market
44 value.

45 MR. FITZGERALD: On page 52, if you would, Ms.
46 McShane? If you could read that into the record for us,
47 please, I'd appreciate it, commencing at line 25, ending at
48 line 28?

49 MS. McSHANE: "However, the recent levels of allowed
50 returns on equity for Canadian utilities are considered by
51 the investment community to be lower than those available
52 on alternative investments of similar risk."

53 MR. FITZGERALD: Okay. And the allowed returns which
54 you're referring to there are shown in your Schedule 19, I
55 believe?

56 MS. McSHANE: Yes.

57 MR. FITZGERALD: Okay. Now, are you suggesting, from
58 the text of your evidence that you just read, that the
59 allowed returns by regulators in Canada are inadequate?

60 MS. McSHANE: Compared ... in compared to what allowed
61 returns are in the U.S., which are the closest proxy and
62 compared to alternative returns available from ... or
63 investment returns from alternatives, yes.

64 MR. FITZGERALD: Yeah. I guess, I mean, the basic
65 answer, then, is that they are inadequate, in your opinion?

66 MS. McSHANE: Yes.

67]MR. FITZGERALD: Yes, okay. I have the right schedule
68 up there, actually, Mr. O'Rielly. Okay. If you could just
69 actually shift that over, Mr. O'Rielly, I want to look at the
70 returns for 2001 in Schedule 19 of Ms. McShane's, page 2
71 of 2. Okay. Now, here, if you're with me, we have ... I'm at
72 page 2 of 2 of your schedule. In the year 2001 we have
73 actuals, these are actual returns?

74 MS. McSHANE: On Schedule 2?

75 MR. FITZGERALD: Yes.

76 MS. McSHANE: No.

77 MR. FITZGERALD: Allowed, I'm sorry. These are
78 regulated rates of return?

79 MS. McSHANE: Yes.

80 MR. FITZGERALD: Okay. The average of electrics 9.67?

81 MS. McSHANE: Yes.

82 MR. FITZGERALD: That includes Newfoundland Power?

83 MS. McSHANE: Yes.

84 MR. FITZGERALD: If I could ask you, then, to look at **CA-**
85 **144**, please?

86 MS. McSHANE: Yes.

87 MR. FITZGERALD: This is a market to book ratio
88 schedule, if you will, referring to some of those same
89 companies that we were looking at in your Schedule 19,
90 page 2?

1 MS. McSHANE: A very couple of them.

2 MR. FITZGERALD: A very couple of them. We have ...
3 excuse me, I misplaced my schedule. Okay. Looking at
4 Schedule 19, page 2 of 2 and looking at **CA-144** at the same
5 time, if you can do that for me?

6 MS. McSHANE: Schedule 19, page 2 of 2?

7 MR. FITZGERALD: Right.

8 MS. McSHANE: And?

9 MR. FITZGERALD: And **CA-144**. You might have to do
10 that with the hard copy.

11 MS. McSHANE: Okay.

12 MR. FITZGERALD: Now, the regulated rate of return, say,
13 for example, for B.C. Gas Utility, I'm looking at Schedule 19.

14 MS. McSHANE: It's the allowed return for B.C. gas?

15 MR. FITZGERALD: Yes.

16 MS. McSHANE: Yes.

17 MR. FITZGERALD: Nine and a quarter has been allowed.
18 If we look at **CA-144** market to book ratio in 2000, and that
19 may not be fair to compare two different years, but they're
20 pretty close, the shares are trading at a book value one to
21 six market book ratio?

22 MS. McSHANE: Well, B.C. Gas, first of all, is made up of
23 a lot more than B.C. Gas Utility, it's also made up of Trans
24 Mountain Pipeline, which is not subject to a specific rate of
25 return. In fact, it's subject to a settlement agreement which
26 allows it to keep whatever returns it earns in excess of
27 what's provided for the settlement. In addition, there are
28 non-regulated, some non-regulated investments. And as
29 I recall, the last B.C. Gas, the report that I looked at said
30 that the target rate of return on common equity for the
31 corporation was 12 percent, which is considerably higher
32 than the allowed nine and a quarter.

33 MR. FITZGERALD: Would you know, currently, off the
34 top of your head, say, what the market book ratio would be
35 for Fortis Inc.? I don't think it's on **CA-144**.

36 MS. McSHANE: On, no, it's not, no. I want to say 125 but
37 I'm not sure. Peter can tell you.

38 MR. FITZGERALD: It's trading over market over book,
39 though, it's exceeded?

40 MS. McSHANE: Oh, I've not ... yes, it's possible that it's
41 over one.

42 MR. FITZGERALD: Yeah. More than ...

43 MS. McSHANE: But again, I mean, we're talking about,
44 you know, a company that has in it Maritime Electric which
45 is allowed to earn 11 percent now. It also includes all the
46 Fortis non-regulated properties and investments in Balize,
47 the Grand Caymans, Ontario, as well. So it's not just the
48 Newfoundland Power regulated investment.

49 MR. FITZGERALD: Of those different enterprises that you
50 mention that are part of Fortis, do you know which of those
51 is outperforming the other?

52 MS. McSHANE: Well, I don't know specifically what the
53 rates of return on the individual components are, no. But
54 the market to book ratio, don't forget, represents what
55 investors' expectations are for the future, it doesn't
56 necessarily reflect what a particular investment happens to
57 be earning in any given year.

58 MR. FITZGERALD: Okay. According to your schedule,
59 the regulated rate of return, 2001 for Newfoundland Power
60 is 9.59?

61 MS. McSHANE: That's what the allowed rate of return
62 was, right.

63 MR. FITZGERALD: Yes. We know, I guess we could take
64 notice of the fact that Fortis is the sole shareholder of
65 Newfoundland Power?

