



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO  
GENERAL RATE APPLICATION  
2012/13 AND 2013/14

Before Board Panel:

Regis Gosselin - Board Chairman  
Raymond Lafond - Board Member  
Larry Soldier - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
January 23, 2013  
Pages 5106 to 5415

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1	LIST OF UNDERTAKINGS		5110
2	No.	Description	Page No.
3	95	Mr. Bowman to provide further details with respect to page 2 of 6 in PUB/MIPUG-1-11 revised for IFF12, with respect to other key metrics, such as the interest coverage ratio	5401
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1 --- Upon commencing at 9:02 a.m.

2

3 THE CHAIRPERSON: I believe that we're  
4 ready to start. Good morning, everyone. Do we have  
5 any administrative matters to attend to before we  
6 commence this morning?

7 MS. ANITA SOUTHALL: Yes, Mr. Chairman.  
8 Manitoba Hydro has, I believe, one (1) question in  
9 redirect. So perhaps we'll turn to them first. And  
10 then, as I understand it, immediately thereafter we'll  
11 turn to MIPUG's direct evidence. Thank you.

12 THE CHAIRPERSON: Good morning, Ms.  
13 Ramage.

14 MS. PATTI RAMAGE: Good morning. We --  
15 as Ms. Southall indicated, we have just one (1) brief  
16 question for redirect, and it's a clarification of the  
17 record in terms of a subject to check. So I'll -- I'll  
18 just give you the background and pose the question to  
19 Mr. Schulz, and then we can very quickly move on with  
20 MIPUG's evidence

21

22 MANITOBA HYDRO PANEL 2 - REVENUE REQUIREMENT:

23 MANFRED SCHULZ, Resumed

24 DARREN RAINKIE, Resumed

25

1 RE-DIRECT-EXAMINATION BY MS. PATTI RAMAGE:

2 MS. PATTI RAMAGE: Mr. Schulz, on  
3 January 7th, 2012, at page 2,220 of the transcript, Mr.  
4 Peters asked you to turn to pages 212 and 213 of the  
5 PUB book of documents at Tab 19. These pages cited  
6 Manitoba Hydro's response to PUB/Manitoba Hydro First  
7 Round 101(a), which provided a graph of the net -- net  
8 fixed assets and the net debt for the years 1990  
9 through 2032 based on IFF11-2.

10 On page 2,220 of the transcript, Mr.  
11 Peters noted that this information would be updated  
12 with IFF12 and suggested, subject to check, on lines 23  
13 to -- through 25 of the transcript, that, and I quote  
14 here:

15 "Out by 2032 the net assets will go  
16 up as much as 31 billion, and the net  
17 debt would go up to about 28  
18 billion."

19 Mr. Schulz, have you had an opportunity  
20 to confirm those numbers that you accepted subject to  
21 check for IFF12?

22 MR. MANFRED SCHULZ: Yes, and good  
23 morning, everyone. And by March 31, 2012, the net  
24 fixed assets is projected to grow to approximately 33  
25 billion, and the corresponding net debt is forecasted

1 to grow to approximately 26.6 billion. Thank you.

2 THE CHAIRPERSON: Is the date correct,  
3 2012?

4 MR. MANFRED SCHULZ: Sorry. I meant by  
5 2032.

6 THE CHAIRPERSON: Okay.

7 MR. MANFRED SCHULZ: Thank you.

8 THE CHAIRPERSON: Thank you.

9

10 CONTINUED BY MS. PATTI RAMAGE:

11 MS. PATTI RAMAGE: And never one to  
12 stick with my word, I was just handed another piece of  
13 paper. And this is -- I -- I will put it in and have  
14 Mr. Rainkie just confirm this. This came from Mr.  
15 Warden, who was at a board -- at -- at our board  
16 meeting this morning, but he did want Manitoba Hydro to  
17 update the Board yesterday. There was questions  
18 regarding a Wuskwatim agreement. There was two (2)  
19 agreements, and Mr. Warden was sent an email saying  
20 that:

21 "Those negotiations for that early  
22 agreement started December 8th, and  
23 the agreement was signed March 2011."

24 So, Mr. Rainkie, if you could confirm  
25 that for the record so that becomes the evidence?



1 MR. DARREN RAINKIE: Good morning, Mr.  
2 Chairman, members of the Board, and everybody. Yes, I  
3 can confirm that that is the case.

4 THE CHAIRPERSON: I'm sorry, I'm a bit  
5 lost. So are we talking of the first agreement?

6

7 (BRIEF PAUSE)

8

9 MR. DARREN RAINKIE: That was the first  
10 supplementary agreement. And, in fact, somewhere on  
11 the extensive record are the Wuskwatim financial  
12 statements for March 31st, 2012. And the date of March  
13 of 2011 is actually in the -- in the notes to the  
14 financial statements. So I -- I think that was --  
15 information was already on the record. We were just  
16 trying to point you to where it is.

17 THE CHAIRPERSON: Thank you.

18 MR. RAYMOND LAFOND: Mr. Schulz, when I  
19 look at IFF12 page 40 and I look at the long-term debt,  
20 it says 27.9 billion. And I think you referred to  
21 twenty-six point six (26.6). And for the net plant in  
22 service, it's thirty-one billion, six hundred and forty  
23 (31,640,000,000). I'm looking at page 40 of IFF12.

24 MR. MANFRED SCHULZ: Yes, I'm familiar  
25 with that, M. Lafond. So when we do the calculation of

1 net debt and net fixed assets, you have to be careful,  
2 for instance, in pulling off fro -- for instance, on  
3 the net debt calculation is taking the long-term debt,  
4 adding to it the short-term debt, and also the current  
5 portion of -- of debt in the current -- current  
6 liabilities and then subtracting from that the sinking  
7 fund balances to arrive at the net debt calculation.  
8 If -- looking just at the IFF financial statements, it  
9 would be difficult to derive that calculation.

10                   And on the net assets, we take the  
11 property, plant, and equipment; add to that the  
12 construction work in progress; less the accumulated  
13 depreciation to arrive at the net fixed asset number.  
14 Again, difficult to derive specifically off the  
15 financial statements as presented in the IFF.

16                   MR. RAYMOND LAFOND:    Thank you.

17

18                   (PANEL STANDS DOWN)

19

20                   THE CHAIRPERSON:    Thank you.  I believe  
21 that's it for the re-direct for Manitoba Hydro.  So M.  
22 Hacault, I will turn over the microphone to you.

23                   Just before you start, you should know  
24 that I've -- I -- all of the Board members have read  
25 Mr. Bowman's report attentively, and that may help you

1 in -- in the questioning of your witness. Thank you.

2 MR. ANTOINE HACAULT: Thank you,  
3 members of the Board. The direct evidence of Mr.  
4 Bowman didn't intend to follow the written evidence  
5 that he had done. What we'll be attempting to do is to  
6 deal with some of the testimony of Manitoba Hydro in  
7 additional IRs and look at that through the eyes of  
8 rate-making principles. And hopefully some of the  
9 testimony will answer some of the questions that were  
10 posed by Board members of the Hydro panel through, as I  
11 say, the eyes of rate-making principles, which would  
12 balance Manitoba Hydro's financial stability with the  
13 concerns and the needs and protection of ratepayers.

14 So the first part would be to help the  
15 Board understand Mr. Bowman's background. So I guess  
16 we should get him sworn in, please, Mr. Secretary.

17

18 MIPUG PANEL:

19 PATRICK BOWMAN, Sworn

20

21 EXAMINATION-IN-CHIEF BY MR. ANTOINE HACAULT (QUAL.):

22 MR. ANTOINE HACAULT: Mr. Bowman, I'd  
23 like to take you through some of your experience in the  
24 area of rate making.

25 And first, am I correct in understanding

1 that you have about fourteen (14) years of experience  
2 in utility regulation having started in or about 1998?

3 MR. PATRICK BOWMAN: Yes. Good  
4 morning. Thank you, Mr. Chairman, members of the  
5 Board. Yes, that is correct.

6 MR. ANTOINE HACAULT: And during that  
7 time frame, as it regards to utility regulation, you  
8 have acted both on behalf of the utilities and on  
9 behalf of ratepayers.

10 Is that correct?

11 MR. PATRICK BOWMAN: Yes.

12 MR. ANTOINE HACAULT: And, for example,  
13 on the utilities side, you've acted on behalf of Yukon  
14 Energy Corporation, Yukon Development Corporation,  
15 Northwest Territories Power Corporation, and also  
16 Northwest Company Limited?

17 MR. PATRICK BOWMAN: The first three  
18 (3) are utilities. The fourth is actually a customer  
19 Intervenor. But -- but, yes, tho -- those are among  
20 the three (3).

21 MR. ANTOINE HACAULT: And in Manitoba,  
22 you have been involved in preparing analysis and  
23 evidence for regulator -- regulatory proceedings before  
24 the Board since 1998 on behalf of MIPUG?

25 MR. PATRICK BOWMAN: Yes.

1 MR. ANTOINE HACAULT: And in  
2 Newfoundland, you have prepared analysis and evidence  
3 in Newfoundland Hydro GRA hearings for the industrial  
4 consumers of Newfoundland and Labrador Hydro?

5 MR. PATRICK BOWMAN: Yes, since 2001,  
6 that's been one (1) of our clients.

7 MR. ANTOINE HACAULT: Now, your  
8 experience in rate-regulated matters also in -- evolves  
9 around project development, socioeconomic impact  
10 analysis, and mitigation. Is that correct?

11 MR. PATRICK BOWMAN: Yes.

12 MR. ANTOINE HACAULT: And for which  
13 clients have you provided support in that regard?

14 MR. PATRICK BOWMAN: Well, in -- in  
15 recent years, I've done most of my work on that front  
16 in the North. I was the project manager for the Mayo  
17 hydro project in Yukon through all of its planning and  
18 development stages, which included all the  
19 environmental assessment project planning, regulatory  
20 aspects, the economics, the equivalent of the NFAAT  
21 process that they have, consultation, dealing with  
22 communities, funding, all of those aspects, up until  
23 the time that the project was turned over to the  
24 construction team.

25 And in Northwest Territories, recently I

1 was -- played a similar role, though starting later in  
2 the process, but for a fairly major dam redevelopment  
3 project up there for the size of their system. And on  
4 that, I was also involved in contractor negotiations  
5 and being involved in the joint utility/contractor  
6 management committee for the development of that  
7 project, which -- which just went into service last  
8 fall.

9 MR. ANTOINE HACAULT: And that was for  
10 the Northwest Territories Energy Corporation. Is that  
11 correct?

12 MR. PATRICK BOWMAN: That was actually  
13 for the Northwest Territories Power Corporation. I've  
14 also done work for the Northwest Territories Energy  
15 Corporation. That's been more on how you deal with  
16 sharing power between a regulated and a non-regulated  
17 operations, where they run a hydro plant on the same  
18 river system or, in fact, in -- in parallel, and how  
19 you deal with the regulatory and utility board  
20 implications of that situation.

21 MR. ANTOINE HACAULT: And have you  
22 provided support for First Nations in the early 2000s,  
23 with respect to potential claims related to past and  
24 ongoing impacts from major northern BC Hydro Electric  
25 development?

1 MR. PATRICK BOWMAN: Yes, that was one  
2 (1) of our clients that I was involved with many years  
3 ago. That was -- there are actually two (2)  
4 communities that were affected by the development of  
5 the Williston Reservoir in the 1960s. And we're still  
6 working on settling claims with BC Hydro. And we  
7 worked with the communities.

8 Others in our firm were involved until -  
9 - until the claims were finally settled in about 2007,  
10 by recollection. My -- my work was more on the -- the  
11 front end of that, in value -- valuation of damages and  
12 the like in -- in the early 2000s.

13 MR. ANTOINE HACAULT: And have you ever  
14 done some work for Manitoba Hydro mitigation  
15 department?

16 MR. PATRICK BOWMAN: I did some work  
17 with Manitoba Hydro many years ago at the mitigation  
18 department. At -- at the time, that was involved in a  
19 inquiry that was occurring, an -- an independent thir -  
20 - third-party inquiry into Northern flooding. We  
21 helped them prepare some documents. But that -- as --  
22 I'm trying to remember the full scope of that. That's  
23 probably twelve (12) years ago now, so it's -- it's  
24 quite distant memory.

25 MR. ANTOINE HACAULT: And lastly, have

1 you provided any assistance for the -- with respect to  
2 flood plain management policies in the Red River  
3 basement -- Basin?

4 MR. PATRICK BOWMAN: That goes back a  
5 long way, but I was involved in some -- some work on  
6 water management after the -- after the flood of -- of  
7 1997. My involvement ended. And -- and our firm was  
8 involved in the environmental assessment of the  
9 expanded floodway, but I had a fairly limited role in  
10 that.

11 MR. ANTOINE HACAULT: Next, I'd like to  
12 turn your attention to a more for -- focussed matter,  
13 and it is the extent of your experience in rate  
14 hearings as it relates to a depreciation issue.

15 First, let's clear up; you have not  
16 conducted depreciation studies or acted as an expert  
17 witness on conducting depreciation studies, per se, in  
18 utility proceedings?

19 MR. PATRICK BOWMAN: I've -- I've not  
20 done depreciation studies or drawn Iowa curves or  
21 estimated lives of plant. That's not part of my  
22 practice.

23 MR. ANTOINE HACAULT: Now, am I correct  
24 in understanding though that you have acted as an  
25 expert on the appropriate regulatory approach to



1 reflecting the outcome of depreciation studies and  
2 revenue requirements and rates?

3 MR. BOB PETERS: Yes.

4 MR. ANTOINE HACAULT: And am I correct  
5 in understanding that this, in some of the hearings  
6 that you have done, has been a specific interest with  
7 respect to depreciation and the appropriate regulatory  
8 approach to reflecting the outcome of depreciation?

9 MR. PATRICK BOWMAN: Yes. I've been  
10 retained a number of times by different utilities and -  
11 - and Intervenor customer groups who've been faced with  
12 fairly acute depreciation problems, not to do a  
13 depreciation study but to help guide a study, supervise  
14 the work of people doing the depreciation studies, and  
15 helping companies understand what the study is telling  
16 them, and the implications, and -- and make broad  
17 policy decisions in regards to those studies or -- or,  
18 on the converse side, helping Intervenor groups  
19 understand the studies and -- and understand the  
20 implications.

21 And -- and it's been in that regard both  
22 utilities and Intervenor groups, but also in one (1)  
23 case working with the government. That was another  
24 aspect of my utility practice that -- that wasn't  
25 highlighted, which is I also have been involved in

1 helping set electricity rate policies with -- with  
2 government bodies -- government agencies. And -- and  
3 that can include -- in one (1) case, very -- very much  
4 included -- due diligence review of a utility's  
5 depreciation study.

6 MR. ANTOINE HACAULT: I'll put -- put  
7 to you a couple areas which I believe that you've  
8 provided testimony in, firstly with respect to the 2005  
9 Yukon Energy required revenues and related matters  
10 proceeding.

11 What was your involvement in providing  
12 expert evidence as it resulted -- related to, rather,  
13 depreciation studies?

14 MR. PATRICK BOWMAN: In that example,  
15 Yukon Energy is one of our longstanding clients and has  
16 been since they were created. Actually before they  
17 were created. And in that hearing, it was the first  
18 hearing under -- after Yukon Energy took over direct  
19 management of its own assets. And so a fairly major  
20 depreciation study was done. I was retained by the  
21 company to help them generally with the revenue  
22 requirement, and specifically to help understand and  
23 deal with the implications of depreciation.

24 That was -- depreciation was a fairly  
25 major focus in that hearing. It was -- it was -- there

1 example where a company when through a change in  
2 methods. In that case, they changed from the Equal  
3 Life Group to the Average Service Life method. And --  
4 and I was the -- the person who -- who had to deal with  
5 those questions also in -- in testimony. In that case,  
6 the depreciation expert was not -- not called to the  
7 hearing. I -- I dealt to that to the extent it arose  
8 in the hearing.

9 MR. ANTOINE HACAULT: Thank you. Next,  
10 I draw your attention to the 2006/'08 Northwest  
11 Territories Power Corporation GRA.

12 Could you explain what your role was as  
13 it regards depreciation generally?

14 MR. PATRICK BOWMAN: A similar role.  
15 Again, retained by the company. Again, they retained a  
16 depreciation expert to do a study. We helped the  
17 company understand some of the implications. That one  
18 ended up not going to the utility board. The decision  
19 was made, with all the issues that were going on, to  
20 leave that study at a draft stage. And -- and so  
21 although the results were conveyed in a draft form, it  
22 -- it was not a matter that made it into rates in that  
23 -- in that hearing.

24 MR. ANTOINE HACAULT: Next, I draw your  
25 attention to the 2012/'13 and the 2013/'14 Northwest

1 Tower -- Territories Power Corporation GRA.

2 What was your role as it regards to  
3 depreciation in that application?

4 MR. PATRICK BOWMAN: That was similar  
5 to the Yukon 2005 application. Again, the company  
6 retained a depreciation expert, Gannett Fleming, who  
7 did the study. I worked with the people in the company  
8 to help them make -- understand the results of the  
9 study and make decisions in respect of policy matters,  
10 guiding the study. And -- and again, the depreciation  
11 expert did not testify at the hearing. I was the one  
12 (1) who dealt with those subject matters as they were -  
13 - arose at the hearing.

14 MR. ANTOINE HACAULT: And who was the  
15 depreciation expert from Gannett Fleming?

16 MR. PATRICK BOWMAN: Mr. Larry Kennedy.  
17 He's their Canadian representative.

18 MR. ANTOINE HACAULT: Now, there are  
19 some hearings where I understand you also acted as an  
20 advisor, firstly with respect to the 2012 and 2013  
21 Yukon Energy GRA.

22 What was your role and with whom did you  
23 work?

24 MR. PATRICK BOWMAN: In that example, I  
25 was retained as part of a team to help Yukon Energy

1 again prepare what was largely a revenue requirements  
2 application. Again, they did an up -- this time, they  
3 did an update to the depreciation study, not a full  
4 overhaul. But they retained KPMG to do that work, and  
5 I was -- acted with the chief financial officer of the  
6 company in helping to guide that study. I -- I did not  
7 appear in -- in that hearing to -- to testify, but I  
8 was involved with the company in -- in guiding that  
9 study.

10 MR. ANTOINE HACAULT: Next, I draw your  
11 attention to the 2012 Hydro depreciation review. So  
12 the 2012 Newfoundland Hydro depreciation review, what  
13 was your role in that review and who was the  
14 consultant?

15 MR. PATRICK BOWMAN: That's -- in that  
16 case, I was working with an Intervenor group, the  
17 Industrial Customers of Newfoundland, again, which I  
18 noted has been one (1) of our clients for a long time.  
19 Newfoundland Hydro had come forward with an application  
20 to its board to -- to implement various aspects of  
21 IFRS. And out of that, one (1) of the aspects was some  
22 changes to the depreciation methodology. I was  
23 retained to help review that application and -- and  
24 provide advice to the customers on how to address  
25 depreciation.

1                   That study for the utility was conducted  
2 by Gannet Fleming. On the basis of discussions with  
3 the customers, they -- and their counsel, they brought  
4 in a depreciation expert from Florida, is my  
5 recollection. We had previously been involved with the  
6 Florida board. And -- and so they had -- they took  
7 issue with various aspects of the technical parts of  
8 the study: whether the correct Iowa curves were drawn  
9 and whether the correct lives were used. And so they  
10 had expertise on those fronts from -- from the -- a  
11 consultant from Florida.

12                   I, again, provided advice and expertise  
13 related to interpreting these results and how they  
14 would -- how they would impact things like a cost of  
15 service study and design of rates.

16                   MR. ANTOINE HACAULT: As part of these  
17 various assignments, have you had the opportunity to  
18 review evidence on depreciation from those  
19 jurisdictions that you've identified?

20                   MR. PATRICK BOWMAN: Yes.

21                   MR. ANTOINE HACAULT: And as part of  
22 your preparation to be able to provide the advice that  
23 you were describing, have you reviewed literature on  
24 depreciation? And could you idenf -- identify some  
25 of the key texts that you might have reviewed and read?