66 MS. McSHANE: Yes.

67 MR. FITZGERALD: And the shares of Fortis, although,
68 granted, made up of ... or it's a fairly large enterprise, are
69 trading at a favourable rate right now?

70 MS. McSHANE: If you mean by a "favourable rate" are
71 they trading at a market to book above one?

72 MR. FITZGERALD: Yeah.

73 MS. McSHANE: Yes, they are trading at a market to book
74 slightly above one. Are they trading at a favourable market
75 to book ratio, if you compare that market to book ratio to
76 the average market to book ratio even now of the S and P
77 500, which is about six times, no, they're not. So, it's ... yes,
78 it's a little bit over one, but clearly, not what I would call
79 favourable in terms of relative valuations.

80 *(2:30)*

81 MR. FITZGERALD: You are aware, of course, that it was
82 this particular Board that set the regulated rate of return for
83 Newfoundland Power in 2001?

84 MS. McSHANE: Yes, I'm aware of that.

85 MR. FITZGERALD: And, while you will not agree with me
86 that Fortis' shares are trading at a favourable rate, they are,
87 at least ... no one is losing money with the investment in
88 Fortis? You say it's not a favourable market to book ratio
89 ...

90 MS. McSHANE: Well, I guess all I was trying to say was
91 that it depends what your comparative is. If your

comparative is the rest of the market, then it's not. If your comparative is simply one, it's slightly over one.

MR. FITZGERALD: Compared to the rest of, you said the market. Maybe you could remind me, comparable to whom?

MS. McSHANE: Well, I gave you an example, the S and P 500, because I happen to know that number off the top of my head. Compared to the TSE 300, I think the market to book ratio TSE 300 is ... I haven't calculated it recently. The last time I looked at it it was about three times. If you look at the industrial companies in that sample, I mean, they've clearly been able to maintain market to book ratios valuations in excess of one consistently, I mean, and one would expect that to be the case. So, one times verses three times is, a utility verses the TSE 300 is what I was, you know, referring to or the S and P 500 or any other number of indices that are diversified.

MR. FITZGERALD: If a regulated company earns its cost of capital shouldn't the market book ratio be 1.0?

MS. McSHANE: If it only earned the bare bones of attracted capital then the market to book ratio should equal one. And if it's earning something that's equal to the comparable earning standard, then, yes, you would expect it to be able to achieve a market to book ratio in excess of one.

MR. FITZGERALD: So, then, Fortis has got some skin on its bones, then, I guess?

MS. McSHANE: Has some skin, I don't understand that expression.

MR. FITZGERALD: Okay.

MS. McSHANE: Has skin ... meat on its bones, but skin, I'm not sure about.

MR. FITZGERALD: Let's start with the muscle tissue, then.

MS. McSHANE: Okay.

MR. FITZGERALD: Obviously, Fortis is not bare bones?

MS. McSHANE: No, that's ... I mean, don't forget that Fortis is more than the utility.

MR. FITZGERALD: No, I understand that.

MS. McSHANE: So the book value of utilities, obviously, means significantly more than the book value of non-utility operations, so ... because you've got a company that's got both utility and non-utility I don't think that you can conclude that it's earning an excess of its cost of capital.

MR. FITZGERALD: Just a few more questions, Ms. McShane. Back to where we started regarding the recommended rate of return for this particular enterprise, Hydro. You have advised this Board, in your estimation, the proper recommended return or your recommended return for Hydro is 11.0 to 11.5 percent with a mid range of 11.25?

MS. McSHANE: Yes.

MR. FITZGERALD: Okay. Now, could you please refer to **CA-137**? Now, this is a table in response to an information request regarding your past recommendations before other regulatory boards regarding other regulated entities. Now, I could do the math here or you can do the math. I'm not sure if you have your calculator with you. But it appears, if you scroll down through that and you compare your recommended to the actual allowed return on equity that, in fact, you have your recommendations, your recommendations have been overstated by a level of about 1.4 percent. Do you accept that?

MS. McSHANE: Well, I would accept that the boards have approved returns that are, on average, 1.4 percent below. I don't like your characterization of them being overstated. But yes, they have been, the approved returns have been lower than what I have determined to be a reasonable return.

MR. FITZGERALD: Okay. Alright. Thanks, Ms. McShane. That's all my questions, Mr. Chairman.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Fitzgerald. Thank you, Ms. McShane. I'll move now to Mr. Kennedy's cross, please?

MR. KENNEDY: Thank you, Chair. Ms. McShane.

MS. McSHANE: Good afternoon.

MR. KENNEDY: Ms. McShane, the first thing I wanted to do is just try to get to the bottom, if you will, of your opinion regarding Hydro's applied for rate of return. And I'm not sure if you've had an opportunity to review Mr. Wells' testimony?

MS. McSHANE: His testimony, you mean his actual written pre-file testimony?

MR. KENNEDY: No. His testimony in the hearing itself?

MS. McSHANE: The transcript?

MR. KENNEDY: That's correct.

MS. McSHANE: I did read the transcript, yes.