1 MR. PATRICK BOWMAN: I -- I have. I've  
2 reviewed a number of studies that were done and -- as  
3 well as assignments that were completed by -- by  
4 consultants on specific depreciation policies or -- or  
5 practices of -- of an individual utility. We  
6 referenced some of those in our evidence, like the KPMG  
7 report that was done for Newfoundland Hydro. That  
8 wasn't a depreciation study per se; it was a review of  
9 depreciation policies.

10 I've also reviewed, at times, some of  
11 the -- the texts that relate to -- to depreciation,  
12 like the -- there's a NARUC manual that is an attempt  
13 to summarize much of the literature on depreciation up  
14 to that point in time. I've -- I have flipped through  
15 the 1930s Robert Winfrey book; but after about Chapter  
16 3, it gets into very specific Iowa curve matters that -  
17 - that are not an area that I -- I deal with, in terms  
18 of the -- the calculus of -- of the curves.

19 MR. ANTOINE HACAULT: Am I correct in  
20 understanding that you've been qualified as an expert  
21 six (6) times before this Board with respect to rate  
22 application evidence?

23 MR. PATRICK BOWMAN: Yes. Yes.

24 MR. ANTOINE HACAULT: With those  
25 questions, I propose to have Mr. Bowman qualified as an

1 expert on the appropriate regulatory approach to  
2 reflecting the outcome of depreciation studies and  
3 revenue requirements and rates. I propose to have him  
4 qualified as an expert in rate-making principles and  
5 the appropriate regulatory principles for a Crown owned  
6 utility providing a service at cost; also to have him  
7 qualified with respect to revenue requirement analysis  
8 applicable in setting rates; and, finally, Power System  
9 planning and economics.

10 THE CHAIRPERSON: Thank you, M.  
11 Hacault. I'd like to hear from the Intervenors and the  
12 Applicant on this particular request.

13 I wonder, Mr. Williams, do you have any  
14 comments to -- to offer?

15 MR. BYRON WILLIAMS: We have no  
16 challenge to the qualifications as framed by My Learned  
17 Friend.

18 THE CHAIRPERSON: Ms. Ramage...?

19 MS. PATTI RAMAGE: Yes, Manitoba Hydro  
20 does have some concerns with the qualif -- with the  
21 qualification that has been requested. Manitoba Hydro  
22 has no concern with respect to Mr. qualifica -- Mr.  
23 Bowman's qualifications with respect to rate making or  
24 revenue requirement generally; or rate design, I  
25 believe; or Power System planning is not an issue, I



1 think, before this Board.

2 We do have an issue with the --  
3 reflecting the outcome of depreciation studies and  
4 revenue requirements. We also have an issue with the  
5 qualification as expert as appropriate regulatory  
6 principles for a Crown-owned utility.

7 And perhaps maybe we could ask some --  
8 Mr. Bowman some questions to deal with those issues.

9 THE CHAIRPERSON: Please do.

10 MS. PATTI RAMAGE: Yes.

11

12 CROSS-EXAMINATION BY MS. PATTI RAMAGE (QUAL.):

13 MS. PATTI RAMAGE: Mr. Bowman, you have  
14 an arts degree in human development and outdoor  
15 education. Is that correct?

16 MR. PATRICK BOWMAN: That is my  
17 undergraduate degree --

18 MS. PATTI RAMAGE: Yes. And a --

19 MR. PATRICK BOWMAN: -- and -- sorry.

20 MS. PATTI RAMAGE: -- a master's degree  
21 in natural resource management, correct?

22 MR. PATRICK BOWMAN: I have -- I was  
23 going to finish. My undergraduate degree actually has  
24 a minor in mathematics, as well. My master's degree is  
25 in natural resource management, primarily focussed in

1 the area of natural resource economics.

2 MS. PATTI RAMAGE: Just to be clear, no  
3 doctorate? I believe Mr. Lafond was referring to you  
4 as Dr. Bowman earlier.

5 MR. PATRICK BOWMAN: No doctorate.

6 MS. PATTI RAMAGE: You don't hold a  
7 professional accounting designation?

8 MR. PATRICK BOWMAN: No.

9 MS. PATTI RAMAGE: You are not trained  
10 in interpreting accounting standards?

11 MR. PATRICK BOWMAN: No.

12 MS. PATTI RAMAGE: You do not possess  
13 the designation of Certified Depreciation Professional  
14 from the Society of Depreciation Professionals?

15 MR. PATRICK BOWMAN: No.

16 MS. PATTI RAMAGE: And you're not a  
17 member of that society?

18 MR. PATRICK BOWMAN: No.

19 MS. PATTI RAMAGE: And you have  
20 indicated you have not conducted a depreciation study  
21 yourself.

22 MR. PATRICK BOWMAN: I have not  
23 conducted depreciation studies at all.

24 MS. PATTI RAMAGE: And when you were --  
25 you -- you referenced a number of appearances before

1 other regulatory boards. You were qualified as an  
2 expert on revenue requirement before the Yukon  
3 Utilities Board.

4 Is that correct?

5 MR. PATRICK BOWMAN: Yes. I was  
6 appearing as a company witness, and I'm trying to  
7 recall if we actually had specific qualifications set  
8 out. I -- I don't recall, but it was -- as a company  
9 witness sometimes the -- the tendency to specify an --  
10 an area of expertise can be a little bit less of a  
11 focus.

12 MS. PATTI RAMAGE: Okay. I'm just  
13 looking at page 1 of your resume. It says you appeared  
14 before the Yukon Utilities Board as expert on revenue  
15 requirement matters.

16 MR. PATRICK BOWMAN: Yes.

17 MS. PATTI RAMAGE: Is that right?  
18 You've been qualified as an expert in cost of service  
19 rate design and system planning by the Northwest  
20 Territories Public Utilities Board?

21 MR. PATRICK BOWMAN: Again, it would've  
22 primarily been as a company wit -- actually, entirely  
23 as a company witness. And so my -- my recollection of  
24 what exactly the -- the framing was put in escapes me.  
25 But -- but it would have been covering those areas;

1 load -- load analysis for sure.

2 MS. PATTI RAMAGE: Okay. When I look  
3 back at your previous appearances before this Board, it  
4 appears you've been qualified as an expert in cost of  
5 service and rate-design matters.

6 Is that correct?

7 MR. PATRICK BOWMAN: For sure those two  
8 (2) areas. My recollection is that there were some  
9 other matters added at various times, but you could --  
10 I couldn't quote you on it.

11 MS. PATTI RAMAGE: You haven't provided  
12 evidence with respect to depreciation in -- in any of  
13 these jurisdictions.

14 Is that correct?

15 MR. PATRICK BOWMAN: Well, as I noted,  
16 it's generally involving appearing with the company  
17 panel. And the way that these hearings are usually  
18 approached in places where we work is you don't -- it's  
19 not that there's a general rate application and then a  
20 tab that's the InterGroup evidence, or Mr. Bowman's  
21 evidence.

22 We work integrally with the company.  
23 And -- and there's only one (1) rate application filed,  
24 and different witnesses will cover different parts of  
25 the -- of the application. But you won't find a tab of

1 Mr. Bowman's evidence in any of those -- in any of  
2 those proceedings.

3 MS. PATTI RAMAGE: And you haven't been  
4 qualified, you indicated, as an expert in depreciation  
5 in any of these jurisdictions.

6 But you have not been qualified as an  
7 expert in the appropriate regulatory approach to  
8 reflecting the outcome of depreciation studies in any  
9 of these jurisdictions either, have you?

10 MR. PATRICK BOWMAN: I'm -- I'm not  
11 sure that wording was ever used before. As I said, you  
12 know, I was in -- for example, in Yellowknife, what are  
13 we at, about six (6) months ago for a general rate  
14 application. And -- and there was a company panel who  
15 spoke to the GRA. I sat with the company panel. And -  
16 - and it was made clear that I was the one speaking to  
17 the matters related to the depreciation study.

18 I don't believe that there was any  
19 specific qualifications of anyone on the panel to  
20 narrow aspects of the application. It's just a matter  
21 of who speaks to which areas.

22 MS. PATTI RAMAGE: Mr. Bowman, I've  
23 noticed in your -- in your resume, for a number of the  
24 -- the utilities that you spoke of this morning, you  
25 have included, for example, at page 1 of your resume,

1 that you've -- you have a reference to depreciation  
2 studies for the Yukon Energy Corporation, 1998 to  
3 present.

4 Is that correct?

5 MR. PATRICK BOWMAN: Yes, but that's --  
6 as I said, that's been a client that I've worked with  
7 pretty much continuously for fourteen (14) years. So  
8 you won't find on the resume, necessarily, a list of  
9 what occurred in what era. It's -- it's more broadly.

10 If you want to see the hearings, you'd  
11 have to go to the -- the attachment which lists each  
12 individual hearing. But again, that -- when you're  
13 testifying with the company panel, especially in a  
14 place like Yukon, you kind of have to help cover the  
15 waterfront. There's a lot of issues for -- for a small  
16 company.

17 So I -- I don't think you'll even find  
18 depreciation, perhaps, listed there. I think you would  
19 have to go to a -- to a transcript and look at how the  
20 information was dealt with.

21 MS. PATTI RAMAGE: Depreciation is  
22 listed in your resume, correct?

23 MR. PATRICK BOWMAN: Yes.

24 MS. PATTI RAMAGE: And when I look at  
25 your 2010 resume for that same client, the wording is

1 virtually identical, but the word "depreciation" does  
2 not come up in your previous resumes; it was added for  
3 this hearing.

4 Is that correct?

5 MR. PATRICK BOWMAN: Yes. We do a  
6 review of the resumes before filing each application  
7 we're involved in and -- and make sure that they're --  
8 they're tailored to the issues that will be dealt with  
9 are -- we're not in the habit of producing CVs, like --  
10 like academic professionals, that are forty (40) or  
11 fifty (50) pages long. We end up, in our profession,  
12 dealing with a lot of different issues. And -- and so  
13 you try to make sure that you -- you can tailor it.  
14 Not a lot of -- not a lot of people want the long ones.

15 MS. PATTI RAMAGE: But you do put the  
16 important points of any process in, correct?

17 MR. PATRICK BOWMAN: You put in matters  
18 that are relevant to the -- to the people you're  
19 preparing the resume for. I -- I don't think it's --  
20 that there's a universal importance. I think it's --  
21 it's a question of which -- which proceeding you're in  
22 and -- and what are the matters that are likely to be  
23 of -- of significance in that hearing.

24 I don't think you'll find on this  
25 resume, for example, that -- that I've done a lot of

1 work on -- on loss of load expectation and capacity  
2 planning for utilities, but I have appeared on panels  
3 related to that and -- and provided testimony. But  
4 it's not something we deal with in this hearing, so I  
5 don't think you'll -- you'll find specifically  
6 references to -- to something like LOLE studies.

7 MS. PATTI RAMAGE: But depreciation is  
8 a matter that has been incorporated into any -- all  
9 financial statements of this Corporation and any other  
10 utility in any rate hearing.

11 Is that not correct?

12 MR. PATRICK BOWMAN: Absolutely,  
13 absolutely. I -- I can't recall having reviewed a  
14 depreciation study for Manitoba Hydro before. I do  
15 believe they were filed. But in the previous six (6)  
16 appearances, I -- I don't think it ever -- it ever made  
17 our -- our cut of issues that were of likely importance  
18 to the clients or that were -- that were a primary  
19 concern.

20 MS. PATTI RAMAGE: Mr. Bowman, if I --  
21 I heard you a moment ago, you -- in describing your  
22 work at Yukon, you said that there are many, many  
23 issues that you deal with there.

24 Would it be fair to say you're a  
25 generalist when you're there?



1 MR. PATRICK BOWMAN: We -- we cover a  
2 wide range of issues. I -- I'm not sure I -- I would  
3 put definitions on it specifically one way or another.  
4 I -- the appearances before a board are usually  
5 premised on -- on having a certain level of information  
6 about the topic you're there to testify to. So I --  
7 I'm -- I'm not sure "generalist" is entirely correct,  
8 but I suppose it depends on the definition you're  
9 using.

10 MS. PATTI RAMAGE: Well, would it be  
11 fair to say you are assisting a utility employee in  
12 performing work perhaps similar to the nature of Mr.  
13 Rainkie or his back-row participants?

14 MR. PATRICK BOWMAN: Well, there's a  
15 big difference between a utility that has eight  
16 thousand (8,000) employees and one that has a hundred.  
17 So, yes, we were retained by the utility to help deal  
18 with a general rate application. We will scope those  
19 issues early on. We'll make some decisions about who's  
20 dealing with -- with which topics, and -- and we'll go  
21 forward in teams to try to make sure those get dealt  
22 with.

23 And I think you're welcome to -- to  
24 follow up with transcript or the -- or the clients, but  
25 I don't think you'll find any -- any debate about the

1 fact that -- that in the hearings noted, I had a fairly  
2 substantial role in -- in depreciation, and I may not  
3 have had a fairly substantial role in, say, interest  
4 cost forecasting. That wouldn't have been one of the  
5 areas where I would have -- where I would have dealt  
6 with, so...

7 But it's a -- it's a bit of a different  
8 environment when you're -- when you're dealing with a  
9 utility that's -- that's of that scale.

10 MS. PATTI RAMAGE: Mr. Bowman, in your  
11 response to Manitoba Hydro/MIPUG First Round 9, I  
12 believe you indicated that you provided testimony for  
13 the utility in the Northwest Territory Power  
14 Corporation's 2012/'13 thir -- and '13/'14 GRA.

15 But would I be correct that your  
16 testimony was not on depreciation? Mr. Kennedy  
17 appeared as the expert depreciation witness at that  
18 process?

19 MR. PATRICK BOWMAN: No. In fact, Mr.  
20 -- Mr. Kennedy prepared the depreciation study, and I -  
21 - I played a role with the utility in guiding that  
22 study. The -- the treasurer was the main utility  
23 representative, so I worked with -- closely with him  
24 and providing advice to the chief financial officer.

25 And so Mr. Kennedy completed the study,

1 but Mr. Kennedy did not appear to testify to that  
2 study. There was only one (1) company panel. And you  
3 can -- like I said, I'm happy to track it on the  
4 transcript if it helps you. But in respect to their  
5 duties of the company panel, depreciation was -- was  
6 one (1) of the areas I was there to speak to.

7 MS. PATTI RAMAGE: And, Mr. Bowman,  
8 you've indicated also -- or your counsel's requested  
9 you be qualified as an expert in appropriate regulatory  
10 principles for Crown-owned utilities.

11 Would you agree that the regulation of  
12 rates in Manito -- in Manitoba is fairly unique, in  
13 terms of the jurisdiction of this Board?

14 MS. PATRICK BOWMAN: Yes. It's  
15 actually on page 2 of the direct that we're expected to  
16 get into here. Absolutely, it's -- it's unique. I  
17 don't know that there's that many jurisdictions who are  
18 running around, saying, We're not unique. But -- but  
19 there are some specific aspects here that -- that have  
20 to be well understood and that it's taken us, you know,  
21 a lot of years to help educate people about.

22 MS. PATTI RAMAGE: But that uniqueness  
23 is derived by virtue of the jurisdiction granted under  
24 the Crown Corporations Public Review and Accountability  
25 Act.

1 Is that not correct?

2 MR. PATRICK BOWMAN: That's one (1)  
3 unique aspect of regulation of Manitoba Hydro.

4 MS. PATTI RAMAGE: And another unique  
5 aspect would be the exemption under (2) of the Manitoba  
6 Hydro Act from regulat -- from the normal regulation  
7 powers of the Public Utilities Board.

8 Is that correct?

9 MR. PATRICK BOWMAN: That's not as  
10 unique. That's the first part. Exemptions -- Crown  
11 utilities are fairly unique creatures. They're -- when  
12 you get into regulation of utilities, you have a basic  
13 rationale for wanting to do it that relates to economic  
14 and technical and -- and legal monopolies that are  
15 provided and -- and fairly broad powers that a utility  
16 has and fairly solid protections, because they don't  
17 have competitors.

18 Any given customer usually, particularly  
19 with respect to their wires, doesn't have any choice  
20 with who they deal with. And so governments will set  
21 up framework to ensure that there are systems to make  
22 sure those rates are fair.

23 When you go to jurisdictions that have a  
24 Crown utility, those same governments may look at the  
25 situation quite a bit different and say, in this case,

1 I'm not trying to make sure that -- that a bunch of  
2 investors in a private utility -- take your pick, ATCO,  
3 Fortis, whichever it is; I don't have to be concerned  
4 about the investors' motives.

5                   So the form of regulation of Crowns is -  
6 - is often different than the form of regulation of  
7 private utilities. For example, in Yukon, there's no  
8 automatic requirement for the utility board to review  
9 capital projects. In BC, there's a substantial  
10 framework for the government to provide direction to  
11 the utility board in how BC Hydro's regulated.

12                   And that -- that's not uncommon because  
13 utilities, in a way, are, in part, a tool of -- of  
14 public policy, rather than simply being -- the  
15 situation may go to Alberta or -- or something, where  
16 they're -- they're really just a service provider who's  
17 there to earn a return.

18                   So it's not at all unusual that -- that  
19 a Crown utility will have a different regulatory  
20 framework than you might find for -- for a private  
21 sectors, and -- and they'll vary in -- in how broad the  
22 role of a utility board is, but it's rarely, rarely as  
23 -- nearly as broad as it is if you're trying to keep  
24 tabs on -- on a utility where you're -- you're both  
25 trying to ensure fair and efficient service and trying

1 to guard against abuses of monopoly power.

2 MS. PATTI RAMAGE: Mr. Bowman, you'd  
3 agree that in Manitoba this Utility's regulatory  
4 framework is set out by statute and that you are not a  
5 lawyer?

6 MR. PATRICK BOWMAN: Yes, I'll agree  
7 with both of those.

8 MS. PATTI RAMAGE: Okay. Mr. Chairman,  
9 I -- quite frankly, I -- I look to Ms. Southall as to  
10 the next step. I had prepared to make a very brief  
11 submission on Mr. Bowman's qualifications. I'm not  
12 sure what the next step is. This is somewhat  
13 unprecedented for Manitoba Hydro.

14 THE CHAIRPERSON: Would you -- would  
15 you mind, Ms. Ramage, just encapsulating what --

16 MS. PATTI RAMAGE: The concern?

17 THE CHAIRPERSON: -- we have been  
18 talking about in very fairly broad terms?

19 MS. PATTI RAMAGE: Yeah.

20 MS. ANITA SOUTHALL: Mr. Chairman,  
21 sorry for interrupting you, sir. May I just ask a  
22 couple of follow-up questions? Thank you.

23 MR. BYRON WILLIAMS: And, Ms. Southall,  
24 just when we -- when we do get to the process, I  
25 certainly have some submissions that I'd like to be

1 heard on this one.

2

3 CROSS-EXAMINATION BY MS. ANITA SOUTHALL (QUAL.):

4 MS. ANITA SOUTHALL: Mr. Bowman, I've  
5 been following the brief testimony on your  
6 qualifications. Can I just go back and revisit the  
7 various tribune -- tribunals you identified where you  
8 were involved in some sort of testimony associated with  
9 depreciation evidence? I think this may be in the  
10 Yukon, Northwest Territories, and perhaps even  
11 Newfoundland.

12 Would those be the three (3)  
13 jurisdictions, sir?

14 MR. PATRICK BOWMAN: Those are three  
15 (3), but in different -- in different ways. So if --  
16 if you're -- that's where you're heading, then perhaps  
17 I'll stop there. Otherwise, I would like to elaborate.

18 MS. ANITA SOUTHALL: And can you tell  
19 me if you were personally qualified by each of those  
20 panels on the interpretation or extrapolation from  
21 depreciation studies?

22 Like on that specific aspect of it, were  
23 you actually qualified as an expert by those tribunals?

24 MR. PATRICK BOWMAN: I'll go back to  
25 the elaboration. In -- in Newfoundland, as I said, I

1 advised clients, but -- but I was not part of a -- a  
2 proceeding. And in fact there was -- there was no  
3 hearing on that. There was a negotiated settlement  
4 between the parties. So it -- it never got to the  
5 point of anyone being qualified. But I -- I hadn't  
6 submitted evidence. I was -- I was solely acting as an  
7 advisor.

8 In -- in one (1) of the other examples  
9 we gave, the Northwest Territories, where I was working  
10 with the government in -- in one (1) of the instances,  
11 the government had hired a committee to do due  
12 diligence of the utility's application before it was  
13 filed. So we worked with that due diligence committee  
14 to help them understand the depreciation study that had  
15 been prepared. So again, it wasn't -- I wasn't before  
16 a tribunal.

17 Going specifically to appearances before  
18 tribunals, it would be Northwest Territories and Yukon.  
19 And I -- I was going to say to the -- I have probably  
20 been before those tribunals ten (10) different times,  
21 and I don't believe I've ever been specifically  
22 qualified, sort of line by line, on -- on any  
23 particular items. It's just not a -- like I said, when  
24 you're appearing on a company witness in a panel, it's  
25 not an item that -- that those -- those Boards -- or



1 the steps that they go through.

2 MS. ANITA SOUTHALL: Thank you, sir.

3 And my last question is, do you have any specific  
4 education associated with the interpretation of  
5 depreciation studies, beyond your reading of literature  
6 and whatever experiential knowledge you may have, sir?

7 MR. PATRICK BOWMAN: No, it's -- it's  
8 all experiential.

9 MS. ANITA SOUTHALL: Thank you, Mr.  
10 Chairman. I think it -- unless the panel members have  
11 any specific questions of Mr. Bowman, we'll maybe take  
12 that as the next step.

13 MR. RAYMOND LAFOND: I just have one  
14 (1) quick question. Mr. Bowman, you referred to at a  
15 point in your testimony, your comments that -- you  
16 said, "our profession."

17 Which profession were you referring to?

18 MR. PATRICK BOWMAN: It hasn't been a  
19 very long morning yet, and I'm already losing track of  
20 which response that would have been. The area in which  
21 I practise is primarily involved in -- in utilities and  
22 -- and the economic and policy side of -- of utilities'  
23 rate making and -- and project development.

24 I don't know that it's a -- it's a large  
25 group of peers that we -- that I -- I'd be associated

1 with in -- in those areas. But -- but generally,  
2 people who practise before these forums, who come from  
3 a -- an economics background as opposed to an  
4 accounting or a -- a legal background, would have a --  
5 I -- I believe that question may have been in regards  
6 to -- to law and interpreting the law.

7                   Generally, those people do not have a  
8 law degree in order to formally interpret laws. But at  
9 the same time, the laws (sic) is reflecting a policy  
10 framework, and -- and a lot of the words have meanings  
11 to an economist. And -- and you have to look to those  
12 laws and to that framework in order to figure out how  
13 you can then reflect the intent or the -- or the policy  
14 direction into something like -- like rates, which is  
15 what we're about at the end of the day.

16                   And so I think in that -- if -- if I  
17 made the comment about "our profession," I would have  
18 been speaking of -- of people who -- who come from an  
19 economics background who are -- who are, in this  
20 example, fundamentally practising in respect of rates  
21 and fairness tests for rates, and how they -- how,  
22 although they are not lawyers, there's a -- there's an  
23 absolute requirement to be able to understand the --  
24 the policy framework or the -- or the -- the meaning of  
25 the -- the words to an economist that are in the acts,

1 even if they aren't necessarily the same meanings or  
2 same -- same arguments you hear before a -- a court on  
3 those same acts.

4 THE CHAIRPERSON: Mr. Williams, would  
5 you like to comment, please, on the qualifications of  
6 this...?

7 MR. BYRON WILLIAMS: I'm certainly  
8 prepared to. I'm not sure of the appropriate order,  
9 Mr. Chair, and -- and...

10 THE CHAIRPERSON: I'm sorry about that.  
11 Ms. Ramage...?

12

13 SUBMISSIONS BY MS. PATTI RAMAGE (QUAL.):

14 MS. PATTI RAMAGE: This mic is quite  
15 something. It doesn't want to go on and it doesn't  
16 want to go off. You've got it. It may help to have  
17 Manitoba Hydro's comments, because it may provide a  
18 perspective of what our concern is. And, to be clear,  
19 Manitoba Hydro is not suggesting in any way that Mr.  
20 Bowman's evidence is inad -- inadmissible as we've seen  
21 it to date, or ought to be struck, or anything along  
22 those lines.

23 What Manitoba Hydro is requesting that  
24 his -- Mr. Bowman's expertise be properly recognized as  
25 being in revenue requirement, rate design, and cost of

1 service. Manitoba Hydro has a great deal of respect  
2 for Mr. Bowman in these areas. We don't always agree  
3 with Mr. Bowman in these areas, but we have a great  
4 deal of respect for his opinions in these areas.

5 We also accept that he has general  
6 knowledge of the impacts of depreciation, but it's  
7 Manitoba Hydro's view that it's not appropriate to  
8 attach to that general knowledge, acquired through  
9 sitting on panels where depreciation was reviewed as an  
10 issue with other depreciation experts, the authority  
11 associated with the term "expert".

12 Manitoba Hydro's revenue requirement is  
13 derived based on the expertise of multiple professional  
14 disciplines. In virtually every hearing I've  
15 participated, it's included the testimony of  
16 professional accountants and professional engineers and  
17 other specialists.

18 We have never seen before a witness  
19 attempt to qualify themselves, for example, as an  
20 expert in revenue requirement and accounting -- and the  
21 accounting treatment of, but yet that's what the  
22 expertise of revenue requirement is, is looking at the  
23 accountant's work as it applies to revenue requirement.  
24 It's looking at the engineer's work as it applies to  
25 revenue requirement. And it's, in this case, looking

1 at a depreciation consultant's work as it applies to  
2 revenue requirement.

3 But our concern is with elevating that -  
4 - that information that we are hearing, and Mr. Bowman  
5 has heard before, to the level of expert in that area.  
6 And we think that ought to be reserved for the people  
7 with those designations. And we shouldn't try to  
8 cross-pollinate those issues.

9 Mr. Bowman is an expert in revenue  
10 requirement. There's many components that go into  
11 revenue requirement. If he wishes, we accept he has  
12 general knowledge of the impacts of depreciation. But  
13 our concern is putting those two (2) terms together:  
14 depreciation and expert, and qualification as an  
15 expert.

16 On the issue of -- the second issue,  
17 which was regulatory provincials for -- principles for  
18 Crown-owned utilities, Manitoba Hydro is of the view  
19 that those regulatory principles in Manitoba are set  
20 out in the Crown Corporations Act, and this utility and  
21 this Board is guided by that legislative framework. It  
22 is not guided by textbooks.

23 It is not guided -- those are the  
24 regulatory principles in -- in this province.  
25 Certainly witnesses will testify as to what various

1 academics have said, what other regions have said. But  
2 the expertise to guiding this -- that matter is in law,  
3 and it ought to come in final submissions.

4                   Again, we have no -- no issue with Mr.  
5 Bowman providing his evidence on that. It's attaching  
6 that he's an expert in that area, because I think that  
7 expertise will be left to the lawyers in final  
8 argument, to such extent that those issues arise.

9                   THE CHAIRPERSON:    Mr. Williams...?  
10

11 SUBMISSIONS BY MR. BYRON WILLIAMS (QUAL):

12                   MR. BYRON WILLIAMS:    Yes. And I -- and  
13 I thank My Friend, Ms. -- Ms. Ramage, for clarifying  
14 the -- that they're not objecting to the admission of  
15 the evidence. That is helpful. Mr. --

16                   THE CHAIRPERSON:    Could you repeat  
17 that, please?

18                   MR. BYRON WILLIAMS:    As I understand  
19 from Manitoba Hydro, they're not objecting to the  
20 admission of Mr. Bowman's evidence. They're objecting  
21 to the characterization of some his expertise. And I  
22 think that's an -- an important clarification, which --  
23 which I appreciate.

24                   Mr. Chairman and -- and members of the  
25 panel, just to back -- perhaps back up to first

1 principles. Certainly, when one looks to qualifying a  
2 wit -- a witness as an expert, one looks at, in -- in  
3 our client's submission, two (2) essential criteria.

4                   One (1) is: Are they independent? Do  
5 they -- are they able to form an independent judgment?  
6 And then: Do they have an expertise that is of --  
7 available to the tribunal or the decision-maker that is  
8 not ordinarily -- or not generally available? So it --  
9 it's something that they can add to the deliberative  
10 process beyond general -- beyond general knowledge.

11                   When my client -- and certainly, as --  
12 as we've observed, both Mr. Bowman, in -- in hearings  
13 before this tribunal and also his voir dire this  
14 morning as well as the reviewing his curriculum vitae,  
15 it appears to our clients that the -- at the heart of  
16 Mr. Bowman's expertise is expertise in natural  
17 resources economics and in regulatory economics.

18                   His degree -- his degree gives him the  
19 natural resources economics expertise, and with that  
20 master's levels work, of course, the -- the ability to  
21 -- to analyze statistical and economic information.  
22 His experience over fourteen (14) years in a really  
23 broad range of jurisdictions has, in our client's  
24 respectful submission, given him that insight into  
25 regulatory economics.

1                   And -- and certainly, the -- we note  
2 that he has extensive experience with hydroelectric  
3 utilities, including this -- those which are Crown-  
4 owned hydroelectric utilities. And that experience,  
5 certainly from our client's perspective, gives him  
6 insight into the unique nature of -- of Crown-owned  
7 hydroelectric utilities, whether that's the concept of  
8 patient capital, whether in the Manitoba context it's  
9 the debt guarantee fee, but the -- the very intensive,  
10 long-term capital investment.

11                   Certainly, I would have to disagree with  
12 my -- My Learned Friend, Ms. Ramage, that regulatory  
13 principles or the regulation of a Crown-owned utility  
14 is a lawyer's monopoly. I certainly do accept her  
15 submission that -- that one has to take guidance from  
16 the statutory regime. But it -- the concept of a just  
17 and reasonable rate, which lies at the heart of the  
18 Public Utilities Board's mandate and which lies at the  
19 heart of our legislative regime in Manitoba, at its  
20 heart, it's an economic concept.

21                   I don't want to dis -- disrespect the --  
22 the accountants either, but I'm just -- there -- there  
23 is -- a lot of that flows from over a hundred years of  
24 the examination of: How do we regulate a monopoly?  
25 And if one thinks of Mr. Wiens from Manitoba Hydro,



1 probably the foremost expert on regulation from  
2 Manitoba Hydro's perspective -- an economist, by the  
3 way -- and one thinks of the texts that he cites, in  
4 terms of relying on regulatory principles, it is  
5 Bonbright. And no one would ever dare suggest to Mr.  
6 Bonbright, who's passed away some twenty (20) to thirty  
7 (30) years ago, that he was a lawyer. That is an  
8 economics text at its -- at its heart. Those core  
9 principles are economic texts.

10                   So certainly, in terms of the criticism  
11 of Manitoba Hydro or the suggestion that somehow Mr. --  
12 Mr. Bowman's expertise is -- as an economist and a  
13 regulatory economist, excludes him from talking about  
14 those regulatory principles, we would respectfully  
15 disagree.

16                   From our client's perspective, the  
17 tighter call is in terms of how we characterize Mr. --  
18 Mr. Bowman's perspective, in terms of the depreciation  
19 issue. The words that I -- that I used in -- in our  
20 opening comments, we didn't object to his  
21 characterization as an expert as framed. And -- and we  
22 maintain that position.

23                   Mr. Bowman is -- is not saying to this  
24 Board that he's an expert in -- in the practice of Iowa  
25 curves. And -- and frankly, if you looked at Mr.

1 Kennedy's resume and his, you know, his undergraduate  
2 work, you would see that, you know, his expertise in  
3 that regard is computer generated.

4 Mr. Bowman is speaking to a -- a more  
5 practical issue of understanding how these depreciation  
6 concepts and results are -- are applied in a regulatory  
7 cons -- construct, melding the knowledge of  
8 depreciation results, some statistical insights, as  
9 well as regulatory principles.

10 And so we would agree with Manitoba  
11 Hydro if they're suggesting that Mr. Bowman is not an  
12 expert in depreciation, but we certainly take issue  
13 with the more narrow characterization of his expertise.

14 Mr. Chairman and members of the panel,  
15 for what it's worth, those are our client's comments.

16

17 (BRIEF PAUSE)

18

19 THE CHAIRPERSON: Mr. Hacault...?

20

21 SUBMISSIONS BY MR. ANTOINE HACAULT (QUAL.):

22 MR. ANTOINE HACAULT: Thank you,  
23 members of the Board. I want to go back to  
24 specifically what I was seeking to have Mr. Bowman  
25 qualified in. And you may recall in my questions of

1 Mr. Bowman, when I'm speaking about depreciation, I was  
2 not asking him to be qualified as a depreciation  
3 expert.

4                   There's, in my respectful submission, a  
5 big difference between asking Mr. Bowman to be  
6 qualified as a depreciation expert and asking him to be  
7 qualified on the issue of the appropriate regulator  
8 approach to reflecting the outcome of depreciation  
9 studies. We've seen that the depreciation studies can  
10 either front load some of the depreciation. They can  
11 be straight line. They could be sinking fund.

12                   Those outcomes have an impact on who  
13 bears the cost of paying the rates and when they're  
14 paid. It's more a timing issue. So that Mr. Bowman,  
15 as has been explained in his testimony, has provided  
16 advice and insight, both in hearings and have been  
17 retained by clients to provide advice on that very  
18 specific issue: How do you deal with the outcomes of a  
19 depreciation and the timing of the expenses that get  
20 put in?

21                   I agree with Mr. Williams that if we  
22 look in textbooks that we have on expert evidence,  
23 there's two (2) criteria; firstly, the independence.  
24 And I think that I would suggest there's no doubt about  
25 that. He's -- Mr. Bowman's been accepted, both

1 evidence on behalf of utilities and of customers. And  
2 he's appeared before this Board, and his independence  
3 has never been criticized at all.

4           The second part is whether, as a result  
5 of experience -- you don't need to have a degree --  
6 whether experience can provide any information that  
7 might be useful to this Board that wouldn't be in the  
8 knowledge of a person walking on the street.

9           If you go and ask somebody on the  
10 street, How do you deal with these -- a sinking fund  
11 approach, how do you deal with an ASL approach, how do  
12 you deal with an ELG approach, the results of those  
13 studies, and how do you deal with them when you're  
14 going to set rates, when do you put them in rates and  
15 what happens; I think it's fair to suggest that you can  
16 ask twenty (20) people, and they would have no idea,  
17 because they have no experience and no knowledge in  
18 that area.

19           Mr. Bowman has been involved in this  
20 area and providing and providing testimony since 2005.  
21 So the reason why we seek to have somebody qualified as  
22 an expert is because they have, because of their  
23 experience or sometimes because of their degree,  
24 specialized knowledge which can be of assistance to a  
25 board or to a court.

1                   And so that there's also issues with  
2 respect to when we talk about when that gets put into  
3 rates, those are intergenerational equity issues.

4                   And this leads me to also disagree with  
5 Ms. Ramage that rate regulation, you only find the  
6 answers in the statute. I totally disagree with that,  
7 and that you have to be a lawyer to understand what you  
8 have to do in rate making. The last panel of this PUB  
9 had no -- had one (1) lawyer on it. This panel does  
10 not have any lawyers on it. Is it because this panel  
11 doesn't have any lawyers on it, it can't make a  
12 decision on rate-making principles?

13                   The rate-making principles also -- and -  
14 - and that was also exemplified by some of the comments  
15 of Mr. Williams -- you don't find them all in the  
16 statute. There are leading texts which are relied on  
17 by rate regulators throughout North America. One is  
18 Bonbright.

19                   And those economic theories on how rates  
20 get assessed -- firstly the revenue requirement;  
21 secondly the cost of service allocating the cost to the  
22 proper class and not discriminating between the  
23 classes; and rate design -- those general principles  
24 and guiding issues aren't all found in the statute.

25                   And that's not unusual in the legal

1 sense because -- and this is back to what I was  
2 teaching the students about two (2) weeks ago at the  
3 university -- our system of law is you have general  
4 principles. Those may be changed or modified somewhat  
5 by a statute, which is what's happened here, Crown --  
6 the Crown Corporations Utility Act. And also in the  
7 Manitoba Hydro Act there -- there are some -- there is  
8 some guidance in that legislation as regards rate  
9 setting.

10 So to say that Mr. Bowman has to be a  
11 lawyer and can't testify with respect to appropriate  
12 rate-making principles related to a Crown utility, I  
13 suggest, is incorrect.

14 Dealing with the second qualification,  
15 which is the rate-making principles as applicable to a  
16 hydroelectric Crown-owned utility or -- my specific  
17 wording was:

18 "Rate-making principles for an  
19 appropriate reg -- and appropriate  
20 rate-making principles for a Crown-  
21 owned utility providing service at  
22 cost."

23 You can see from Mr. Bowman's experience  
24 that he brings a perspective which has not yet been  
25 brought fully to this hearing. I did some cross-

1 examination on that, pointing out what happened in this  
2 jurisdiction, what happened in that jurisdiction.

3 But there has been nobody in this room  
4 that has, again, the specialized knowledge through  
5 experience that he's had over the last fourteen (14)  
6 years that can explain to this Board what's happening  
7 in other jurisdictions in -- in which he appears and in  
8 which InterGroup provides advice.

9 So that -- again, going back, does Mr.  
10 Bowman have knowledge that somebody on the street if  
11 you go talk to them all, what's happening in BC, what's  
12 happening in Northwest Areas, what's happening -- he  
13 can provide answers to member Lafond's questions on the  
14 Mayo plant because he was involved in that. He could  
15 have answered it right away. Hydro witnesses couldn't.  
16 They had to go back.

17 He -- he was involved in Newfoundland.  
18 He understands exactly what happened with respect to  
19 those proceedings. He provides advice there. So he  
20 has knowledge from across the country and brings this  
21 Canadian perspective to Manitoba proceedings and how  
22 Manitoba, with its specific context of cost of service  
23 and not a rate of return, fits into all of that.

24 And it gets perhaps into some of the  
25 questions that the Board Chair asked the other day.

1 Well, what do I say to ratepayers who ask me, Well, in  
2 Ontario they did this, in BC they did this, in other  
3 areas they did this? Mr. Bowman can bring that unique  
4 perspective because of his knowledge in appearing in  
5 front of those different areas and can help provide  
6 advice to the Board that's not known anywhere else.

7                   You're not going to find it in textbook.  
8 You're not going to find a certified professional  
9 that's going to have this. But by virtue of his  
10 fourteen (14) years of experience, he has specialized  
11 knowledge which can assist this Board. So that's why  
12 we were suggesting that he also be recognized as an  
13 expert in rate-making principles and appropriate  
14 regulatory principles for a Crown-owned utility  
15 providing service at cost.

16

17                   (BRIEF PAUSE)

18

19                   MR. ANTOINE HACAULT: I'd just like to  
20 close as my --

21                   THE CHAIRPERSON: I'm sorry, what'd you  
22 say?

23                   MR. ANTOINE HACAULT: Ms. Ramage  
24 acknowledged that Mr. Bowman had specialized knowledge  
25 in revenue requirements. Well, revenue requirements,



1 as we've seen over the last two (2) -- couple of weeks,  
2 are comprised of several components. But at one (1)  
3 point in time, and there -- there's an interaction  
4 that's been happening on that, somebody has to provide  
5 context with respect to different parts of revenue  
6 requirements and how those can, or should, or maybe  
7 should not, fit into a revenue requirement.

8                   It's looking at those items, looking at  
9 what's happening, based on his economics background,  
10 theory, and experience, to provide some insight and  
11 some practical, specialized knowledge as to how people  
12 -- how we can look at that in Manitoba, and how that  
13 compares to other areas of the country.