MR. KENNEDY: Okay. And in my cross-examination of Mr. Wells I made note of the fact that he had referred to the applied for rate of return being based on a return on equity of three percent in somewhat derogatory terms. His phraseology was that it was idiotic and that it was a no brainer, and there, alternatively, in the transcripts of the 26th and in the transcript of September the 24th. And I also

note that in your own pre-file testimony, and I believe Mr. Fitzgerald just brought you to this, but at page 55 of your testimony you indicate that since Hydro ... I'd better just read the specific line. It's at line 16. This was in your discussion about the use of a range. And then you continued that "Since Hydro is only seeking to earn a return on equity of three percent the requested return on rate base understates its true cost of capital." At page 56 of your pre-filed ... actually, the sentence begins at the bottom of page 55 at line 23. "Since Hydro is requesting a return on rate base of only 7.4 percent it would not be reasonable to conclude that Hydro's actual return on rate base will be required to fall short of an already inadequate return before it could again bring an application for a rate increase to the Board." In light of all these comments by both yourself and Mr. Wells, himself, concerning the return on equity and then the resulting return on rate base that falls out of that return on equity, I'm wondering if you could provide to me your professional opinion as to whether a 7.4 percent rate of return on rate base, based on a three percent rate of return on equity is a fair and reasonable rate of return as construed under the Public Utilities Act and the Electrical Power Control Act?

MS. McSHANE: No, it is not.

MR. KENNEDY: I'd like to turn now to the rate base issue, if I could? On page 12 of your pre-filed evidence at line 21 there's a question as a follow-up to the capital underpinning the financing of the utility assets. "What if there is specific capital that can be identified with non-utility assets?" And your reply is "That capital would be removed from the corporate capitalization to arrive at the utility only capitalization. Hydro did this by removing the debt and equity retained earnings specifically attributable to Hydro's investment in Churchill Falls and removing from equity Hydro's earnings from recall energy." I just wanted to ask you what your view is, first, on the fact that Hydro is, in itself, a utility generator and transmitter and, in some cases, distributor, and that these assets that we're backing out are utility related as opposed to, in the case of Fortis, there is some non-utility aspects to Fortis. And given that, in some respects, Hydro is treated on a consolidated basis, and we'll look to that specifically in a minute, I'm just wondering if you could provide the Board with some guidance about taking those aspects of its utility operation out of some aspects of its regulated environment and, yet, they still remain in other aspects like the consolidated statements that the rating agencies use?

MS. McSHANE: Well, I don't think that what is done for financial statement purposes has much bearing on what should be done for regulatory purposes. What the regulators should be concerned with are the assets and financing that are associated with the utility. And as a result, to the extent that utility assets and related financing can be kept separate, they should be.

MR. KENNEDY: Okay. Let's just turn to page 23 of your direct ... or your pre-filed. There's reference in your pre-filed testimony there beginning at line 19 in response to the question of reconciling Hydro's 1999 capital structure with its forecast capital structure for the test year 2002. Of Hydro's ... it's at the beginning of line 21. "Hydro's forecast non-consolidated debt ratio for 2002 of 71 percent, inclusive of the financing of the investment in Churchill Falls, is directly comparable to the 63 percent debt ratio in 1999 cited in the DBRS report. So, it is the case that the rating agencies look to the consolidated company when determining the bond rating?

MS. McSHANE: That's absolutely correct, they do.

MR. KENNEDY: And in that regard, how does that, then ... how is that, then, taken into account in determining what the appropriate rate of return is for Hydro as the utility without these assets in it?

MS. McSHANE: The typical approach that has been taken, because Hydro is not alone in having non-regulated operations, is to deal with the utility on a stand alone basis, and to determine what the appropriate capital structure would be for a utility without any regard to operations in non-utility areas and to determine what a rate of return, allowed rate of return on the utility assets should be, without any concern with what the returns are from the non-regulated operations.

MR. KENNEDY: So, at page 16 of your pre-filed at line 16, in response to the question of describing the principals that underpin the financing of Hydro's utility operations as a commercial entity?

MS. McSHANE: Yes.

MR. KENNEDY: You state that you start with the proposition that a utility, a Crown corporation or investor owned should be financed in a manner which is compatible with commercial viability on a stand alone basis without subsidies as among stakeholders. And I believe that you've already been referred to this particular paragraph?

MS. McSHANE: Yes, right.

MR. KENNEDY: And I have a couple of questions in that regard. One is, you say Crown corporation or investor owned. So, is there, in your mind, a distinction between the two, that we would treat a Crown corporation or an investor owned corporation differently for the purposes of if they were a regulated utility?

MS. McSHANE: No. Are you referring because I used the word "or"?

MR. KENNEDY: Yes. So ...

MS. McSHANE: Oh, so as opposed to the word "and." No, there was no substantive difference to be attributed to that choice.

MR. KENNEDY: Okay. So we would say it's a conjunctive "or" rather than a disjunctive?

MS. McSHANE: Yes.

MR. KENNEDY: Okay. So in your opinion, for the purposes of providing a regulatory environment, it's irrelevant of whether Hydro is a Crown corporation or an investor owned corporation?

MS. McSHANE: For this starting purpose, that's correct.

MR. KENNEDY: And that in regards to it being treated as if it's on a stand alone basis, again, we ignore, from your opinion, the Board should ignore the fact that it is just part of a larger operation that, in some respects, gets treated on a consolidated basis and other respects shouldn't, and this is one of the respects where it shouldn't?

MS. McSHANE: Yes. And maybe I can give you just a couple of examples.

MR. KENNEDY: Sure.

MS. McSHANE: To indicate that this is typical. Take a company like Trans Canada Pipelines, which has always had a significant number of non-regulated operations. The National Energy Board only looks at the consolidated capital structure to assure itself that the total amount of equity in the company is sufficient so that the utility capital structure is not giving a subsidy to the non-utility capital structure. So it says, let's determine what the risks on a stand alone basis of Trans Canada Pipelines, the regulated utility are. Let's determine what an appropriate capital structure for that entity is and then let's make sure that, in total, I have enough equity in the firm on a consolidated basis so that I can actually have whatever the deemed capital structure for the Pipeline is and an appropriate equity for the non-utility operations. But it doesn't take the consolidated capital structure and say that that, irrespective of what it is, belongs against the utility assets.