14                   THE CHAIRPERSON: Ms. Ramage, did you  
15 want to provide any other commentary?

16

17 SUBMISSIONS BY MS. PATTI RAMAGE (QUAL.):

18                   MS. PATTI RAMAGE: Only two (2) brief  
19 points. And one (1) is, what I heard from Mr. Hacault  
20 was that -- that Mr. Bowman would be providing advice  
21 on the -- the outcomes of a depreciation study and,  
22 again, how it impacts revenue requirement. That is not  
23 Manitoba Hydro's issue. The issue would go more to,  
24 for example, providing ice -- advice to this Board on  
25 the merits of ASL versus ELG, that sort of thing.

1                   That is not his expertise. That is  
2 where we believe he is a generalist. If sitting in a  
3 hearing and sitting in these processes makes him an  
4 expert, Mr. Rainkie's an expert. Arguably, I would be;  
5 and I could guarantee you I'm not.

6                   And then the other point would be in  
7 terms of rate-making principles. Mr. Bowman -- I  
8 accept he can certainly testify to the other  
9 jurisdictions he's been in. But to say he's an expert  
10 of -- of regulatory principles across the country, he  
11 is -- he can provide advice as to his experiences in  
12 other jurisdictions. Again, no issue.

13                   But to suggest across Canada he has --  
14 Mr. Bowman hasn't been in every jurisdiction. And I  
15 don't believe he's studied it any more than Manitoba  
16 Hydro has. We constantly attempt to monitor what's  
17 going on elsewhere, do our best job. Do we know  
18 everything? No. Would we be qualified as experts in  
19 it? I don't think so. And I don't think it's  
20 appropriate.

21                   "Expert" is a very important word.  
22 That's -- that's the key. Generalist and -- and  
23 excellent working knowledge? Yes. But an expert is  
24 something different from someone who has sat through  
25 these processes. And that's our concern, because once

1 you attach expert to a -- to any piece of evidence, it  
2 elevates that evidence. And that's where our concern  
3 comes from, not the evidence itself.

4 THE CHAIRPERSON: I would like some  
5 more questions -- to ask more questions directly of Mr.  
6 Bowman.

7 Mr. Bowman, I thought I heard you say  
8 that you had worked with one (1) of the -- one (1) of  
9 your clients in giving guidance, or at least to prepare  
10 for a depreciation study that was done by an outside  
11 expert.

12 Is -- is -- did I hear that correctly?

13 MR. PATRICK BOWMAN: More than one (1).  
14 Yeah, in almost all of the cases we're talking about I  
15 would have been working with the senior management of  
16 the utility or the -- or the technical people at the  
17 utility as well, in some cases -- always the senior  
18 management -- in preparing for -- in retaining, in  
19 setting the work plan, in providing guidance through  
20 the work plan, and in interpreting the results, and in  
21 making policy decisions, all of which guide this -- the  
22 -- the depreciation study that's conducted.

23 THE CHAIRPERSON: Now, the -- the -- so  
24 the expert came into the entity, did the depreciation  
25 study, and then in terms of -- what work did you do

1 with respect to addressing the recommendations that you  
2 received from the depreciation expert?

3 MR. PATRICK BOWMAN: Well, I think  
4 you'll find, if you look to something like Mr.  
5 Kennedy's work here, depreciation studies aren't --  
6 aren't always undertaken the same way as something like  
7 an engineering study, where you hire someone to design  
8 you a bridge or something of that nature. They're --  
9 they're an iterative process, and they involve a  
10 utility's own data, and they involve a fair number of  
11 what I will call policy decisions and my clients call  
12 policy decisions through the course of conducting the  
13 depreciation study.

14 And a good example here is something  
15 like the net salvage. Mr. Kennedy's report, we have  
16 various drafts of his reports, and at various times it  
17 had net salvage in it. And Mr. Kennedy testified that  
18 in his -- in his practice, he -- he generally  
19 recommends to clients that they include a net salvage  
20 in their rates. But at some point during that process,  
21 Manitoba Hydro made a decision, a policy decision, not  
22 to include net salvage in the study. And the final  
23 results of the study don't have net salvage.

24 It's not -- so it's not just you sort of  
25 set them off on their way and they come up with the

1 recommendations. You come back with a nicely bound  
2 study that you then figure out what to do with it.  
3 It's -- it's how do you interactively deal with things  
4 like making those policy decisions at the utility level  
5 to guide the study through -- during the conduct of the  
6 study. And that's where I've been, as I said, quite --  
7 quite involved with the senior management of the  
8 various utilities, trying to help them sort out those  
9 decisions that need to be made.

10                   There's a -- there's a view that will  
11 come from people like Mr. Kennedy. There's a view that  
12 will come from -- from other aspects of the -- of the  
13 company. And somehow, they have to sort this out,  
14 because it has impacts on not just depreciation; it can  
15 have impacts on rates, it can have impacts on cash  
16 flow, it can have impacts on -- on future liabilities,  
17 it can have impacts on all sorts of aspects in the  
18 company that they have to weigh.

19                   THE CHAIRPERSON: Now -- now -- so the  
20 depreciation study is completed, there's an outcome.  
21 Did you appear before a utility regulator to commen --  
22 to comment upon the -- the impact of the selected  
23 outcomes? In other words, as a selected outcome is a  
24 result of a study, you go in front of a regulator.

25                   And did you ever appear before a

1 regulator to talk about the impact of that particular  
2 selected outcome?

3 MR. PATRICK BOWMAN: Yes. And the  
4 example I gave that probably had the liveliest debate  
5 was the case in Yukon in 2005, where the utility made  
6 the decision to move from an ELG approach to an ASL  
7 approach. That was a matter for review before the  
8 utility board. It also made the decision to include  
9 net salvage in its proposals, and that was a matter for  
10 debate before the utility board.

11 Mr. Kennedy's the one (1) who conducted  
12 the study. He did -- he didn't appear. The utility  
13 was there to answer for it. And the main reason the  
14 utility and -- and us working with the utility was  
15 there to answer for it was because the main issues of  
16 debate weren't technical; they were policy. They were  
17 a choice of an ELG versus an ASL approach, in that  
18 case, was viewed as a policy decision, and the utility  
19 had to answer for why one (1) approach suited its  
20 operations better than the other. They could have told  
21 Mr. Kennedy to go left or right, and he would prepare  
22 the study that suited that approach. And he would be  
23 the only person who was qualified to prepare that  
24 study.

25 The utility also made the decision that,

1 based on policy considerations, it was going to propose  
2 that it continue to conduct net salvage in its rates.  
3 And -- and that's what it proposed, and that's what we  
4 testified to. And that one (1), at the end of the day,  
5 the utility board disagreed. And it said, No, no more  
6 net salvage in rates. So it agreed with the ASL. It  
7 didn't agree with the net salvage proposal.

8                   And -- and they were both reviewed  
9 heavily at the hearing. And -- and I would have been  
10 the -- the person who was most versed with the subject  
11 and would have done the primary amount of testimony on  
12 -- on the review of those policy decisions. Although -  
13 - well, at the end of the day, the company ultimately,  
14 of course, had to answer for the policy decision it  
15 made.

16                   THE CHAIRPERSON: Now, I think the --  
17 unless there are other people who would like to comment  
18 here, the advisors would like to comment -- I'm sorry,  
19 the legal counsels would like to -- to speak, I would  
20 suggest that we recess for fifteen (15) minutes so the  
21 panel can deliberate on this issue. And after we  
22 break, we'll come back with a decision with respect to  
23 this disputed matter. So let's take -- let's resume  
24 proceedings at twenty (20) to -- to 11:00.

25

1 --- Upon recessing at 10:20 a.m.

2 --- Upon resuming at 10:47 a.m.

3

4 THE CHAIRPERSON: We'll resume the  
5 proceedings immediately.

6

7 RULING (QUAL.):

8 THE CHAIRPERSON: The panel has met and  
9 considered what has heard -- what it has heard from the  
10 Intervenors and the Applicant and Mr. Bowman in respect  
11 of the disputed matter.

12 The panel has concluded that Mr. Bowman  
13 is not an expert -- recognized expert on depreciation.  
14 However, Mr. Bowman has demonstrated to the  
15 satisfaction of this panel that he has experience in  
16 analyzing depreciation studies and addressing the  
17 outcomes of those depreciation studies for rate-setting  
18 purposes. The Board will allow his evidence -- pardon  
19 me -- will allow his evidence to be -- to be heard and  
20 determine the weight to be given to his testimony.

21 Mr. Hacault, we're prepared to allow you  
22 to -- your witness to go through the subject area as  
23 you have identified for examination.

24 MR. ANTOINE HACAULT: Just so I'm  
25 clear, Mr. Chair, there were two (2) disputed



1 qualifications that were being suggested. The first  
2 one was with respect to the appropriate regulatory  
3 approach to the outcome of depreciation studies and  
4 revenue requirements. And the second one was with  
5 respect to appropriate regulatory principles for a  
6 Crown-owned utility.

7 Does -- I didn't understand the Chair's  
8 comments to deal with the second item. I'm not --  
9 maybe I misunderstood.

10 MS. ANITA SOUTHALL: Just to clarify, I  
11 believe the panel has found that it's appropriate, Mr.  
12 Hacaault, for you to take your witness through those  
13 disputed areas, as well as the other areas you'd  
14 identified.

15 So I believe the Chairman's comments at  
16 the end were intended to reflect that you should  
17 proceed in all of the areas that you'd identified with  
18 your witness, and they'll determine what weight  
19 ultimately to give to it in their deliberations.

20 MR. ANTOINE HACAULT: Thank you.

21

22 EXAMINATION IN-CHIEF BY MR. ANTOINE HACAULT:

23 MR. ANTOINE HACAULT: Now, Mr. Bowman,  
24 before we get into the specific testimony related to  
25 this GRA, there was a PUB/MIPUG-25 which went through

1 the type of work that InterGroup does for Manitoba  
2 Hydro. Could you elaborate a bit on the type of work  
3 that InterGroup does for Manitoba Hydro? I know in  
4 your direct you indicated that you personally haven't  
5 done any work over the last bit.

6 But could you just deal with that  
7 particular issue?

8 MR. PATRICK BOWMAN: Yes. The -- the  
9 reference was a PUB question to me, number 25, and it  
10 highlighted that the firm, InterGroup, who I work for,  
11 is retained by Manitoba Hydro from time to time, is  
12 presently retained by Manitoba Hydro to work on matters  
13 of environmental assessment. And in that regard, it is  
14 largely, if not entirely, limited to socioeconomics --  
15 what we call socioeconomics; so impacts of projects on  
16 people, communities, public involvement, as well as an  
17 approach to regulatory principles.

18 And -- and our firm will assist Manitoba  
19 Hydro in -- at -- at times in preparing documents and  
20 assessments of -- of new projects, such as transmission  
21 or generation and its impact on local communities, or -  
22 - or -- the -- the range of things that are covered by  
23 -- by what they call socioeconomic impact assessment.  
24 So what is an impact on community life, or employment  
25 levels in communities, or that type of thing.

1                   None -- none of it is related to NFAATs,  
2 or -- or rates, or economics of projects, or any of  
3 those matters.

4                   MR. ANTOINE HACAULT:   Okay.  Thank you.  
5 Now, we've had about -- I don't know where we're at --  
6 twenty (20) days of hearing or so, about fifteen (15)  
7 or sixteen (16) of which was evidence of Manitoba Hydro  
8 panels.

9                   Could you outline what your assignment  
10 was for -- was in reviewing this GRA?

11                  MR. PATRICK BOWMAN:   Yes.  And I -- in  
12 the pre-filed testimony that we prepare, we make a  
13 point of explaining the assignment and the framing of  
14 the assignment so that our -- our starting point, if  
15 you like, the foundation we look to build upon, is --  
16 is clear from the outset.  It's not just a matter of  
17 looking at some documents and making a decision; it's a  
18 question of where do you start from is the principles  
19 that's going to guide your work.

20                  So we've been retained by the Manitoba  
21 Industrial Power Users Group.  They've been a client of  
22 ours for -- of InterGroup's for -- since the late '80s.  
23 I've personally worked on -- on MIPUG matters since the  
24 late '90s and appeared here six (6) times before on  
25 their behalf.

1                   In each case, the -- many of the issues  
2 were the same; some of them differ by -- by hearing.  
3 In this case, I set out that, as an association of  
4 large industry, MIPUG will -- they have common  
5 interests on -- on rates and electricity matters. And  
6 so I'm retained in that respect, rates and electricity-  
7 related matters, not other aspects of -- of industrial  
8 policy or industrial matters related to Manitoba.

9                   And -- and it's meant to provide them  
10 with a review of what the heck they do when these three  
11 (3) binders are land on their desk, of Manitoba Hydro's  
12 GRA. The MIPUG members are typically senior people in  
13 different organizations, and they have a lot of things  
14 to worry about and read and don't take a lot of time to  
15 read three (3) binders of Manitoba Hydro material. So  
16 -- so they hire people like us to try to work through  
17 it and give them some views.

18                   And -- and our pre-filed testimony  
19 reflects the views that we gave them and -- and their  
20 decision to say that they thought we should take these  
21 views and provide them to this Board.

22                   We're sort of guided by two (2) things  
23 when we get the binders, and we need to flip through  
24 them. One (1) is: Who are the clients and what are  
25 their concerns? And we set some of that out at Section

1 2.1 of our evidence. We're talking about a group of  
2 clients or part of a class that makes up about 25  
3 percent of Manitoba Hydro's domestic load.

4           They're -- each of them has made long-  
5 term commitments to Manitoba. They've invested  
6 significant capital here. They're joined at the hip  
7 with Manitoba Hydro in a major way. They don't have  
8 other options. They can't buy from another -- another  
9 utility supplier. And -- and they don't turn over very  
10 often.

11           And in the last fifteen (15) years, my  
12 recollection is there's only been one (1) new customer  
13 added and -- and one (1) that's gone away. And the one  
14 (1), you know, Pine Falls closed and -- and one (1) --  
15 one (1) new customer was developed in -- in the Virden  
16 area. And, otherwise, we're talking about the --  
17 basically the same members and the same industrial  
18 complement that was there going back to the -- to the  
19 last '90s for sure, maybe before.

20           MR. ANTOINE HACAULT: Mr. Bowman, in  
21 your experience, with respect to industrial customers  
22 in particular, what do they rely on with respect to  
23 hydro electric rates?

24           MR. PATRICK BOWMAN: Well, at the time  
25 they make their commitments or -- or make their

1 investments in a plant they'll often take the time to  
2 try to understand what their supply arrangement here is  
3 going to be. And because they're -- like I said,  
4 they're captive, it's -- it's all about Manitoba Hydro.

5                   And it's critical to a company coming in  
6 -- you can imagine investing hundreds of millions or  
7 billions of dollars to develop -- develop a project --  
8 that -- that they've got a utility that's going to be  
9 around for the long term; that's got financial strength  
10 to help make sure that they're going to get quality  
11 power, reliably -- reliable power, reliable is key; and  
12 that it'll be able to meet their needs under a stable  
13 framework; and that there's some predictability and --  
14 and rationale that reflects how the utility's operated  
15 and -- and how its rates are set.

16                   And the members have definitely made the  
17 point, when they've come before this Board before, to  
18 say that one (1) of the aspects that's important in  
19 that decision making is -- is just the -- the presence  
20 of this Board and -- and having rates regulated. It's  
21 -- it's a very important aspect of -- of their -- the  
22 comfort that they can take that -- that there'll be a  
23 rational assessment and -- and decisions on -- on rates  
24 won't be made willy-nilly or based on short-term  
25 pressures.

1 MR. ANTOINE HACAULT: Now, as relates  
2 the customers and Hydro, as an organization, you've  
3 indicated low rates are irrelevant if they're unstable  
4 or if the Utility would be fly by night.

5 What about the pressures that a utility  
6 like Hydro might face -- or, in your experience, other  
7 utilities like Hydro might face?

8 MR. PATRICK BOWMAN: Well, that's part  
9 of my comments about the -- the role of regulation in  
10 Manitoba and why it's important, that if you're  
11 involved with a utility -- and as I've said, I've been  
12 involved in both sides -- you -- you're facing an  
13 immense amount of complexity and an immense amount of  
14 pressures. And those -- from the world we live in,  
15 those pressures ultimately flow through to rates. It's  
16 one (1) of the end products of the utility.

17 I'm sure if you're coming from a  
18 different perspective, they ultimately flow through to  
19 many different aspects. But -- but we're here about  
20 rates, and -- and I'm asse -- asked to assess rates.  
21 And those short-term pressures can lead to a utility,  
22 like Manitoba Hydro, being -- being -- heading off in  
23 certain directions that -- that's it good to have the  
24 sober second thought of -- of this Board.

25 And probably the best example recently

1 of that is something like the -- the EIIR, energy  
2 intensive industrial rate that was proposed in about  
3 2006, 2007, 2008. People were getting the id -- idea  
4 in their head that export markets were getting really  
5 valuable, and maybe we'll get flooded with industrial  
6 customers, so we'd better make sure we do something to  
7 -- to, as I called it in that hearing, to -- to bar the  
8 door to -- to try to ensure that we don't get that  
9 development here, because it's more important that we  
10 preserve our load for export.

11 I'm sure Hydro characterizes it  
12 differently, but the proposal was pretty clear that if  
13 you grow or if you're new, you're going to pay a higher  
14 rate. Thankfully, the customers had their route of  
15 appeal to this Board, and -- and this Board rejected  
16 that rationale. And I think that's turned out to be a  
17 very wise decision, because as we sit here today, it's  
18 -- it's probably a lot more attractive to have an  
19 industrial customer on your system that you're serving  
20 than -- than dumping power into -- into export markets.

21 And that type of -- of comfort that --  
22 that the system works in that way is -- has been raised  
23 as -- by the members as being important, and it's --  
24 and it's part of what frames our assignment. That's  
25 why we're asked to look at -- at Hydro not in the



1 context just of its finances or its planning, but in  
2 the context of it as a regulated utility. That's one  
3 (1) of the aspects that -- that guides our review.

4 MR. ANTOINE HACAULT: Now, Mr. Bowman,  
5 could you start to address the lenses that you used to  
6 look at the evidence that was provided by Manitoba  
7 Hydro in its rate application?

8 What rate-making principles and -- and  
9 what general principles did you consider in analyzing  
10 that evidence?

11 MR. PATRICK BOWMAN: Yes, and I'll note  
12 that if someone wants to go back and review it, it's  
13 something we took the time to briefly explain in  
14 Section 2.2 of our -- of our submission. But we've --  
15 since InterGroup's been originally retained by MIPUG,  
16 we've always submitted testimony to say that we're  
17 reviewing Hydro in light of principles appropriate for  
18 a Crown owned, regulated utility.

19 And we haven't always taken the time to  
20 explain what all that means. And -- and this time we -  
21 - we went back and tried to put that down on paper so  
22 that people understood the context. So over the course  
23 of about five (5) or six (6) pages there, we review  
24 that.

25 In a way, we're -- we're reviewing

1 Hydro. And -- and the recommendations and the  
2 conclusions we make upon -- in our review of Hydro and  
3 its -- its GRA, focus on three (3) fundamental things.  
4 One (1) is that we're dealing with a regulated utility.  
5 And that -- that has a substantial amount of -- of  
6 meaning, a substantial amount of -- of background and  
7 literature and -- and the like that deals with that.

8                   The second is that we're dealing with a  
9 Crown utility that's, I say, regulated under a cost of  
10 service framework. Without going too far into being a  
11 lawyer interpreting acts, the framework for reviewing  
12 Hydro when it goes through that is a utility that's got  
13 a legislative framework or policy framework that's  
14 designed to recover its costs, guided by a section that  
15 says Hydro shall set its rates in order to recover  
16 costs.

17                   It's different than the framework we get  
18 when we work in other provinces. In somewhere like  
19 Yukon, it has a framework that says the utility shall  
20 earn a return on equity. It's got shareholders'  
21 equity, and it's meant to earn a return on it. And so  
22 does Northwest Territories. That -- we don't have that  
23 here. There's no concept of equity and return on  
24 equity. There's no -- no fair rate of return language  
25 in any of that -- that legislation.

1                   So -- so we review Hydro, in that sense,  
2 different than we would if we were given the same GRA  
3 by -- by a different utility. BC Hydro has some of the  
4 same language. If we were doing a BC Hydro GRA, it  
5 would be reviewed in that light, because that's all  
6 that a board can deal with. In Manitoba Hydro, we --  
7 we don't have that framework. So that's the second key  
8 building block.

9                   And the third is that you're dealing  
10 with a high -- a utility that is dominated by hydraulic  
11 generation. And from an economic perspective, and  
12 rates and fairness of rates being, from my professional  
13 background, an economic question, the fact that it's a  
14 hydraulically dominated utility leads to an entirely  
15 different economic profile of costs in any given  
16 period, costs over time, risks, all of those matters,  
17 than you would at a -- with a thermal utility or -- or  
18 an isolated utility.

19                   So we -- those are the three (3):  
20 regulated, Crown owned at cost, and -- and hydraulic.  
21 And I agreed vociferously with Ms. Ramage's comment  
22 that those three (3) factors come together in Manitoba  
23 Hydro in a way that probably is -- is unprecedented in  
24 Canada. No one's quite got that combination at that --  
25 that acute a level of those three (3) characteristics

1 as you have here with Manitoba Hydro.

2 MR. ANTOINE HACAULT: So now that  
3 you've listed each of those framework principles that  
4 guided your review of all the information that was  
5 provided, could you elaborate further on how the  
6 regulated monopoly portion of that framework gets  
7 applied to your analysis?

8 MR. PATRICK BOWMAN: Yes. Regulated  
9 monopolies have been around a long time. This one (1)  
10 is probably, of the three (3), the one (1) that has the  
11 most literature, the most case law, the most background  
12 on. And in any utility you're dealing with a regulated  
13 monopoly, you're dealing with a service function that  
14 is in the economic definition of a utility and of a  
15 natural monopoly. It's -- it's an essential service.  
16 People don't really have a choice but to use it. And  
17 it can only be supplied by Manitoba Hydro. Once one  
18 (1) company has built the wires, nobody else is going  
19 to run wires alongside them and try to steal their  
20 customers.

21 That's why, going all the way back to --  
22 well, before electricity -- why, back to trains, people  
23 tended to -- tended to have a different approach to  
24 this than a competitive business. And it's -- it means  
25 the rates are regulated. It means the levels of

1 service are regulated, and service quality in many  
2 cases. It means the terms of service are -- are  
3 regulated. It means non-discriminatory access can be  
4 regulated. And all those things have to come together,  
5 because otherwise, the -- the opportunity is very large  
6 for that -- that monopoly to -- to abuse their  
7 position.

8                   And we come at it from a customer's  
9 side. Both my background and our clients come at it  
10 from a customer's side. It's not just a question of  
11 the policy, framework for the province, or the -- or  
12 the financial framework of the utility. It's: What  
13 does this mean to the public interest? What does this  
14 mean to customers?

15                   And customers can't choose not to use  
16 electricity. They can't choose who they're served by.  
17 And they -- they can only influence that -- rather than  
18 just be -- not to be sensational, but rather than just  
19 be victims of it or -- or whatever, if -- if they have  
20 that public interest being looked out for in some means  
21 or other; in this case, by a board.

22                   And it -- it ultimately shows up in the  
23 language of the types of things, like Mr. Williams was  
24 citing, that rates have to be just and reasonable, they  
25 can't be unjustly discriminatory, and that the -- and

1 that the first principles for regulation by a board has  
2 to be the public interest.

3 MR. ANTOINE HACAULT: I believe the  
4 Chair may have had a question.

5 THE CHAIRPERSON: I just want to go  
6 back to the notion that Manitoba Hydro is unique. I  
7 mean, the -- the terms you've described -- a regulated  
8 Crown utility dominated by hydraulic -- I mean, doesn't  
9 that describe Hydro-Quebec?

10 MR. PATRICK BOWMAN: Not in its  
11 entirety. Hydro-Quebec operates in divisions. It has  
12 a production division, and it has a transmission and  
13 distribution division. And the production division is  
14 not regulated. They have a framework that says, under  
15 the -- the legislation there, that the distribution  
16 utility has to acquire all the power it needs to serve  
17 the customers. It's regulated and has its rates for  
18 its wires set, and it has -- has to go out and -- and  
19 acquire power.

20 One of its sources for power is the  
21 production division. And the production division of  
22 Man -- of Hydro-Quebec has to provide to the  
23 distribution division a certain quantity of power at a  
24 certain price that's set by the government. It's not  
25 regulated. No one looks at its operations. There's no

1 question about its operating and maintenance expenses,  
2 and the like.

3                   It's 165 terawatt hours, I believe, is  
4 the number. It's been enshrined in legislation, and --  
5 and the price has been fixed for about ten (10) years  
6 at two point seven-nine (2.79) cents a kilowatt hour.

7                   So -- so if you were sitting here in a  
8 Hydro-Quebec hearing, there wouldn't be any of this  
9 talk of how do you run your system and how do you --  
10 how do you profit from exports. If you can profit from  
11 exports, that's fine. Production division keeps them.  
12 The government gets a dividend, or doesn't, or takes a  
13 risk, and all that stuff.

14                   But if you're a ratepayer, you know that  
15 you're going to pay for your wires on the basis of a  
16 decision by a regulator. And for the first 165  
17 terawatt hours of, power which to -- last I knew was  
18 still more than the entire province consumes in the --  
19 in its regulated division, you're going to pay two  
20 point seven-nine (2.79) cents, and that's all. Or I  
21 think they're now talking about raising that by  
22 inflation, the last I heard.

23                   But -- but you -- you're -- you're not  
24 at risk of water flows. You're not at risk of drought.  
25 You're not at risk of new projects being built because

1 all of that is fixed in an outside, unregulated part of  
2 the operation. So that's -- so that's one of the ways  
3 that Hydro-Quebec is different than Manitoba Hydro.  
4 You don't have that -- you're -- you're not in for a  
5 penny in for a pound on the development and generation  
6 side.

7 MR. RAYMOND LAFOND: Who assumes the  
8 risk?

9 MR. PATRICK BOWMAN: It's -- it's the  
10 Government of Quebec. Through -- they -- they still  
11 own the company, and -- and they still can profit from  
12 it or -- or potentially to take -- take losses from it.  
13 Hydro-Quebec is not at the same -- their variability  
14 isn't as high as Manitoba Hydro, so it's -- it's not  
15 quite the same situation.

16 But -- and if -- if the distribution  
17 utility grows beyond 165 terawatt hours, it has to then  
18 go buy that from market at whatever prices it has to  
19 pay in the market. They haven't really run into that  
20 yet. But as it goes forward, it could be buying the  
21 hundred and sixty-sixth terawatt hour from Hydro-Quebec  
22 production, but it'd be a market transaction. It would  
23 be a separate -- a separate deal outside of that basic  
24 heritage contract. So that -- that's one of the ways  
25 in which they're different.



1 BC Hydro has some differences too, and -  
2 - and Newfoundland Hydro has some differences. But  
3 none -- I'd say none are quite this -- this pure a  
4 model, if you like.

5

6 CONTINUED BY MR. ANTOINE HACAULT:

7 MR. ANTOINE HACAULT: Thank you, Mr.  
8 Bowman. Could you speak a little bit about capital  
9 efficiency and --

10 MR. RAYMOND LAFOND: Oh, I'm sorry --

11 MR. ANTOINE HACAULT: -- sorry.

12 MR. RAYMOND LAFOND: I -- I thought you  
13 -- you were dealing -- you started dealing with the  
14 three (3) principles, and you've just dealt with the  
15 regulated framework. I was assuming that you'd now  
16 talk about the second principle of Crown owned, and the  
17 third one then after, at cost.

18 MR. ANTOINE HACAULT: Yes. We have --

19 MR. RAYMOND LAFOND: Or are we leaving  
20 that?

21 MR. ANTOINE HACAULT: -- we haven't  
22 left it. It's still a discussion under the regulated  
23 monopoly. When --

24 MR. RAYMOND LAFOND: Thank you.

25 MR. ANTOINE HACAULT: -- we get into

1 the second part, the Crown cost of service, I'll  
2 specifically identify that we're moving into that  
3 different area.

4 MR. RAYMOND LAFOND: And I want you to  
5 discuss the Crown-owned portion.

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: Please continue  
9 with respect to your discussion of the fundamental  
10 pillar as it relates to a regulated monopoly.

11 MR. PATRICK BOWMAN: Sure. I'd also  
12 note one (1) other thing that dawned on me about Hydro-  
13 Quebec that -- that's different and that's quite key,  
14 is the Hydro-Quebec also has a cutoff for what they  
15 consider a regulated customer. And if you're above a  
16 certain size in Quebec, like the aluminum smelters,  
17 you're not -- you're not subject to the regulated rate.

18

19 You go make, effectively, your own deal  
20 with the government about your rate. So it'll -- it  
21 could be the published rates or it could be lower.  
22 That was one of the comments that -- that Mr. Yan from  
23 Nexus -- or Canexus -- Canexus made, that those aren't  
24 published. They're just part of an overall package of  
25 costs and benefits associated with a -- with a

1 development.

2                   And my recollection is that cutoff is --  
3 is pretty high; 175 megawatts comes to mind, although I  
4 think it may have been lower. But nonetheless it's a -  
5 - it's a small number of customers who would -- who  
6 would be under that framework. But it means that if --  
7 if you're an industry there, you don't appear before a  
8 Board. You don't have to --

9                   MR. RAYMOND LAFOND: You said you deal  
10 with the government. You mean you deal with the  
11 production division of Hydro-Quebec?

12                   MR. PATRICK BOWMAN: Well, no. It's  
13 actually -- as I understand it, is contracts that are -  
14 - that will bundle the power prices you receive with  
15 the broader economic and social bren -- benefits you  
16 bring. So things like -- it depends on the region you  
17 develop and the jobs that you bring, the taxes you pay.  
18 Those type of things will all get considered in an  
19 overall contractual or -- relationship and -- and  
20 they're -- they're fundamentally at a -- at a cross-  
21 government level. It's not just about power; it's  
22 about your overall role in -- in Quebec society.

23                   So my understanding is that's all at --  
24 at the government level, not the -- not just the -- the  
25 Hydro-Quebec production division.

1                   So in terms of the regulated monopoly,  
2 the thing that -- that adds to this level of assessment  
3 that we do is -- is that there's a lot of people who  
4 have different roles in reviewing Manitoba Hydro and in  
5 looking -- looking at the organization.

6                   Hydro has, you know, a Board of  
7 directors who will deal with -- with broad management  
8 and governance aspects. They have a committee of  
9 cabinet -- or, sorry, a committee of the legislature  
10 that will look at broad policy thi -- matters. It has  
11 a Crown corporations council that plays a role. And it  
12 -- it -- of course, it has auditors. It has lenders.  
13 It has bond-rating agencies.

14                  It has lots of people who play a role in  
15 reviewing Manitoba Hydro and doing -- doing their piece  
16 of the puzzle to -- to guide that organization. And --  
17 and we come here before this Board as the only one (1)  
18 of those that -- that role starts with rates, and it  
19 starts with public interest in respect of rates.

20                  So -- so our evidence to you, if -- if I  
21 get -- ever get sick of the word, it -- it's  
22 fundamentally starting from -- from rates, because  
23 that's -- that's where our assessment goes and that's  
24 where your role, as we understand it, is -- is  
25 fundamentally built.

1 MR. RAYMOND LAFOND: But when you refer  
2 to public rates, you're referring to MIPUG rates, whom  
3 you're presenting?

4 MR. PATRICK BOWMAN: Well, in respect  
5 of most of the recommendations that we're dealing with,  
6 it's -- there's -- there's almost nothing that would be  
7 any -- any different in reviewing Hydro that would be  
8 any -- that would be for -- for industrial versus --  
9 versus residential customers.

10 And I -- I wouldn't want to -- I don't  
11 want to suggest I speak for either. I'm only here to  
12 give my opinion. And but our -- our -- in our -- in  
13 our evidence I -- I say that our -- our members can  
14 decide -- our -- our members' concerns may decide what  
15 we look at. But the -- the -- ha -- having -- having  
16 framed that, it's -- we're not just guided by what --  
17 how does this matter to industrials. Things like --  
18 like time frames of -- of recovery of costs or -- or,  
19 you know, fair rates for today versus the future or  
20 something are -- are much broader than just how does it  
21 affect in -- industrials.

22 It -- it certainly plays a role for all  
23 the different classes. And I -- I'll let others pursue  
24 that as they will in their -- in their arguments. But  
25 -- but I can -- the -- the bulk of our assessment is

1 not -- is not guided by just how does this affect  
2 industry.

3                   And that's -- I'll say that's not  
4 uncommon when you deal with a revenue requirement  
5 application. Generally, most times you're dealing with  
6 the revenue -- fun -- what is fundamentally a revenue  
7 requirement application like this, the customer groups  
8 will have very common interests. They'll be largely  
9 over -- over -- aligned with -- with many of the types  
10 of issues.

11                   It -- that'll be different when we get  
12 to a cost of service review, where you talk about how  
13 do you then allocate those costs to the different  
14 classes. And then there, the common -- the common  
15 perspective is the utility can sort of sit back and let  
16 the customer groups express their different principles  
17 and -- and views.

18                   So I don't think it's entirely true, but  
19 it's a -- the utility knows over a level or trade it's  
20 -- it's getting. It's only a question of who -- who  
21 ultimately then pays those.

22                   So we -- we come to this Board under the  
23 premise that -- that rates matter and they make a  
24 difference and that the regulation and concern over the  
25 cost charged to people has very real impacts. It's --

1 it's part of our overall practice as a firm that deals  
2 with impacts on people, not -- not just you're  
3 fascinated with the eleventh decimal place of the -- of  
4 the rate. It's -- it's because this ultimately has  
5 impacts on -- on people, whether those are residential  
6 customers or industrials.

7                   And -- and it matters, in terms of where  
8 Manitoba can go as a province. Hydro is a -- is a  
9 major factor in -- in many aspects of -- of the  
10 province, and that's part of -- of why you get  
11 regulation these days, probably more so than you did in  
12 the past, of -- of these big utilities, including  
13 Crowns.

14                   You know, the -- the odd one, like Sa --  
15 SaskPower, for years wasn't regulated. It had the  
16 legislature set its rates. But because they're such a  
17 big factor and people look for their input, if anything  
18 they're moving more towards having a board play a role.  
19 Not a regulatory, it's a consultative body; but -- but  
20 moving more towards that. And -- and some of the other  
21 Crowns have moved more towards regulation in the years  
22 I've been -- I've been working, because it's a -- it's  
23 a big factor.

24

25 CONTINUED BY MR. ANTOINE HACAULT:

1 MR. ANTOINE HACAULT: In the context of  
2 a monopoly and customers, are they price takers, or --  
3 or what happens there? Just like...

4 MR. PATRICK BOWMAN: The -- the basic  
5 premise of a -- of a monopoly and the economics  
6 background of a monopoly is that they're -- they're not  
7 able to have a properly functioning competitive market,  
8 by the nature of their system, whether that's by law or  
9 by -- by engineering design or by -- by capital  
10 efficiency. You -- once someone's built a distribution  
11 line to your house, it's not like anyone else can  
12 practically come in and run another one. That's not  
13 efficient for your -- your province. It's a waste of  
14 resources.

15 And -- and so they get a very large  
16 barrier to competition. And -- and so a monopoly has a  
17 -- an ability to set their own prices that's way beyond  
18 what you get in a competitive market. It's part of the  
19 reason for regulation.

20 But it also means that -- that utilities  
21 or companies like that can make decisions that reflect  
22 business interests that are different than you would  
23 get in a competitive marketplace, that are -- are  
24 suboptimal, from an economic perspective. They're not  
25 good from a public policy perspective, but they may be



1 good for the utility. And a rate-setting regime has to  
2 -- and a rate-setting regulator has to help deal with  
3 that.

4                   And that's -- there are hundreds of  
5 pages and many -- many pieces of literature that are --  
6 spilled ink on this point, and -- and court cases on  
7 this point. But things like, you know, customers  
8 paying for what they actually use, what assets they  
9 actually use. Customers -- a private -- a utility  
10 being reviewed to make sure it's not overly focussed on  
11 its cash flow, or its earnings, beyond what it would  
12 ever be able to achieve in a -- in a competitive  
13 market. Or a utility having much less pressure on its  
14 cost regime, because it can always just come back and  
15 raise prices, which you couldn't do if you were in a  
16 competitive market.

17                   Those are -- those are the types of  
18 things that drive people, whether its railroads, or --  
19 or utilities, and whether it's Crown or private, that  
20 drive you to have the -- the regulatory framework we're  
21 talking about here. And -- and it has pluses and  
22 minuses for -- for the overall system.

23                   The pluses are because the utilities  
24 aren't -- are -- are -- they're not price takers. They  
25 have a ability to come before this Board and have their

1 price set. It means customers can therefore get their  
2 protection. They can be looked after by a Board like  
3 this.

4                   But it also means that utilities aren't  
5 subject to the same competitive pressures or -- or  
6 ruthless environment in things like borrowing that  
7 other companies are. If you're a -- if you're a banker  
8 and you're worried about doing lending to a company  
9 that's in a competitive market like a store, you get  
10 really concerned that -- that revenues, or at least  
11 prices or something, the company really can't control  
12 much. They can't just raise their prices because  
13 something happened in their cost regime, if it didn't  
14 happen to their competitor. So you really have to  
15 assess a balance sheet about what are the competitive  
16 pressures, what are the risks, how well can they absorb  
17 different things that happen.

18                   With a utility, you're not in that  
19 framework. And if you look in the bond rating agency  
20 reports, you'll see that there's a lot of commentary  
21 about -- about this Board and about how -- how  
22 accommodating it may be and how much -- how flexible it  
23 is to -- to Manitoba Hydro, or to any other utility, in  
24 terms of them coming back for higher prices.

25                   Because it's a whole other variable that

1 doesn't exist if you're -- if you're the lender in a --  
2 to a -- a competitive -- a firm in a fully competitive  
3 environment. It's the fact that they can change their  
4 prices when they need to, and if -- you know, if they  
5 have the support of a Board like this to say, You can  
6 recover this cost tomorrow, or -- or, Yes, you've  
7 collected this money, but we want it back thank you  
8 very much.

9                   That creates a real asset or a  
10 liability, and it creates a real -- a real effect on  
11 the balance sheet. And it also creates a -- a real  
12 expectation un -- under law, under -- under comfort for  
13 a -- a lender that -- that these things will happen and  
14 that the prices will be able to be adjusted for that,  
15 because you're never going to -- you're never going to  
16 have a point where -- where the customers bolt for a  
17 competitor because the competitor is all of a sudden,  
18 you know, un -- undercutting by -- by 1 percent or  
19 something. You really are -- have -- have a committed  
20 base and a committed ability to raise prices.

21                   So that part of the -- part of the  
22 aspects of regulation is it doesn't only -- it doesn't  
23 only benefit customers by -- by making sure that they  
24 have the protection of a board like this. It also can  
25 benefit the utility by them having, similarly, the

1 protection of a board like this and knowing that if  
2 certain things happen, they can come back and get their  
3 prices adjusted, which they probably couldn't do if  
4 they were in a competitive market.

5 MR. ANTOINE HACAULT: I believe that  
6 completes the discussion under monopolies. Unless  
7 there's questions from this Board, we would move to the  
8 Crown-owned costs of service at pillar, which would be  
9 the second aspect of Manitoba Hydro, and how that  
10 applies to your lens of looking at the material.

11 MR. PATRICK BOWMAN: Sure. I -- if I  
12 can just finish up on one (1) last point on the  
13 regulated utility concept. It hasn't been before this  
14 Board in as big a way as it was in the last hearing,  
15 but in the last hearing we spent a lot more time  
16 talking about risk. It's clearly been in this hearing,  
17 but it -- not in the same degree.

18 And -- and the last aspect of being a  
19 regulated utility is, particularly in this type of  
20 framework, is -- is that in most of the things that are  
21 going on, if there's a risk, it's -- it's fundamentally  
22 the customer who's at risk. It's the customers and the  
23 future customers that can get it in the neck when  
24 things go bad, because, you know, there's very little  
25 chance that a utility is going to be -- especially a

1 utility like Manitoba Hydro is going to be unable to  
2 recover costs or expected to go through a -- a  
3 bankruptcy or -- or a recourse to a guarantor.