(2:45)

MR. KENNEDY: So using an example, in the case of Newfoundland Power being a wholly owned subsidiary of Fortis, that the Board looks at Newfoundland Power as a stand alone utility and in turn, its capital structure, but that it has to ensure that there's no subsidization that takes place between Newfoundland Power and Fortis because you can look at Fortis' capital structure as a market ... on a market basis?

MS. McSHANE: Well, Fortis and Newfoundland Power are a little bit different than the example I was just giving you, because Trans Canada Pipelines is a single entity. It doesn't have subsidiaries that raise their own capital, so capital is only being raised at one level at Trans Canada Pipelines. In the case of Newfoundland Power, Newfoundland Power raises its own debt, it has its own debt rating. And it's, the last I looked it has a A, A minus debt rating. So, if customers are paying the cost of debt that is incurred by Newfoundland Power, not Fortis, so as long as the company has its own financial structure and its own debt rating there really isn't any need to look beyond Newfoundland Power to Fortis. And in the case of Trans Canada, because of the way its structured, there is.

MR. KENNEDY: And in the case of Newfoundland and Labrador Hydro there is or there isn't?

MS. McSHANE: There would be. You would want to make sure that, in total, it was enough equity to be supporting the capital structure that you say is utility.

MR. KENNEDY: In the case of it being treated as an investor owned company, is there any difference, in your view, between whether it's a broadly held or whether it's a closely held corporation?

MS. McSHANE: In terms of what a fair and reasonable return is?

MR. KENNEDY: Yes.

MS. McSHANE: No, absolutely not. I think that that leads us down a slippery slope when you say that I should have a different return from another company just because, you know, I happen to be owned by a single shareholder. It doesn't make any sense, to me, to conclude that if I'm held by one shareholder and all of a sudden I'm sold into the market to a broad range of shareholders that all of a sudden a return of equity should be different. It should be the risk of the assets and the financial structure, not who owns the shares.

MR. KENNEDY: And so, in the case of if I'm a shareholder of some fictitious company and I'm one of millions of shareholders of that fictitious company I am entitled to earn the same rate of return as if I owned the company outright, every one of their shares, I should be compensated equivadently?

MS. McSHANE: In principle, yes. I mean, the fact ...

MR. KENNEDY: Given that the business risk hasn't changed?

MS. McSHANE: ... of the matter is that you may be able to achieve some efficiencies and be able to earn some returns that are different because of the way the ... if management and shareholder happen to be the same entity. But, as a matter of principle, for a utility there's no reason to say that

as a single shareholder I should have a return that's ... or my ratepayer should pay a return that's different from the return that's paid by a utility which is held by many shareholders.

MR. KENNEDY: And that, just to be sure, that, again, is regardless of, well, what rights I may be able to exercise a majority or sole shareholder of a company as opposed to if I was a minority shareholder of a company?

MS. McSHANE: Let's understand that I'm dealing specifically in terms of utility regulation here. And I would suggest that that consideration should not bear on what the fair and reasonable return on equity is, because ultimately it's who's paying the return. The ratepayers are paying the return and the ratepayers shouldn't pay a different return just because of who happens to own the company they're served by.

MR. KENNEDY: But the ratepayers pay the return determined as to what's fair to the investor, though, right, not what's fair to the ratepayer?

MS. McSHANE: Well, it has to be. You know, we're balancing the interests of consumers and ratepayers. So what's fair to the investor is a rate of return that, you know, meet the very standards that we all accept as apple pie and motherhood, and the ratepayers don't deserve to face different rates of return simply because of who the company is owned by. It shouldn't be who it's owned by, but what the basic business and financial risks to the company are.

MR. KENNEDY: Chair, that's a good opportunity to break.

MR. NOSEWORTHY, CHAIRMAN: Okay. Thank you, Mr. Kennedy. We'll break until ten after, please?

(break)

(3:15 p.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you. Could I ask Mr. Kennedy and Ms. McShane to continue, please?

MR. KENNEDY: Thank you, Chair. Ms. McShane, under *The Electrical Power Control Act*, Section 3(a)(iii), which is, I believe, a provision that's already been referred to you, and I think actually you quoted in your own direct testimony at one point, and this is the section of the *EPCA* that provides that, "It's the policy of the province that the rates to be charged, either generally or under specific contracts, for the supply of power within the province should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under *The Public Utilities Act* so that it is able to achieve and maintain a sound credit rating in the financial markets of the world." And then I wonder if we could just turn to **Section 80 of *The Public Utilities Act***. This is the fair and reasonable provision of *The Public Utilities Act*, and it's right there in sub 1, "A public utility is entitled to earn annually a just and reasonable return as determined by the Board on the rate base as fixed and determined by the Board for each type of service," so and so on. The rest of it is for our purposes here, at least my line of questioning, not particularly relevant, so. So I guess the Board's mandate is as provided under that Section 3 of the *EPCA* and then it dovetailing with Section 80 of *The Public Utilities Act*, and I'm wondering, you've already been asked a question about the fact that the stand-alone basis on which you're recommending that the Board treat Hydro.

MS. McSHANE: That would be the point of departure for determining what a just and reasonable return would be overall, yes.

MR. KENNEDY: Right. And I don't know if you were specifically asked, so I thought I would just come back to it, but your phrasing as well of treating the Utility as if it's investor-owned, are they too your own words or your own opinion in interpreting the provisions of the *EPCA* or of *The Public Utilities Act* in determining what's a fair and reasonable return, because I don't see those specific words in either one of those provisions?