4           What's going to happen is prices will go  
5 up. And you see that in something like -- like a  
6 Wuskwatim. If it was a competitive environment and  
7 somebody said, I can build this plant for so many  
8 hundreds of millions of dollars and I can produce a  
9 product for this price, and at the end of the day they  
10 couldn't produce a product for that price, there would  
11 be a risk to a shareholder or a risk to a lender.

12           But in this environment, we don't have  
13 that. It's -- it's -- it's a customer, and it's part  
14 of the reasons why you need a regulated board looking  
15 out for a long term. And -- and that's -- that's  
16 reasonable. It's not to say it's wrong. It's not to  
17 say somebody should -- somebody else should be getting  
18 it in the neck for -- for that. But it does mean that  
19 it -- it has to colour how we -- how we view both the  
20 short-term and the long-term aspect of -- of rates.

21           MR. RAYMOND LAFOND: When you say that  
22 this hearing has not given as much attention to risk,  
23 do you not agree that one (1) of the premises we  
24 established at first was that risks that the -- the  
25 bigger risks are in regards to new generation, whether

1 it be Wuskwatim, as the example you just gave, or the  
2 new projects being looked at, and that this is  
3 essentially deferred to the NFAAT that's going to be  
4 looked into fairly soon?

5 MR. PATRICK BOWMAN: Yes, absolutely.  
6 It's not at all a criticism to say that it's -- it's  
7 not about risk. The NFAAT will have to hugely deal  
8 with risk. It will be a fundamental core concept. And  
9 -- but I -- I'm just saying there were aspects of the  
10 risk of Manitoba Hydro that had additional evidence  
11 called in the last hearing; things like their water  
12 management models and people reviewing whether those  
13 computer models were properly considering future  
14 scenarios of flows, for example.

15 There was a fair bit of review of that  
16 in the last hearing, and we haven't -- we haven't  
17 really focussed on that in a big way in this hearing.  
18 And -- and some others. There was some professors who  
19 testified who -- who had run some Monte Carlo  
20 simulations and that sort of thing. It was -- it was  
21 quite time consuming. It was -- it was very  
22 instructive and was probably good we don't end up  
23 having to repeat it every -- every two (2) years.

24 But -- so it's not to criticize the  
25 scope of this hearing at all. It's just to say that --

1 that we haven't had the same -- the same degree of  
2 focus. But we do have the same outcome, which is  
3 whether it's new projects or whether it's other things  
4 that go on in hydro system, at the end of the day,  
5 Hydro's net income is fundamentally not materially at  
6 risk. Hydro's debt guarantors are not fundamentally at  
7 a whole lot of risk. It's customers who are at risk.

8           And -- and many years ago, I gave the  
9 example in Ontario, when -- when the consumers'  
10 association had to call the witness from Ontario who's  
11 very well respected in this jurisdiction, Mr. Bill  
12 Harper, and he reviewed how, when it proved that the  
13 nuclear investments and some of the other debt the  
14 utility incurred was -- was very -- risk of not being  
15 self-supporting, the government took -- took that and  
16 put it into a separate finance company and put a  
17 surcharge on bills that they've been paying ever since.  
18 And -- and it'll be paid off.

19           But despite a government guarantee on  
20 that debt, it's not -- it's not a recourse to -- to the  
21 guarantor. It's -- it's ratepayers will pay. So -- so  
22 it's the -- the job of this Board is just all the more  
23 -- all the more important from that perspective.

24           On the Crown utility, this also can  
25 guide the review -- in the case of Hydro, does guide

1 the review. It's -- again, it -- it's rooted in the --  
2 the company and what it's established for and how it's  
3 -- how it's meant to be -- to be reflected.

4                   We don't have a case where Hydro is  
5 capitalized by an investor. If you're -- if you're  
6 sitting in Alberta and -- and you've decided that  
7 electricity's a essential service and you want to make  
8 sure that your -- for your industry and your citizens  
9 that you need quality power, and you decide that you're  
10 going to structure a utility in a private-sector way,  
11 then part of what you do is put aside a board like this  
12 that makes sure that the investors are going to get a  
13 good enough return that you actually attract some  
14 capital and they come and build stuff.

15                   So you build into an act that there  
16 should be a fair rate of return on the investors'  
17 money, because you want to attract that investment. If  
18 you put it too low, your system's going to suffer.  
19 You're not going to get the reliability. You won't get  
20 the investment. And so those acts and that legislation  
21 and those -- those frameworks will have that built in.

22                   That's not what we have here. We have a  
23 utility that -- that didn't have to be attracted here  
24 to invest in the system. It -- it was given a mandate  
25 by the legislature to invest in the system. It's got



1 its direction under the -- under the Manitoba Hydro  
2 Act. And, as a result, it -- it carries forward under  
3 the provision.

4                   And it's one (1) of the reasons it --  
5 you'll probably -- I can't recall ever having seen, I  
6 certainly would never calculate a -- what is a return  
7 on equity for Hydro, because it's never been a relevant  
8 consideration and it's never really had an investor put  
9 in equity to -- to earn a return off of it, or at least  
10 certainly not for the purposes of earning a return off  
11 of it.

12                   And you don't need that to attract Hydro  
13 to do what the act already says it should do: provide  
14 quality, reliable service. So that -- from that  
15 perspective, you'll find a whole different framework.  
16 If you go to a CAMPUT conference or meet with a Alberta  
17 board or -- or a Nova Scotia board or someone who  
18 spends a lot of their time regulating private-sector  
19 utilities, a whole different set of -- of expertise and  
20 practice that they need, in terms of -- of attracting  
21 capital in the world markets. And we don't -- we don't  
22 have that -- that here, thank goodness.

23                   And I, as read -- as an economist, the  
24 words that are used in -- in the framework for Hydro,  
25 the legislation included, that you won't find the words

1 "profit" or "return". You will find the word "cost".  
2 Of course, as a -- "reserves" is in there. That the  
3 Hydro rates, per the Act, shall recover the costs. And  
4 it specifically represents -- repre -- references O&M  
5 and -- and interest.

6 And the sum that, in the opinion of  
7 Hydro's Board, should be provided each year for  
8 reserves are funds to be established pursuant to a  
9 separate section that gives you a guidance on those  
10 reserves. So we come in that -- that -- and that can  
11 be amortization of assets. It can be self-insurance,  
12 rate stabilization.

13 But it -- it guides us on some things.  
14 Like we wouldn't see that there's room in a regulatory  
15 framework to say that customers should prepay for  
16 assets, that we should start, you know, paying now to -  
17 - to build up the -- the cashflow or the equity for  
18 Conawapa so that when it comes into service, Conawapa  
19 is capitalized like an investor would capitalize it.

20 It's not in the Act, and it's not in  
21 Hydro's plans. I -- I -- my understanding, Hydro has  
22 no dispute with that, that they've routinely said, We  
23 don't pre-charge customers to prepay for assets. So on  
24 that point, they're -- the -- the regulatory framework  
25 and the -- the Crown framework is -- is quite clear.

1                   And that -- that fits well with the  
2 regulatory principles of used and useful. And we've  
3 referenced the times that ratepayers pay for what's  
4 serving them today. If there's an asset that needed to  
5 serve ratepayers tomorrow, tomorrow's ratepayers pay  
6 for it.

7                   That's different than BC Hydro. For  
8 example, BC Hydro does file a GRA that has a return on  
9 equity, because that's the framework. That's the  
10 legislation. It's different than -- than the old  
11 Centra Gas, which did have a framework for that, but  
12 not -- not in Manitoba Hydro's case.

13                   And the other piece of the puzzle in the  
14 Manitoba Hydro example is that their -- they've rai --  
15 they -- each time they come before this Board for a  
16 rate increase, the question becomes not: Are we paying  
17 the investor enough to keep it spending money and keep  
18 building us quality assets? The question is: Are we  
19 putting enough aside to be able to have stable rates in  
20 the future? That's the premise of the reserves.  
21 That's the premise of the risk analysis, the drought  
22 reserves, those types of things.

23                   And -- and I -- underlying in that,  
24 rightly so, the question is: How much ought ratepayers  
25 pay today to build up and put aside the reserves that

1 will provide them benefit in the future through more  
2 stable rates and -- and protection against risk events  
3 that would otherwise drive their rates up? Remember  
4 there was the -- it's ratepayers that'll get it in the  
5 neck if -- if things don't turn out.

6 MR. ANTOINE HACAULT: So, Mr. Bowman,  
7 how does that discussion fit into the fact, for  
8 example, that Mr. Warden explained that the first  
9 effort of Manitoba Hydro was actually to put a reserve  
10 which was equal to two (2) years' worst flood on  
11 record?

12 MR. PATRICK BOWMAN: Well, it -- it  
13 fits perfectly with that. I wasn't around in those  
14 hearings. But, you know, Hydro -- Hydro basically  
15 operated as a debt-funded company, through the records  
16 I've reviewed, 95/5 debt-equity ratio or something of  
17 that nature, for many, many, many years.

18 And once it finally started being  
19 regulated by this Board, it came in and made the case  
20 that -- that it didn't make sense to -- to operate on  
21 that basis, where there was not a lot of protection if  
22 a -- if a drought occurred and the like. So we should  
23 start bringing up rates so that some reserves are set  
24 aside and -- to the benefit of ratepayers, to the  
25 benefit of stabler and more predictable rates in the

1 future -- for when adverse events occur.

2                   And the -- and the first -- the first  
3 set of reserves then was defined by a specific adverse  
4 event, and it was -- it was two (2) years of the worst  
5 drought on record plus, I believe, another provision  
6 for self-insurance, is -- is my recollection of it.  
7 And -- and it led to a target of about \$600 million, I  
8 recall, that was -- became the -- the progress of  
9 setting rates up to about the late '90s, '96 GRA,  
10 probably.

11                   MR. ANTOINE HACAULT: Thank you. You  
12 commented a bit on BC Hydro's approach to reserves.  
13 What about Northwest Territories? How do they deal  
14 with the issue of reserves or returns?

15                   MR. PATRICK BOWMAN: They don't have  
16 them at all. And the reason is because they're  
17 regulated under a different framework. In Northwest  
18 Territories, the -- the Crown there was set up by the  
19 Government of Northwest Territories buying what used to  
20 be a federal company called the Northern Canada Power  
21 Commission. And they set it up as their own utility,  
22 Northwest Territories Power Corporation, NTPC.

23                   And -- and they set it up as a regulated  
24 company. And they borrowed largely from an act in  
25 Alberta, which is the -- the Utilities Act designed for

1 private-sector companies. And it's capitalized with 40  
2 to 50 percent equity, and it earns a return on that  
3 equity, and it pays a dividend to its government.

4                   It's -- it's, for all intents and  
5 purposes, a private-sector company owned by the  
6 government. It's regulated on that basis. It doesn't  
7 pay taxes, so it doesn't have taxes in its -- in its  
8 cost structure. And the dividend that it pays, when it  
9 has the money to pay it, is funnelled back into  
10 subsidies for customers. So it's not like the  
11 government is trying to make out like bandits off of  
12 the investment.

13                   But it's not -- it's not structured as a  
14 Crown like Manitoba Hydro. It -- it specifically says  
15 in the -- in the Act that the -- the Public Utilities  
16 Act there that all the utilities, both the Crown and  
17 the private-sector utilities that operate in that  
18 territory -- there's a mix -- are meant to pay a return  
19 on the investors' equity.

20                   And, you know, the Government of  
21 Northwest Territories actually put up the money. It --  
22 it bought the company. It capitalized it. It put up  
23 the money. It made an investment. It said, I'd like a  
24 return on that, thank you very much. That -- that's  
25 how it's fundamentally different than Manitoba Hydro.

1 MR. ANTOINE HACAULT: But there are no  
2 extraterritorial exports there, correct?

3 MR. PATRICK BOWMAN: That -- that --  
4 yeah, that's correct. There's no extraterritorial --

5 MR. ANTOINE HACAULT: And what is their  
6 rate right now to customers?

7 MR. PATRICK BOWMAN: Wow. It's -- it's  
8 really high. Northwest Territories is primarily served  
9 by diesel generation, and there -- there is -- I'll  
10 say, in terms of the communities, it's primarily  
11 diesel. There are two (2) hydro grids, and the hydro  
12 grids serve the biggest communities.

13 But the subsidized -- ultimately, all  
14 customers are subsidized to the same rates that's paid  
15 in Yellowknife, if your rate would otherwise be higher.  
16 And we're in the high twenty (20) cents per kilowatt  
17 hour, is my recollection.

18 MR. RAYMOND LAFOND: Before the  
19 subsidy?

20 MR. PATRICK BOWMAN: No, after the  
21 subsidy. Actually, in the thermal communities, if you  
22 went out there, their rate right now is -- is running  
23 about fifty (50) cents a kilowatt hour for non-  
24 government customers. And up until about 2009 -- that  
25 was a major review I was involved in, where they did a

1 -- a rate policy redesign. Up until 2009, every  
2 community paid its own rate, and there were some that  
3 were two dollars (\$2) a kilowatt hour.

4           But they brought those rates together,  
5 and they're about fifty (50) -- around fifty (50)  
6 cents. They vary between residential and commercial.  
7 And then for your basic consumption, which is 600  
8 kilowatt hours in the summer and 1,000 kilowatt hours  
9 in winter for residentials, the government subsidizes  
10 you back down to that -- that lower Yellowknife rate of  
11 high twenties (20s). And commercials don't get any  
12 subsidy. They pay the full rate.

13           And it's differ -- I was going to say  
14 it's -- the concept that the -- that the government  
15 puts up money to own a company and has equity and wants  
16 a return on that equity as an investor also exists in  
17 Yukon. Again, they don't have exports, but it -- it  
18 also exists in Yukon.

19           And -- and as I noted, it also exists in  
20 -- in BC, where they do have exports. It's -- there is  
21 a return on equity built into BC Hydro's regulatory  
22 framework. And, frankly, there's income taxes built  
23 into BC Hydro's regulatory framework, even though they  
24 don't pay them. It just becomes part of their  
25 earnings. But -- but, notional income tax is -- is



1 built into their rates.

2 MR. ANTOINE HACAULT: Does the Board  
3 have any further questions on that issue?

4 MR. RAYMOND LAFOND: No, I just wanted  
5 to understand why we were using this as an example. I  
6 thought you were referring to them as an example  
7 because their results were better than in Manitoba. I  
8 was just wondering why.

9 MR. PATRICK BOWMAN: No. And actually,  
10 I'm going to move on to the hydraulic topic. And  
11 you'll see that, if anything, a lot of the theory that  
12 leads into the rest of the -- of the testimony links  
13 more to the Hydro concept than it does to the -- the  
14 Crown utility concept.

15 But it -- it's not just that Hydro's a  
16 Crown. It's that Hydro's a Crown, operating under a  
17 legislation that says it should operate under a cost of  
18 service, recover its costs. It's not like these others  
19 that are a Crown operating in a framework that says the  
20 government's got a company and would like to earn a  
21 return thing. That -- that's -- I think that's why I -  
22 - I put those two (2) together in -- in talking through  
23 Manitoba Hydro.

24 And there -- there are others that were  
25 -- they are other Crowns that were structured the same

1 as Manitoba Hydro for -- for many years. I'm -- as I  
2 said, I'm not sure there's many left. But, you know,  
3 New Brunswick Power operated under that type of  
4 framework for a long time, and -- and so did  
5 Newfoundland Hydro. And -- and I believe BC Hydro, if  
6 you go far enough back, had a similar -- similar  
7 framework. And then there's a good reason for it when  
8 we get into the -- the hydro generation part.

9

10 CONTINUED BY MR. ANTOINE HACAULT:

11 MR. ANTOINE HACAULT: Before you move  
12 on to the hydraulic generation pillar, could you  
13 comment, while you're commenting on the Crown-owned  
14 cost of service utility, with respect to the provincial  
15 debt guarantee for Manitoba Hydro, how that fits into  
16 the framework?

17 MR. PATRICK BOWMAN: Well, yeah, yes.  
18 It fits into the framework because you're structuring a  
19 utility that's -- does not have an investor who puts up  
20 funds. And so where are they getting the money to  
21 build anything? The only way that they get themselves  
22 started is by borrowing all of the funds. And not a  
23 lot of people are in the habit of borrow -- of lending  
24 a hundred percent of a -- of a value of a company to it  
25 to -- to build the bulk of its assets.

1                   So talking -- perhaps this is a  
2 convenient time to talk a bit about the -- the  
3 hydraulic generation profile. If -- if you go to a  
4 place like Alberta, you'll find mostly private-sector  
5 utilities dominated by thermal generation. And that's  
6 a common confluence.

7                   If you go to places that have a lot of  
8 hydro, whether that's Manitoba or Quebec or BC or  
9 Newfoundland or Yukon or Northwest Territories, have a  
10 lot of hydro in relation to the size of their load,  
11 they tend to have Crowns. And they tend to have Crowns  
12 because hydraulic generation has an economic profile  
13 that doesn't suit private investors very well.

14                   It's extremely capital intensive. It  
15 requires you to sink -- tie up a lot of money up front.  
16 It has a very poor economic profile in the first couple  
17 of years, as we see with Wuskwatim. It has very long  
18 payback times before the asset starts to be of value.  
19 And it has very high degrees of risk year to year  
20 because of things like water flows.

21                   But what it has, despite all of that is  
22 almost certainly, and in almost every case that I'm  
23 aware of, a very attractive framework and economics for  
24 ratepayers over the very long-term. And if you don't  
25 capture that benefit for ratepayers, it could be a very

1 attractive very, very long term return to investors.

2           So a lot of these provinces who have  
3 hydro resources weren't all that interested in having  
4 investors develop them or -- or, more accurately,  
5 couldn't really attract an investor to develop them,  
6 because that short-term variability and low front-end  
7 returns, because it has such a high front-end cost and  
8 very long investment horizons, would lead to an  
9 investor saying, Yeah, I'm happy to build you a hydro  
10 plant, but I want a really, really high rate of return  
11 at the outset. That's a -- that's a bad economic  
12 investment profile for a private-sector firm. It's  
13 just not something that's going to attract them. Or I  
14 want you to back me somehow or provide some guarantees.

15           So what tends to happen is the  
16 government, on behalf of a group of citizens, gets  
17 together and says, That's fine, we don't -- we don't --  
18 we won't go that route. We won't have a private  
19 investor. We'll do it together. We'll call it a  
20 cooperative model, a -- whatever -- whatever it is. We  
21 have our ability to borrow. We have our good name. We  
22 have a million people here who can -- who can back  
23 this. And we have a project that, over the long-term,  
24 is going to be good for Manitoba and good for  
25 ratepayers. And as long as we can smooth out the bumps

1 and carry the front end, it will -- it will give us an  
2 advantage, well, far into the future.

3                   It's a very compelling public policy  
4 case, as long as the numbers on the capital costs can  
5 be kept low enough. It's ver -- it's very compelling.  
6 But -- but it takes the -- the group who doesn't bring  
7 in a bunch of equity and is not looking for dividends  
8 but -- but is willing to put up the money to -- to  
9 build it. And -- and the way that these provinces have  
10 tended to do that is they get together and say,  
11 Citizens, we'll -- we'll back that debt. It's a good  
12 investment.

13                   And that's why the Crown gov --  
14 government guarantees are pretty -- pretty ubiquitous  
15 in -- in the Crown-sector hydro-dominated utilities.  
16 And it -- and it -- like I said, it makes a lot of  
17 sense, and it's proven to be a very, very valuable  
18 model.

19                   MR. ANTOINE HACAULT:    Could you perhaps  
20 hone specifically on a comparison between hydro  
21 generation and, say, thermal and SCCT and how those  
22 compare from a capital perspective and -- and return  
23 with respect to the life?

24                   MR. PATRICK BOWMAN:    Yes. The  
25 economist in me is -- look -- looks at these projects

1 and is looking at the overall cost profile and how they  
2 -- how they vary and what parts of them are fixed and  
3 what parts are at risk and what parts are -- are  
4 incremental costs.