MS. McSHANE: Then I guess the answer is, generally speaking, yes, that is how I would interpret those phrases and I believe that those phrases are consistent with regulating a Crown corporation on the basis of appropriate economic principles, and I have applied the economic principles to Hydro that relate to the opportunity cost that it incurs on the assets that are devoted to the public service.

MR. KENNEDY: Previously you had noted that, you know, Government had specifically chosen a Crown corporation as the vehicle through which it would provide the utility service to its public as opposed to, I think you alluded to of it being a division of Government, I think was ...

MS. McSHANE: Yes.

MR. KENNEDY: ... the phrasing that you used, and I guess I took from that, and I'm wondering if you agree, that, you know, that the Government specifically chose a Crown corporation versus it being a Government department and that that sends a certain signal about how it wishes this enterprise to be treated.

MS. McSHANE: I think that's fair, that the establishment of the corporate entity sends the message that this operation is a commercial entity which supplies services at cost where the costs are appropriately measured, and at the same time indeed has a public service role and that role typically for Crown corporations has been described as

1 providing universal service at affordable and universal
2 rates.

3 MR. KENNEDY: So would you agree then that the fact that
4 Government chose not to privatize its utility, that it chose
5 to use a Crown corporation instead of just allowing a
6 private enterprise, truly private enterprise, to run the
7 operation, was in itself also a signal?

8 MS. McSHANE: Oh, I think that's true. There are certain
9 signals that are provided by that choice and those are
10 primarily, I think, that there are resources that the
11 Government believes should not, should stay basically
12 under the control of the Government and that it may want
13 to assure that because of the demographics of the service
14 area that it is in a position to ensure that universal service
15 remains the norm.

16 MR. KENNEDY: And that if it had employed a vehicle that
17 was a completely private company, that it may lose its
18 ability to exercise certain social policy directions that it
19 might otherwise want to exercise. Is that fair? That might
20 be one of ...

21 MS. McSHANE: Can I ...

22 MR. KENNEDY: ... one of some consideration?

23 MS. McSHANE: It may have and I can only speculate on,
24 you know, whether that's a concern of governments who
25 have indeed looked at privatization and who've determined
26 that that's not the way they want to go. Having said that,
27 the Government, whether or not the utility is privately
28 owned or publicly owned, still has the ability through
29 legislation to use those utilities as instruments of social
30 policy. All you have to do is look at Alberta, for example.
31 I mean, the Alberta utilities didn't come to the Government
32 of Alberta and say restructure us, please. It was the
33 Government of Alberta who believed that it was in the best
34 interest of consumers to restructure the industry and thus
35 ordered it.

36 MR. KENNEDY: And that's always the case no matter what
37 the industry as well, that Government has, through its
38 legislative powers, the ability to restructure any industry ...

39 MS. McSHANE: Correct.

40 MR. KENNEDY: ... private or otherwise. So in the case of
41 the Utility, of the generation, transmission and distribution
42 of electricity in the province, is it fair to say then that what
43 we have is sort of a mid point or at least some point on a
44 continuum between a Government department operated
45 vehicle and a completely private company, that a Crown
46 corporation fits somewhere in between those two points?

47 MS. McSHANE: I think that's probably fair.

48 MR. KENNEDY: Okay. And so should, when the Board is
49 determining what's a fair and reasonable rate of return for
50 this Crown corporation, and also how it's to operate
51 financially, you know, internally, that it should take that
52 into account, that it can't be treated as if it was a
53 Government department in the same way that it can't be
54 treated as a purely private company, that it's its own unique
55 vehicle and that it's a Crown corporation?

56 MS. McSHANE: I think that there is something to be said
57 for recognizing that it's a Crown corporation because that's,
58 those are the facts, and I guess that what the Board has to
59 do is to determine whether or not, on subject matters at
60 hand, whether there is from an economic perspective
61 significant differences between the investor-owned utility
62 and the Crown corporation in terms of what constitutes a
63 just and reasonable return, and I think that if you generally
64 look at those Crown corporations who have been moved to
65 (phonetic) rate of return, rate base regulation over the past
66 five to seven years, that invariably the returns that have
67 been provided to those utilities have been consistent with
68 the returns that have been provided to investor-owned
69 utilities.

70 MR. KENNEDY: Would you agree with the statement that
71 a utility that seeks to be treated as if it was investor-owned
72 must also act as if it is investor-owned?

73 MS. McSHANE: It should, yes.

74 MR. KENNEDY: There's been a number of questions
75 regarding the declaration of a dividend by Hydro and the
76 dividends by Hydro, and perhaps if we can pull up **NP-72**,
77 Mr. O'Rielly, just so we can have it up on the screen, then
78 we can refer to that. The second page, I think. And this
79 has been an exhibit that's been, I believe, up before
80 yourself already and up before a number of witnesses
81 already, including Mr. Wells, and as has been indicated in
82 the evidence to date, the dividend for 2002 of $70 million
83 odd is being booked in the test year, although not actually
84 paid out obviously, because it's the test year, and, but that
85 indications are from Government, I believe is how Mr.
86 Wells put it, that Government will in all likelihood draw this
87 down, and so that's the reason that it's being put in there as
88 a dividend that Hydro will issue in 2002, and as has also
89 been indicated in the evidence today, and as shown in **NP-**
90 **72**, sometimes the Government has taken less than what it's
91 due and sometimes it's taken more. Overall in the period of
92 '95 to 2002 it will take in excess of the 75 percent declared
93 policy, and you've gone through this with, in great detail
94 with Ms. Butler, I believe, and as well with Mr. Hutchings.
95 The question I had was ... let me just bring out just a couple
96 of more points. Mr. Wells in his testimony of September
97 the 26th indicated that, in response to a number of
98 questions concerning this, that ultimately it was
99 Government that decided the dividend and that overrode
100 everything else. That's September the 26th, line 79, page

39. And similarly the same date, page 40, line 14, Mr. Wells indicated that this was the difference between a broadly-held company and a company with one big shareholder, as he referred to it. And I'm wondering if you could provide the Board with some guidance about whether the fact that a shareholder, the only shareholder, has the ability to call upon the company and decide when it's going to get its dividend and how much of a dividend it's going to get, has inherent value to that shareholder. Is that worth something to a shareholder?