5                   And in a hydro investment, you'll find  
6 that, in a lot of cases, the present value of operating  
7 costs might make up 20 percent of the total cost of  
8 that asset over its life; 80 percent of it is going to  
9 be related to capital depreciation and operating, vast  
10 -- vastly dominated by the capital costs. It's off the  
11 charts.

12                   Thermal generation, in the extreme,  
13 could be the exact opposite. In the simple-cycle  
14 turbines that you actually plan to run, which are not  
15 developed very often, could be 20 percent capital, 80  
16 percent operating. Even combined-cycle turbines, coal  
17 plants, you might be 50/50 over -- over their life, and  
18 -- and they're a lot shorter life too.

19                   So you're not -- with hydro, you're not  
20 exposing yourself to anywhere near the inflationary  
21 risk. You're not exposing yourself to many of the same  
22 future costs as you would have with a thermal  
23 generation. You're -- you're locking in most of your  
24 costs up front. And, as I said, that's a -- that's a  
25 tough profile for a private-sector investor unless

1 they've got a really good backing.

2                   And you can look at something like  
3 British Columbia now. In the last fifteen (15) -- ten  
4 (10), fifteen (15) years, British Columbia has -- has  
5 had some directives, policy directives, by the province  
6 that says, We're going to help the private sector play  
7 a bigger role, IPPs. And it's hotly debated, but --  
8 but they did pass some -- an energy policy, energy  
9 plan, in -- I think it eventually got crystalized in  
10 about year 2002 or so, 2001, that said we're -- BC  
11 Hydro, we don't want you to build any more. You -- you  
12 can work on the big one. Site C, go ahead, you work on  
13 that one. But any of the little stuff, we're going to  
14 -- we're going to ho -- go ahead and do a call for  
15 power and we're going to have all these IPPs come out.

16                   And -- and they did that. And they  
17 prepared their resource plans. And they had a call for  
18 power. And lots of BC IPPs came out and bid in. And -  
19 - and they expected and -- and received contract  
20 frameworks that leave, basically, the -- all of the  
21 risks with BC Hydro. They're getting paid a levelized  
22 price for the -- the power they deliver.

23                   In many cases, my understanding is  
24 they're take-or-pay contracts, so they -- so that even  
25 if BC Hydro is not in -- in need of the power at the

1 time or doesn't have a good market for it, it's got to  
2 buy it. And -- and they'll levelize those costs so  
3 that -- so it doesn't have this downward-sloping cost  
4 profile we talked about earlier in this hearing about  
5 hydro projects, where they're high on the front end and  
6 lower as you go -- get on in their life, because you  
7 depreciate them.

8                   That's what it looks like as an -- as an  
9 owner of a hydro project. But what these investors  
10 have managed to do is get a price that actually is flat  
11 or increasing over the project's life. And -- and the  
12 risks on -- and -- of that and the benefits of the  
13 back-end lower prices are -- are ultimately not going  
14 to be available to the -- the BC ratepayers in the same  
15 way, because those contracts expire after twenty (20)  
16 or thirty (30) years. The investor still owns the  
17 hydro plant. And he can come back and negotiate a new  
18 price with BC Hydro, based on what's happened to  
19 markets and values of alternative fuels and the like in  
20 between.

21                   So unlike us sitting here, where we've  
22 got -- you know, something like Kettle or Grand Rapids,  
23 where we're getting very, very attractive power out of  
24 it and we will for a long time because, as a group, we  
25 own it, there, this is the time when those would be



1 going into renegotiation and starting to say, Hey,  
2 based on current prices, you're telling me it's seven  
3 (7) or eight (8) cents avoided cost. And they'd get to  
4 renegotiate.

5                   So the -- they hydro economics will look  
6 very different to a Crown investor and to a group of  
7 ratepayers who back it with -- with their -- their --  
8 with their future rates and a -- and a government who  
9 backs it with its debt guarantee than these profiles of  
10 -- of projects we're talking about in other places, and  
11 -- and particularly than with respect to two (2)  
12 thermal projects.

13                   So if you can -- if you can lock in your  
14 -- your cost and you can do it at a price that -- that  
15 doesn't kill ratepayers too badly in the first years,  
16 you got a pretty darn good chance of having a project  
17 that'll -- that'll be a very good project over the  
18 long-term. That has tended to be the profile for hydro  
19 projects.

20                   So -- and -- and you're going to have a  
21 hard time getting a private-sector investor who's  
22 really interested in that unless you're going to back  
23 them and you're going to take the risk. And they're  
24 going to look for a regulatory framework too, because  
25 all their dollars are committed to that -- to that

1 regime.

2                   So unlike a thermal plant, where if you  
3 build a gas turbine and things go crazy, most of your  
4 costs are still future fuel costs and you just avoid  
5 them. You can shut down, walk away. You -- you're not  
6 in for -- in the same degree. But hydro plants, you  
7 can't do that.

8                   MR. ANTOINE HACAULT:    Could you discuss  
9 in that context, again coming back to reserves and  
10 contrasting where we have the IPPs, where you have an  
11 investor that would like to see some returns on his  
12 investment, how is that contrasted between the  
13 hydraulic model and, as you say, CCTs?

14                  MR. PATRICK BOWMAN:   Well, with  
15 something like a CCT, if you're sitting here setting  
16 rates, you're going to spend a lot of time debating  
17 what the fuel cost is going to be, and you're going to  
18 put in place mechanisms to deal with the fuel cost.  
19 You won't spend nearly as much time debating interest  
20 rate risk or -- or depreciation studies, because  
21 they're not going to be quite the same degree of cost  
22 profile.

23                  Don't get me wrong. A lot of debates go  
24 on over those. But -- but thermal plants, your -- your  
25 -- those other costs, the capital fixed costs, just

1 don't -- aren't -- don't make up the same -- the same  
2 profile.

3                   Once you get to the hydro projects -- we  
4 talked about the -- the economic profile that has this  
5 variability in it -- you've -- you don't have to think  
6 about equity, because we've made the decision that it  
7 makes sense for us to do it together and back it  
8 ourselves. So we don't have an investor to pay. We  
9 don't need return equity. And you don't have to worry  
10 about some of the -- some of the long-term price resets  
11 that might be there if you had contracts like BC's  
12 IPPs. You know you've got your costs locked in.

13                   But what you do have to worry about is  
14 the variability that can be faced, because if we really  
15 sit here with 100 percent debt and -- on a hydro  
16 project and we haven't done something to provide  
17 flexibility in the framework, then you have a high risk  
18 of price instability related to things like droughts or  
19 other -- or other risk events.

20                   And that's -- makes perfect sense why  
21 the -- the framework that's been set up focusses  
22 heavily on reserves and reserves for rate  
23 stabilization. Those words are even in the Hydro Act.  
24 And it's been discussed before this Board. D

25                   And it's fundamentally in the interest

1 of -- of my client and, I suspect, others, that it's  
2 not beneficial to anybody to set an unsustainably low  
3 rate and know that they're going to get 30 percent rate  
4 increases because it stops raining one year. That --  
5 that doesn't help anybody.

6                   It prob -- sends all kinds of crazy  
7 price signals. It -- goodness knows what kind of chaos  
8 it could cause in -- for commercial operators,  
9 especially when you know you can -- you can balance  
10 that out by finding a long-term, sustainable price  
11 that, in most years, when you have better than average  
12 water flows, given the way the -- the median works,  
13 you're putting a bit aside for the rainy day and -- and  
14 when the -- or the non-rainy day. And when the non-  
15 rainy day occurs, you're able to smooth through that  
16 without having massive rate shocks. You may have some,  
17 but -- but you try to keep those to a minimum.

18                   And all of these ratepayers who are --  
19 who are interested in the long-term interest of -- of  
20 having a solid and reliable utility would have  
21 comparable -- comparable consideration there, in terms  
22 of striking that sustainable level of long-term rates.

23                   And it's -- it's one of the reasons why  
24 we will tend to use language that others may call  
25 outdated but that -- that fundamentally links right

1 back to the Act, and talks about reserves and reserves  
2 for the purposes of rate stabilization and for the  
3 purposes of -- of being there for the benefit of  
4 ratepayers.

5                   That's -- that's the way the system was  
6 designed, and there's no -- nothing that's changed as  
7 to why that system works. It still can work. It still  
8 does work. And there's nothing that's changed in the  
9 legislation to say, I'd like to start using a different  
10 system.

11                   MR. ANTOINE HACAULT: Now, how does  
12 that fit into risks such as infrastructure risks?  
13 We've had some discussion in the testimony, for  
14 example, of the Dorsey risk. How does the reserve  
15 issue fit into risk such as infrastructure risk?

16                   MR. PATRICK BOWMAN: Well, that's a  
17 tricky one, and it's a tricky one because it's the kind  
18 of thing that -- that isn't readily suited to -- to  
19 reserves the same way as something like droughts, that  
20 are cyclical and mean reverting. We -- we use that  
21 language, in terms of flows, that after a period of low  
22 flows, at some point you're going to tend to get a  
23 period of high flows. And you're going to have a mean.  
24 They're going to tend to revolve around a cycle, and so  
25 it -- it lends itself to some degree of -- of rate

1 stability as long as you're -- you're striking the  
2 right level of rates.

3                   The infrastructure risks are real.  
4 They're -- been there a long time. They've been there  
5 since Dorsey was built. The dollar-value impact may be  
6 higher now. And -- and they're probably in -- in the  
7 category of things that are very high impact, very low  
8 probability. And that's a much harder concept to -- to  
9 self-insure, which is effectively what Hydro is doing  
10 on those.

11                   Thankfully, I might take a bit of --

12                   MR. RAYMOND LAFOND: That -- that last  
13 phrase, I mean, this is what Hydro is doing?

14                   MR. PATRICK BOWMAN: Well, Hydro --  
15 most of the things that you'll find on that list of  
16 risks in the annual report or in the -- in the IFF are  
17 -- are there as risks because it can't -- it can't, or  
18 it won't, or it doesn't make sense to go to Lloyd's of  
19 London and get them to -- to buy insurance for it,  
20 right. It's -- it's their -- their inherent risk to  
21 the organization. They're not easily or -- or sensibly  
22 insured by someone else.

23                   I -- I'm going to take a bit of the easy  
24 out on this one, that it's been there a long time.  
25 It's decreasing in magnitude and scope with the changes

1 that are happening and things like Riel  
2 sectionalization and Bipole 3. And -- and as a result,  
3 I don't -- I don't think it's something that -- that we  
4 would now ramp up the degree of -- of fuss about that -  
5 - that -- as compared to what's been there for twenty  
6 (20) years.

7                   It doesn't mean it's not real. And --  
8 and it -- it definitely is -- is something that people  
9 should spend a lot of time thinking about how to avoid;  
10 how to improve a system to protect against it, which is  
11 what they're doing, as best I can tell; how to consider  
12 options and -- and scenarios.

13                   But I would actually put -- I would  
14 think that the loss to Manitoba Hydro of a sustained  
15 loss of Dorsey would pale in comparison to the loss to  
16 the Manitoba economy from a sustained loss of Dorsey.  
17 So if I was lying awake at night, worrying, I'd be  
18 worrying about how we keep the lights on way ahead of  
19 worrying about the -- the specifics of how we pay for  
20 it.

21                   And -- and it's part of the reason, I  
22 think, that you'll find there's a fair bit of  
23 discussion about -- about risks and the infrastructure  
24 risks as you move towards an NFAAT hearing, where the  
25 NFAAT is fundamentally, as I -- as I would portray it -

1 - I don't know if it's the way Hydro describes it. But  
2 it's fundamentally about -- about getting a way to  
3 improve your transmission connections to the US.

4 MR. RAYMOND LAFOND: To my knowledge,  
5 the NFAAT does not consider Bipole 3 or the -- the Riel  
6 station. It just considers the new projects, Keeyask  
7 and Conawapa?

8 MR. PATRICK BOWMAN: Yeah, that --  
9 that's my understanding of the scope. But the  
10 development plan, if you flip to the power resource  
11 plan, you'll see the -- the lines people tend to focus  
12 on is Keeyask and Conawapa. But the line that people  
13 ignore, because it -- or -- or sometimes ignore,  
14 because it seems like a small number, is a new cross-  
15 border transmission. And -- and part of it that --  
16 that people really ignore, because very few people  
17 understand it, is a new set of contracts that give us a  
18 different set of transmission rights in the US.

19 And so if you're sitting here, worrying  
20 about ratepayers, or if you're in some other office,  
21 worried about the potential shocks to the Manitoba  
22 economy, those things are at least as big a deal as  
23 building a hydro dam, because they change dramatically  
24 not just your ability to access our 5,000 megawatts up  
25 north, but our ability to access the 100,000 megawatts



1 to the south of us.

2                   And -- and I -- I won't go much farther  
3 than that, because I'm -- I'm certainly not able to  
4 review the power resource plan in -- at that level of  
5 detail. But I think you'll find that -- that people  
6 who -- who have been involved -- and I've certainly  
7 heard this from fairly senior in Manitoba Hydro that  
8 we've met with -- that the -- the resource plan is not  
9 fundamentally about generation. It is fundamentally  
10 about a package that has a very, very high profile on -  
11 - on transmission for that reason, cross-border  
12 transmission.

13                   MR. ANTOINE HACAULT: I'm just looking  
14 at the time. The Board can continue to ask questions  
15 on this, and I leave it to the Board as to when we take  
16 a break.

17                   THE CHAIRPERSON: Well, you're  
18 focussing on the -- sort of the principles at this  
19 moment, and it's interesting. You know, I'd like to --  
20 can we square that away in a relatively short period fo  
21 time, or...?

22                   MR. PATRICK BOWMAN: I think we can.

23                   THE CHAIRPERSON: I guess, while we're  
24 on the topic of -- of time management, this is an  
25 interesting topic that we're covering. But I'm worried

1 about the time that's available to this panel before it  
2 recesses for an extended period of time.

3 I'd like to get the evidence in from  
4 your witness before the end of the day tomorrow. And  
5 at the pace we're going, I'm concerned that we won't  
6 get that done. I wonder if, over the lunch hour, in  
7 terms of -- of -- my concern is making sure that we get  
8 disputed issues on the table and discussed. And -- and  
9 so far, we have -- we have not done that.

10 And so I'm worried, in terms of how we  
11 get to that and get that completed before the end of  
12 the day. And we can go back and discuss, sort of,  
13 basic principles, which I think will surface in -- in  
14 some of the -- the areas that are being challenged by -  
15 - by MIPUG, in terms of the rate application, as a  
16 byproduct of -- of a discussion of the disputed  
17 matters.

18 So -- so to the first question: Can we  
19 -- can we complete this discussion of -- of rate-  
20 setting principles before we break for lunch in a  
21 relatively short period of time? And then second --  
22 the other question is: Do you object to -- to the  
23 approach I'm suggesting with respect to addressing the  
24 -- the disputed areas of the Application?

25 MR. ANTOINE HACAULT: My expectation,

1 members of the Board, is that we will finish Mr.  
2 Bowman's direct testimony prior to 4:30. I -- I would  
3 have thought it's -- we had an initial motion this  
4 morning; I think we would have been well into his other  
5 evidence by now. But my full expectation is that -- I  
6 was looking through the notes. We're about halfway  
7 through the presentation. There's been quite a few  
8 questions. So that we'd spent about an hour and a half  
9 this morning on the presentation, and I would expect  
10 another hour and a half to two (2) hours would complete  
11 the presentation,

12 THE CHAIRPERSON: Given that, why don't  
13 we adjourn now for -- for lunch and -- and resume the  
14 proceedings -- sorry, why don't we recess now and  
15 resume our proceedings at 1 o'clock? Thank you.

16

17 --- Upon recessing at 12:03 p.m.

18 --- Upon resuming at 1:01 p.m.

19

20 THE CHAIRPERSON: Good afternoon.  
21 We're ready to resume the proceedings. Mr. Hacault...?

22 MR. ANTOINE HACAULT: Thank you, Mr.  
23 Chair.

24

25 CONTINUED BY MR. ANTOINE HACAULT:

1 MR. ANTOINE HACAULT: Mr. Bowman, could  
2 you address the -- the in -- issue of interest rate  
3 risk and setting up reserves?

4 MR. PATRICK BOWMAN: Yes. Good  
5 afternoon. The notes that I have on this relate to the  
6 fact that, building where we were this morning, the  
7 premise of trying to set the rates for a utility such  
8 as this is to find the -- the level that can be  
9 sustainable generally over time so that things that are  
10 cyclical, like droughts and floods, or some of those  
11 other things that are -- that can affect it on a short-  
12 term or a medium-term basis, don't lead to rate shocks.

13 Interest rate risk is a -- is a little  
14 bit different. It's a little bit different partially  
15 because most of the debt at any given time is locked  
16 in. And it's a little bit different because it's not  
17 necessarily quite the same cyclical mean-reverting  
18 nature as water flows.

19 But if -- if interest rates make a move  
20 -- move up, for example -- for a period of time that  
21 leads to hydro refinancing debt at a higher level, you  
22 know, on a normal operating basis, then it's a  
23 perfectly reasonable set of circumstances that lead to  
24 rates moving up.

25 It's -- it's not necessarily the -- the

1 kind of feature that you'd worry about trying to set  
2 aside some reserves to protect against, because it's  
3 exactly the kind of feature that is a recoverable cost  
4 for the utility and is a -- is a reasonable basis for -  
5 - for rate changes, whether that's up -- upward or  
6 downward movements.

7 MR. RAYMOND LAFOND: I -- I'd like to  
8 make a comment on that. If, for instance, a new  
9 project like Wuskwatim wa -- was financed at 6 percent  
10 for thirty (30) years, come thirty (30) years' time,  
11 the interest rates are 16 percent for -- to renew it  
12 for twenty (20) years.

13 That would be a real interest -- that  
14 would be a real rate shock because interest rates -- or  
15 interest -- finance expense make up two thirds (2/3s)  
16 of the cost?

17 MR. PATRICK BOWMAN: Yes, I agree. I'd  
18 sort of make two (2) corollaries to it. One (1) is I'm  
19 not sure anyone would -- well, let me go back a step.  
20 First, I think you'd want to be looking at the -- as  
21 Hydro does, at a portfolio of debt and maybe not  
22 necessarily the -- the debt associated with one (1) --  
23 with one (1) project.

24 And -- and even if you were dealing with  
25 either a portfolio or -- or even a subset of the

1 portfolio, you -- for those reasons, you'd -- you'd  
2 still want to have a sensible treasury type of policy  
3 about exposure to rates by using different -- different  
4 maturity dates so that you're not necessarily having a  
5 whole bunch of debt turning over at the same date.  
6 That -- that certainly gives you an acute risk if that  
7 -- if that does occur.

8                   And that's why, with my comments I said  
9 on a normal basis, if interest rates move up any given  
10 year, you're going to be refinancing some of your debt.  
11 That will drive your costs up somewhat. You come back.  
12 You work your way through higher rates. And that is  
13 the way the system's meant to work.

14                   When it comes to very lar -- ma -- very  
15 major projects, it definitely is a different situation.  
16 And -- and when you look in those risk tables that we  
17 provided in the MIPUG book of documents about interest  
18 rates risk now it's magnitudes higher than it was two  
19 (2) or three (3) years ago, because the horizon is now  
20 picking up the major projects.

21                   But that's not -- that's not necessarily  
22 a risk that's inherent in -- in the -- what I call the  
23 status quo IFF or the basic operations of Hydro. That  
24 -- that's a risk that definitely fits more in the --  
25 the bucket of the sort of NFAAT type of issues and that

1 really needs serious thought.

2                   You gave the example earlier of the  
3 project in -- in Mayo and why it was able to come in on  
4 time and on budget. Well, one (1) of the reasons we  
5 were able to make that happen was because of schedule  
6 management. The -- the project was smaller. It was --  
7 it didn't involve new water conveyance system -- or new  
8 water retaining systems. There was already a dam  
9 there. We added a penstock and turbine and expanded  
10 the capacity of it by 10 megawatts.