MS. McSHANE: No, I ... I mean, I can't possibly deny that that would be worth something to a shareholder, the ability to come to the company and say give me the money, show me the money. No, I'm sorry for being facetious, but ...

MR. KENNEDY: I don't have the ability to do that as a shareholder of one of many of a broadly-held company to phone up the president and say I want you to double my dividend this year.

MS. McSHANE: No, not of a broadly-held company, but Mr. Wells was correct that if you're a company like Trans Alta Corporation for example, you can go to Trans Alta Utilities and say show me the money, because they're the sole shareholder, so it's really, you know, only in cases where there are, where the corporation is broadly held that that ability is limited.

MR. KENNEDY: Uh hum.

MS. McSHANE: You'd have to get all the shareholders together and, you know, get them to agree that that's what they wanted to do.

MR. KENNEDY: Which would be highly unusual.

MS. McSHANE: Which would be highly unusual, of course.

MR. KENNEDY: And that in most normal circumstances you take what you are given ...

MS. McSHANE: Right.

MR. KENNEDY: ... as a shareholder by way of a dividend.

MS. McSHANE: Sure.

MR. KENNEDY: If you're not happy with it, you sell your stock.

MS. McSHANE: That's correct, or you bring, or you get your, you know, shareholder friends together and you go to the annual meeting and you tell the management that, vote the management out and get somebody in that's going to do what you want them to do.

MR. KENNEDY: Right. But certainly I can't override everything else and direct the company to declare a dividend of a stated amount.

MS. McSHANE: In a broadly-held corporation, no.

MR. KENNEDY: And you've agreed that my ability to do that, if I in fact could do that, has inherent value over and above the dividend itself.

MS. McSHANE: I'd say that's true.

MR. KENNEDY: And I'm wondering then how that is taken into account, if you will, in determining what the rate of return is to that shareholder. Has that been factored in in any way?

MS. McSHANE: I don't see any way that you could possibly quantify what that's worth and it seems to me that if you look at jurisdictions where you have utilities which, for example, Trans Alta Corporation, which are owned by, I believe the utility is owned by a single shareholder versus a, an Alta Gas Utilities which is, you know, is part of a corporation which is more widely held, and there's no distinction that's made as between those with a single shareholder and those with broadly-held shareholder, broadly-held shareholder base. You know, the returns to those utilities reflect the basic business and financial risks. There's just simply no way, to my knowledge, to determine, you know, what kind of value you put on that ability.

MR. KENNEDY: So if it can't be quantified, we could nonetheless on a qualitative basis, the Board could take that into account when determining how it's going to regulate Hydro and what financial parameters it will set for Hydro.

MS. McSHANE: Well it certainly has the ability to do that, you know, if it follows the precedents that have been followed elsewhere. I mean, I don't see any basis for treating Hydro any differently than other regulators treat the Crown corporations they regulate vis-a-vis the investor-owned, investor-owned utilities they regulate.

(3:30 p.m.)

MR. KENNEDY: I just wanted to turn to cost of capital for a moment, and it's ... I guess we could start with **page 28 of your pre-filed testimony**. And it's beginning at the question at line 12, "Since Hydro is a Crown corporation and its shareholder is the Province, and thus ultimately the taxpayers of Newfoundland, why are these standards relevant," and they're the standards on how to calculate a rate of return on equity. And you indicate, "The equity funds reinvested in Hydro by the Province have an opportunity cost. The determination of a reasonable return on equity should be independent of the happenstance of the identity of the shareholder. The Province and the taxpayers, the shareholder, should expect to earn a return on the equity funds reinvested in Hydro equivalent to the return they could have earned on an alternative investment of comparable risk." And you've had some questions on

this already as well, Ms. McShane, and I believe you indicated that one of the reasons why, I just wanted to confirm this, but one of the rationales, if you will, of this concept of providing compensation for the opportunity costs is the fact that it sends the right pricing signals to the Company. Is that correct?

MS. McSHANE: Sends the right pricing signals to the customers.

MR. KENNEDY: Ultimately the ratepayer. The Company is being ... the Company is incurring the correct pricing signal, if you will.

MS. McSHANE: Yes.

MR. KENNEDY: And then presumably that pricing signal gets passed down to the ratepayer in rates.

MS. McSHANE: Correct.

MR. KENNEDY: Okay. Now, is this a purely objective investor that we're dealing with here again that, when you say independent of the happenstance of the identity of the shareholder, are you saying that we're treating this investor and the calculation of the opportunity costs, regardless of the fact that we know it's Government who's the shareholder and sole shareholder and the one big shareholder who can call down dividends whenever they want?

MS. McSHANE: Yes.

MR. KENNEDY: And so is there any, in your opinion, modicum of subjectivity involved in what is an appropriate compensation for that opportunity cost peculiar to the shareholder itself?

MS. McSHANE: The fact that you look at what the use of funds is as opposed to the source of funds, source of funds being the shareholder, then there is no judgement in the sense that you're not making a distinction as between who provides the investment but rather to what is the investment provided, so ...

MR. KENNEDY: So ...

MS. McSHANE: Sorry, can I just ...

MR. KENNEDY: Go ahead, sorry.

MS. McSHANE: So, for example, if the Government decided that it wanted to invest funds in Hibernia, for example, then it would proceed on the appropriate basis in terms of what return it expected to receive from that, that it would expect to achieve a return that was commensurate with the risk of investing in Hibernia and it would make a distinction between that and the returns available from an investment in Hydro, and if, you know, if those investments and the opportunities aren't appropriately priced, then the Government may well make a major error in where it puts its money.

MR. KENNEDY: Like a cucumber farm, for instance.

MS. McSHANE: Well, I don't know anything about cucumber farms but I'm gathering maybe they invested in one. *(laughter)*

MR. KENNEDY: But your examples, always (phonetic) find, speak to other investments or alternative investments that Government could make which are still Government-oriented investments. In other words, you don't speak to the lost opportunity cost of being able to invest in Nortel as opposed to Hydro.

MS. McSHANE: I thought Hibernia was far enough away from Government to make it a non-Government ...

MR. KENNEDY: Oh, okay. So you ...

MS. McSHANE: ... operation, but I recognize that there clearly is Government participation in these projects, but the intention was to make a distinction between something of relatively low risk and something of high risk. Yes, the Government, if they had funds that were available for an investment, they could certainly put them into a Nortel.

MR. KENNEDY: But governments never do that, right, so ...

MS. McSHANE: Make indirect investments of that type?

MR. KENNEDY: Make perhaps indirectly but directly governments don't invest in pure market plays, if you will, as opposed to reinvesting in the province's own social fabric. And I guess ...

MS. McSHANE: I guess not directly in that sense but they certainly do make investments as, in the form of pension funds.

MR. KENNEDY: Yes, so that's an indirect investment ...

MS. McSHANE: Right.

MR. KENNEDY: ... in some market force. But I as a taxpayer of the Province of Newfoundland, I know my government is going to invest in things that are peculiar to my province, that governments would normally invest in. In other words, if it didn't invest in Hydro, it would invest it in the Liquor Board or it would invest it in the Newfoundland and Labrador Housing Corporation or it would invest it in ACOA or it would invest it in all those normal government operations and departments. That's where my money would go. I wouldn't, as a taxpayer investor, expect for Government to buy Nortel stock with my tax money, would I?

MS. McSHANE: Probably not, no. You probably would not expect them to do that.

MR. KENNEDY: So, but from your professional opinion, the opportunity costs that I'm allowed to earn on my investment in Hydro is based on as if Government, if it didn't invest it in Hydro, it may just as well invest it in some pure market play like a Nortel Networks or what have you.

MS. McSHANE: Or something of equivalent risk, yes, not a Nortel Networks as we all know but, you know, an investment of similar risk.

MR. KENNEDY: I wanted to just go with you, through with you, Ms. McShane, some examples that I guess I've been gathering up, if you will, of where Government, or, sorry, where Hydro has implemented Government policy, and then I wanted to bring you back to your comment about how the Board should take this into account in determining what, how to regulate Hydro, and just to see, for instance, if you're aware of some of these and get you to comment on them and ask you whether you think that they're unusual in some way. The first I think you'll probably agree is unusual is that is it fair to say that an example of Hydro implementing more social-oriented policy as opposed to operating like a pure commercial entity would be the fact that it's only looking for a rate of return based on a three percent rate of return on equity as opposed to what your, in your professional opinion the market would otherwise allow?

MS. McSHANE: I agree that it is unlikely that an investor-owned utility would go before its regulator and ask to, only to earn a three percent rate of return. Now some of them may only earn a three percent rate of return for a couple of years, but I think that there has to be a balance between recognizing that, fully recognizing that there is an opportunity cost of capital and getting to the point where you can earn your opportunity cost of capital. The fact is that in the past that opportunity cost of capital existed, it simply wasn't recognized, and in a very real sense then the costs of providing service have been understated to the extent that the opportunity cost of capital wasn't fully recognized, but, you know, to come to the Board and say, well, oil prices have gone way up and we need to earn an 11 1/4 percent return on equity and that means, and I'm just going to throw a number out because I don't know what the rate increase would be, that would mean that we would need to implement this year a rate increase of 40 percent to take all this into account. Maybe an investor-owned utility would do that, but there does have to be a balance between the ratepayer and the investor interests and as long as, I think, that the Board recognizes that in principle there is an opportunity cost that is associated with the equity and determines that for the future the returns will be set in conjunction with those principles and lets the market know that the return that Hydro is looking for in this rate case is, you know, a transitional fact, factor, that Hydro is moving towards acting and behaving as a commercial entity.

MR. KENNEDY: Okay. So based on that then, is moving, that they're not there yet.

MS. McSHANE: Not if they're only seeking to earn three percent, they can't be there yet, but they are on their way.

MR. KENNEDY: Well, is that a case of that chicken and the egg, is it that they recognize themselves that they're not there yet, or is it the case that, and therefore are only asking for three percent as opposed to vice versa? Anyways, that's a ...

MS. McSHANE: No.

MR. KENNEDY: That's a hypothetical question that ...

MS. McSHANE: Is it a rhetorical question?

MR. KENNEDY: A rhetorical question as well.

MS. McSHANE: Rhetorical question.

MR. KENNEDY: Yeah.

MS. McSHANE: Okay.

MR. KENNEDY: The rural subsidy, which has been brought to your attention already, which annually amounts to something in the vicinity of $30 million, would you agree with me that that's a departure from what you would consider to be the normal cost of service rules, and I know you're not a cost of service expert but a cost of capital, but that the cross-subsidization within the ratepayer classes in that amount is, is a departure away from the normal pricing signals?

MS. McSHANE: Within the ratepayer class? I haven't studied in any detail the extent to which there are subsidies within ratepayer classes. I did look at a response to a data request, which number I still don't remember ...

MS. GREENE, Q.C.: **NP-185**.

MS. McSHANE: ... which was basically the summary of a survey that was undertaken by Manitoba Hydro where they went out and they looked at what the number of customers were on various systems who were not connected to the grid. They were remote customers served by diesel facilities and they also provided the operating deficit for each of those companies. And, you know, one way you can look at this, I think, is to look at what the per capita deficit is and in that regard what you're seeing is that Newfoundland and Labrador Hydro is sort of in the middle of the pack if you made those calculations. I don't think that necessarily that this particular exhibit covers all of the subsidies that exist because some of them are simply never calculated to the extent that you have a system that covers a large area, everybody is connected to the grid, clearly some customers are cheaper to serve than others, but you

take all the costs that are associated with residential customers, you divide them by the number of customers and everybody pays the same rate. Some of those customers are obviously being subsidized.

MR. KENNEDY: For instance, related to that, there's been some evidence about the fact that some plant has been built in some remote communities in Labrador and that, I'd suggest to you, that the payback on that investment made by Hydro may never be realized in any realistic timeframe and that that would be an example of Hydro investing in these remote areas in an attempt to spur economic development in those areas. And you'd agree with me, would you, that that's an example of Hydro being used to implement social policy and operating other than what a pure commercial entity might do.

MS. McSHANE: Because it's offering what you might refer to as economic development rates or something that would be analogous to that? It's building something that it hopes ... it's charging and charging customers rates in hopes that economic development will ... I mean, the extent of that may be different. I'm not specifically familiar with the circumstances that you're describing, but clearly investor-owned utilities have economic development rates where they do at times set rates below fully-embedded costs in order to spur economic development.

MR. KENNEDY: And why would they do that? That's to reap the benefits in the long run from that economic development that they spur?

MS. McSHANE: Absolutely.

MR. KENNEDY: And so from that perspective you wouldn't see Hydro as being any different from an investor-owned utility?

MS. McSHANE: It may be to a matter of degree but I would say that, generally speaking, that companies do, you know, often set rates at levels below, as I said, for embedded costs to spur economic growth and to try to provide the basis for further load in the future.

(3:45 p.m.)

MR. KENNEDY: In 1998 Hydro was asked by Government to break off from discussions that it was having with the non-utility generators and that there was a breakup fee paid by Hydro of some $1.3 million. I'm wondering if you are familiar with that issue? Probably not.

MS. McSHANE: No.

MR. KENNEDY: And I'm wondering, putting that forward, I guess, as another example of where Government has had direct involvement in the operations of Hydro that were cost sensitive, and again I ask you whether that's inconsistent with how a pure commercial entity might operate?

MS. McSHANE: I don't know enough about the circumstances to comment specifically on that because I don't know what the issue was.

MR. KENNEDY: So in your examination of Hydro and determination of what a reasonable return was for its opportunity costs, how did you take into account all the different ways that the Government of Newfoundland and Labrador exercises its social policy through Hydro?

MS. McSHANE: I don't think that as government that there's necessarily anything that the province has done which should distinguish it to such an extent from an investor-owned utility as to impact on its required cost of equity, so, I mean, I haven't made any adjustments to what I view as an appropriate return on equity for factors related to social policy.

MR. KENNEDY: So that's the conclusion that you've reached. I'm wondering what process you went through, if any, to, in order to reach that conclusion.

MS. McSHANE: Process that I go through ...

MR. KENNEDY: Your conclusion is that they haven't done anything that would warrant you departing from the norm, if you will.

MS. McSHANE: Right.

MR. KENNEDY: I guess I'm asking you what process you employed to be able to convince yourself of that fact.

MS. McSHANE: Simply gathering information in terms of how the Company operates, how its rates are set, who its customers are, how the social policy is indeed implemented, but, I mean, not a formal analysis but rather sort of a question and answer type of approach to management of Hydro.

MR. KENNEDY: So just to sort of sum up that aspect of it then, I just want to confirm your opinion, if you will. Am I gathering correctly that, and maybe instead of me putting words in your mouth you could provide me with your opinion about either on the quantitative or qualitative scale what impact has Government's involvement in Hydro had on your determination of what is a fair return for its opportunity costs?

MS. McSHANE: I guess the bottom line is that I attempted to assure myself through an analysis of the relationships between Hydro management and the Government that the overall returns that would be available to the province would be no more than those that would be available to an investor-owned utility.

MR. KENNEDY: Chair, that's an appropriate place to break. It'll also give me an opportunity to review my notes and

1 just see if I have anything else that I need to ask tomorrow
2 morning, but there may not be anything. I just want to
3 make sure.

4 MR. NOSEWORTHY, CHAIRMAN: So you're close to
5 cluing up, Mr. Kennedy, finishing?

6 MR. KENNEDY: Close to finishing, I am, Chair, thank you.

7 MR. NOSEWORTHY, CHAIRMAN: Ms. Greene, do you
8 have any idea how long you might be on your redirect?

9 MS. GREENE, Q.C.: Not very long. It will be a matter of
10 minutes as opposed to anything longer.

11 MR. NOSEWORTHY, CHAIRMAN: I think the Board's
12 questions are going to be few, so conceivably we could
13 finish with Ms. McShane tomorrow, I would think.

14 MS. GREENE, Q.C.: My second cost of capital witness, Mr.
15 Hall, is here and will be ready to start his examination as
16 soon as we're finished with Ms. McShane.

17 MR. NOSEWORTHY, CHAIRMAN: Okay. Thank you
18 very much. We'll reconvene at 9:30 tomorrow morning.

19 *(hearing adjourned to October 31, 2001)*

20