11                   And the project was being assessed in  
12 2007. The decision was made to proceed with the  
13 project to an advancement schedule in the middle of  
14 2008, which is when some -- most of the cost esta --  
15 estimating was done. We filed for environmental  
16 approvals in early 2009. They had shovels in the  
17 ground by 2010. And the project was in service at the  
18 very end -- Christmas 2011.

19                   So one of the ways you manage risk on a  
20 project, or you manage cost escalation, is you keep  
21 your -- your schedule contained. And -- and it's --

22                   MR. RAYMOND LAFOND: I -- I understand  
23 that, but I'm trying to see a relationship with  
24 interest rates.

25                   MR. PATRICK BOWMAN: Well, I'm saying

1 the same is true for interest rates. The -- the -- if  
2 you're sitting, having a -- if you're sitting --

3 MR. RAYMOND LAFOND: No, but on  
4 interest rates, you -- you said there were no reserves  
5 required. My knowledge in the banking industry, they  
6 require equity for the purposes of absorbing, amongst  
7 other things, interest rates escalations, which can be  
8 fairly serious on a project that's so capital  
9 intensive, because that's the major portion of it.

10 MR. PATRICK BOWMAN: Right. So let me  
11 go back a step, because I would -- I would put this in  
12 -- in two (2) categories, and I think they each have a  
13 bit of a different story to them.

14 So under a normal operations category, a  
15 base case IFF where you're -- you are building what you  
16 need to, you're doing a least-cost capital plan, and  
17 you're assessing rates in a test year over a few years,  
18 your interest rate risk is not immense because most of  
19 your debt is fixed at long term. It only turns over  
20 slowly.

21 And -- and for your banker looking at  
22 your statements, you're different as a regulated  
23 utility who can raise the rates than you are as a  
24 company who can't raise its rates, who's -- who's fixed  
25 in the market.



1                   So if you're -- if you're financing,  
2 take a pick -- Home Depot and you're loaning them  
3 money, then you want to see that --

4                   MR. RAYMOND LAFOND:    Yeah, I -- I think  
5 I understand all this.

6                   MR. PATRICK BOWMAN:    Yeah.

7                   MR. RAYMOND LAFOND:    I'm just -- I'm  
8 just questioning the premise of why no retained  
9 earnings would be -- need to be accumulated to a  
10 certain extent to cover off finance risks?

11                  MR. PATRICK BOWMAN:    Sorry. It's  
12 possible I'm -- I'm misunderstanding the question,  
13 because I was -- it -- there's a -- there's a set of  
14 interest rate risks that relate to the ongoing normal  
15 IFF, and there's a set --

16                  MR. RAYMOND LAFOND:    Well, maybe I did  
17 --

18                  MR. PATRICK BOWMAN:    -- of interest  
19 rate risks that were --

20                  MR. RAYMOND LAFOND:    Maybe I did not  
21 understand your premise. I think I heard that we  
22 needed to accumulate retained earnings for the purposes  
23 of -- of avoiding major rate changes or vol -- volatile  
24 rates due to droughts, but that that was not needed for  
25 interest rates.

1                   And I'm saying: Why would not a certain  
2 level of retained earnings be required to soften up the  
3 blows of interest rates incre -- increasing  
4 substantially in the near future?

5                   MR. PATRICK BOWMAN: Well, some -- some  
6 level of reserves could soften, but it's not serving a  
7 function like a drought, to offset something that's  
8 good some years and bad others. The interest rates are  
9 already softened and absorbed into Hydro's system  
10 because they do long-term borrowing, because they only  
11 turn over so much debt in the absence of the major  
12 projects, because they only do -- turn over so much  
13 debt every year, and because they use a long-term debt  
14 portfolio and most of their interest rates are fixed.

15                   That would tend to mean that when your  
16 interest rate starts to move, your -- your cost levels  
17 shift perhaps in a fairly significant way, but over  
18 time, and -- and your cost transition to a different  
19 level, a higher level. And your rates can move over  
20 that same time to transition.

21                   I'm saying that -- making a distinction  
22 between that and something like -- like droughts where  
23 you can have --

24                   MR. RAYMOND LAFOND: Okay. I  
25 understand the droughts. But we -- we heard earlier

1 this week that the policy of Manitoba Hydro is to  
2 maintain 15 to 30 percent of their debt portfolio in  
3 variable rates; in other words, demand rates. So if  
4 rates go up by 3 percent, 30 percent of the portfolio  
5 goes up by 3 percent.

6 Am I correct?

7 MR. PATRICK BOWMAN: Well, the -- the  
8 part I would have focussed on was what they were  
9 actually maintaining and whether that's a sensible  
10 proportion to maintain. My general experience with --  
11 with these type of -- of utilities is that you would  
12 try to maintain as -- you know, a very high percentage  
13 in -- in fixed rates. You might keep some percentage  
14 in short-term, which is what I understand Manitoba  
15 Hydro is looking to do. You know, to -- 15 percent is  
16 the number that -- that I've seen recently in variable.

17 But there's sort of a technical reason  
18 for that, which is you actually end up with an overall  
19 lower cost of debt by keeping some in short-term, and  
20 you can actually reduce your risk of variability from  
21 year to year by keeping some in short term because you  
22 start to see the effects of rate changes a little bit  
23 sooner. So you don't get just walled by big  
24 refinancings. You -- you -- you get some of that eased  
25 into your system. And -- and as that eases into your

1 system, that's exactly the kind of reasons why you  
2 would come back and say, Our overall cost level has  
3 changed, let's change rates now.

4 I'm making a distinction that that's not  
5 a reason why you would come and say, Our cost levels  
6 might change in the future, and so let's all get  
7 together and decide that -- that ratepayers should now  
8 pay a higher level of rates, take money out of the  
9 economy, take -- take the impacts of higher rates  
10 because -- because interest could go up, and -- and so  
11 sort of pre -- pre-fund the interest expense in that  
12 year.

13 Interest expense in that year is a valid  
14 component of rates, and -- and it will be -- it could  
15 be readily part of a change to rates at that time.  
16 Other than perhaps some -- some limited aspects that  
17 are for, you know, transition to help avoid the rate  
18 shocks.

19 But it -- it would take -- outside of  
20 the major projects, it would take a heck of a short and  
21 a heck of a steep interest rate price change to be --  
22 have Hydro coming in here and saying, it's -- We now  
23 need to shock our customers.

24 MR. RAYMOND LAFOND: Okay. Thank you.  
25 I've heard.

1 CONTINUED BY MR. ANTOINE HACAULT:

2 MR. ANTOINE HACAULT: So, Mr. Bowman,  
3 is part of that, that your capital also, on the long-  
4 term projects, continues to be spent over a long time  
5 period? For example, we're looking at Conawapa late  
6 around 2026, and there's already some capital spending.  
7 And that capital spending continues on an ongoing  
8 basis. That, together with the biannual -- so every  
9 two (2) years -- you're looking at the interest costs.

10 Is that part of what we're considering,  
11 as far as a transition to slowly perhaps increase reets  
12 -- rates to meet any increased interest rates?

13 MR. PATRICK BOWMAN: Right. Your --  
14 your goal in setting rates for a cost-of-service-based  
15 utility like this would be to strike a level of rates  
16 that reflects the underlying costs and that is able to  
17 absorb things like cyclical changes and -- and to some  
18 extent, absorb the -- the shock of changes when -- when  
19 there's material changes in cost levels.

20 If your costs are up -- and this is the  
21 same argument that I was making in the EIIR hearing.  
22 If something happens like your -- in that case, if you  
23 had your load grow because customer demands went up and  
24 you lost some export revenues and you had to hook up  
25 new customers here and it wasn't generating the same

1 amount of revenues as your exports, that's a valid  
2 component of a changing cost that you'd work to build  
3 into rates. If your interest rates went up, that's a  
4 valid component of the change in costs of that  
5 underlying system that you want to build into rates.  
6 And rates should -- should work to strike a new stable  
7 level and -- and -- and move their way there. That --  
8 that -- that's perfectly fine.

9           The downside is saying that we want to -  
10 - the alternative, I guess, is to say, No, no, let's  
11 work up rates now, let's -- let's head for our retained  
12 earnings not at 2 1/2 billion, not at 3 1/2 billion,  
13 but, you know, you look in the latter years of the IFF,  
14 and it's 5 billion or 6 billion.

15           And -- and the question has to be, what  
16 are -- what are -- what are ratepayers getting for  
17 that? Why are they -- why would it make sense for them  
18 to be wanting to have that much out of -- of the  
19 overall economy, that much out of investment, that much  
20 out of investment, that much park -- parked in Manitoba  
21 Hydro if it's -- if it's not serving a purpose of  
22 helping stabilize rates?

23           It -- it -- the only other purpose it  
24 possibly serves is offsetting a little bit of interest  
25 costs. But I think it's -- it probably is far from the

1 most-efficient way to have Manitobans save is through  
2 their -- their retained earnings investment in Manitoba  
3 Hydro compared to the alternative uses of that.

4 MR. RAYMOND LAFOND: And that will be  
5 my final comment on interest rates, but it seems to me  
6 that if current ratepayers benefit from short-term  
7 rates of 15 to 30 percent based on Hydro's policy, the  
8 current ratepayer should also pay some of the risk for  
9 financing long-term projects with short-term rates  
10 instead of very long-term rates, because these are  
11 projects -- capital projects that have a hundred life  
12 expec -- a hundred-year life expectancy.

13 That's all I'm -- I was getting at,  
14 because if we get the benefit now for low, short term  
15 rates, we should probably also put a reserve for the  
16 risk of -- of having these low rates versus fixed  
17 rates; in other words, benefiting for -- from -- for a  
18 3 or 4 percent rate right now versus paying 6 percent,  
19 which is technically the proper type of debt we should  
20 have on long-term projects. That was my point.

21 MR. PATRICK BOWMAN: Yeah, and I think  
22 it's a -- it's a very good point. And I -- I accept  
23 the premise entirely that if, for some reason, we were  
24 to sit here and say, Wow, we're going to -- we're going  
25 to take a bunch of short-term debt, beyond what a good

1 portfolio analysis would show, because -- because the  
2 rates are really low.

3                   So let's make sure we nab a bit of that  
4 short-term debt a bit more than we could otherwise  
5 justify and -- and really pass through some cost  
6 savings on to ratepayers, or -- or some benefits into  
7 Hydro's system. And -- and we know we're doing it on  
8 borrowed time, but -- but let's grab it. Let's do it.  
9 That would be a bad -- a -- a --

10                   MR. RAYMOND LAFOND:    Yeah, I -- I  
11 understand the principle. I'm just wanting to relate  
12 it directly to the current policy of 15/30 percent.  
13 Like, a bunch of money doesn't tell me anything. I  
14 mean, like, it's just the -- the problem between 15 and  
15 30 percent.

16                   Is that something you agree with or --  
17 or you don't? Or are you...?

18                   MR. PATRICK BOWMAN:    I -- I would -- I  
19 don't spend a lot of my time working in debt  
20 portfolios, but in my experience working with -- with  
21 utilities that have long-lived assets or financing  
22 large projects, the tendency would be to keep very low  
23 levels of -- of debts in -- in -- on short-term rates.

24                   Now, fifteen (15) is -- is pretty low.  
25 It's not very low. Thirty (30) is -- seems very high,



1 to me. But I can also understand how somebody who is  
2 actually far more versed in a portfolio analysis could  
3 come in and make an argument and says, No, no, you're  
4 all missing the point; in fact, 30 percent is not only  
5 cheaper than the other, but it's also less risky than  
6 the other. And they could put together an assessment,  
7 and -- and I think we could all look at it.

8                   But -- but thirty (30) is a big number.  
9 Thirty (30) is a really big number for that. I -- I'm  
10 not -- I have not experienced and I cannot recall an  
11 example of where I would have seen a utility dealing  
12 with assets like this that would have variable rates up  
13 in the 30 percent range. It would be much, much lower  
14 and -- and locked in as early as possible.

15                   MR. RAYMOND LAFOND: So I can conclude  
16 that Manitoba Hydro following the lower end of the  
17 scale of their 15 to 30 percent policy is not an issue  
18 for MIPUG?

19                   MR. PATRICK BOWMAN: We -- we've never  
20 -- I -- I have never and -- and MIPUG has never argued  
21 that they would have any concern with a 15 percent  
22 level if it can be justified on the basis of, you know,  
23 a good portfolio analysis. I -- I would be sceptical  
24 of seeing a -- a -- something that says that -- that 30  
25 percent makes sense, especially -- especially at a

1 current time when you know you're going to be adding a  
2 bunch of debt.

3 In essence, if you're -- if you really  
4 are building the plant, if you're really going forward,  
5 then... How do I put it? Even though you may not have  
6 it financially on your books right now, the debt  
7 associated with that, you're starting to rack up the  
8 commitments associated with a debt like that. And you  
9 have created an interest rate risk and an exposure to  
10 variations in interest rates that aren't for the debt  
11 you're borrowing; it's for the debt you're about to  
12 borrow.

13 And that would probably be in a proper  
14 portfolio analysis, looking over a -- a five (5) to ten  
15 (10) year period, a good reason to say, I'm not going  
16 to be fifteen (15) to thirty (30); I might be way below  
17 that, because -- because I also have to consider this  
18 exposure, right.

19 THE CHAIRPERSON: But I do -- I do want  
20 to -- your -- your central thesis, I think, is the fact  
21 that Manitoba Hydro is intending to -- to increase its  
22 -- its reserves in anticipation of future events. Am -  
23 - am I correct in that?

24 I mean, that's your central argument,  
25 isn't it?

1 MR. PATRICK BOWMAN: Well, the argument  
2 is less before the Board in this hearing than it was in  
3 -- in the last one. But the argument that I've made is  
4 Manitoba Hydro's requires reserves. Call them retained  
5 earnings if you want, although as a concept, accounting  
6 retained earnings are -- isn't -- isn't perfect as a  
7 concept for reserves.

8 But -- but they required reserves.  
9 Those reserves benefit ratepayers. We ought put  
10 reserves aside, and we ought assess the need for more  
11 or less reserves in the context of how it benefits  
12 ratepayers. And benefit is tied to stability of rates.  
13 Okay?

14 I can accept the rationale that has led  
15 to the 2 1/2 billion that is there now. I can accept  
16 a rationale that says, You may have to reassess those  
17 levels as you move forward and add plant.

18 But I think the 25 percent ratio or the  
19 -- or the -- the \$6 billion level that's shown in the -  
20 - in the IFF, when you get out to the latter years,  
21 there's reason to be sceptical that that's actually an  
22 amount of reserves that ratepayers will really -- that  
23 really will make sense for them to -- to help put aside  
24 to their own benefit. And -- and I don't know if it's  
25 not to ratepayer benefit, I don't know what other

1 rationale we have for -- for putting those reserves  
2 aside.

3 THE CHAIRPERSON: At the moment, if we  
4 -- if the panel supports the Application that's been  
5 made by Manitoba Hydro, they're looking at net income  
6 for the two (2) test years of roughly 50, \$60 million a  
7 year for a corporation that has revenues in the order  
8 of over a billion dollars a year.

9 And that, to me, does not seem to be an  
10 attempt to increase reserves, given the size of --  
11 given the size of the Corporation's revenues and given  
12 the many moving parts that are -- that impact on  
13 Manitoba Hydro's revenues. It doesn't seem to me that  
14 that's an attempt to increase their reserves beyond a  
15 reasonable level.

16 But I'd like to hear your point of view  
17 on that.

18 MR. PATRICK BOWMAN: You -- you and I  
19 completely agree on that point, Mr. Chairman, and --  
20 and it's one (1) of the reasons why I've said in PUB --  
21 well, the question in PUB-11, I've -- I've put -- put  
22 some numbers that we'll -- I think we'll get to. But  
23 I've said I'm not taking issue with -- with the reserve  
24 levels that are there. But I think if the argument --  
25 I think the argument this Board has to be a bit careful

1 of is Hydro saying, Things are really bad, because we  
2 were targeting to be putting aside 160 or 180 or 200  
3 million a year, and now we're only putting aside 60 a  
4 year.

5                   And I think this Board has to assess and  
6 say, Is -- is 60 so bad, given what we're facing today?  
7 We may have been talking that level. And -- and maybe  
8 that was justified and maybe it wasn't. But how does  
9 60 -- putting aside 60 today -- with some variability,  
10 but how does putting aside 60 today compare the  
11 situation we face today?

12                   And -- and we're going to touch on this  
13 in a minute. But it's -- I would su -- submit it's not  
14 that bad. It's -- it's building on -- at a mean level.  
15 It's continuing to build over a period of -- of an IFF,  
16 where lots of other costs are going on, lots of other  
17 cost increases and pressures. And -- and it's led to  
18 retained earnings that are booked, which, as I said, I  
19 -- you have to be a bit careful about what we're  
20 focussing on that number. But it's led to retained  
21 earnings that are booked that are -- are higher than  
22 they've ever been in Hydro's history and that, in  
23 relation to many of the risks Hydro faces, are -- are  
24 higher as a percentage than -- than they were even two  
25 (2) years ago when we sat here.

1                   So the situation looks a bit different.  
2   That's not to say sixty (60) is too much. But a 1.2  
3   interest coverage target or -- or feeling uncomfortable  
4   because it's not two hundred (200) would -- I would  
5   submit, would be a problem. I think that would --  
6   would not be justified on the -- on the evidence that's  
7   before the Board.

8

9   CONTINUED BY MR. ANTOINE HACAULT:

10                   MR. ANTOINE HACAULT:   Mr. Bowman, could  
11   you move on to, looking at the time, the issue of over-  
12   advancing costs in the context of a Crown-owned  
13   utility?

14                   MR. PATRICK BOWMAN:   Yes. Just to  
15   finish off, this is the last point under the sort of  
16   theory that we use when we come to assess an  
17   application, is the -- the long-term economics of hydro  
18   that we set out work whether you're talking about a  
19   hydro system that's 50/50 hydro and thermal, or they  
20   work whether you're talking about something larger.

21                   But you practically can't get a hydro  
22   system much higher than, say, 50/50 hydro or two thirds  
23   (2/3s) hydro and the rest thermal without -- without  
24   substantial interconnections. And the reason is  
25   because your planning target is based on droughts, and

1 it doesn't always make a lot of sense to back up a  
2 hydro plant that's subject to drought with another  
3 hydro plant.

4                   There's -- thermals are much more  
5 efficient at that on that basis. And -- and for some  
6 of the reasons that -- that we discussed earlier, it  
7 would lead you to -- to be talking about -- about  
8 thermal plants. But what you do with pushing your  
9 hydro limits beyond that level, that 50/50 or the two  
10 thirds (2/3s), is the interconnections to the other  
11 jurisdictions.

12                   And the interconnections are key,  
13 because you effectively don't build your own diversity.  
14 You build your strength and you let them build theirs,  
15 and you coordinate. And that's why the transmission is  
16 so essential to thinking about the -- the overall  
17 development plan and it's so essential to having a  
18 Manitoba Hydro that is 99 percent hydraulically  
19 generated energy. You could -- you could never achieve  
20 that without -- without interconnections, not on an  
21 economic basis. You never design for bill-back.

22                   And it's a really successful model as  
23 long as you protect against two (2) things. One (1) is  
24 as long as you protect against the -- the risk of your  
25 transmission being unavailable or -- or your rights not

1 being there, but the other one (1) is as long as you  
2 protect against over-advancing the hydro project costs.

3           And it's -- it's very easy to see that  
4 with something like Wuskwatim. It's probably the best  
5 case we have in front of us where ratepayers today are  
6 facing a Wuskwatim project that's going to be  
7 challenging economics for -- for many years to come.  
8 And -- and it could be --could be worse.

9           It would be worse if -- if we chose a  
10 particular combination of -- of things like accounting  
11 practices, like depreciation, that made it more -- you  
12 know, put more costs in the early years, or if we made  
13 a broader focus on salvage and putting aside the money  
14 today so that a hundred and forty (140) years from now,  
15 people can take it down. Those things would make  
16 Wuskwatim look worse in -- in the books today.

17           The problem that arises when you do that  
18 is that when you get to the next project, like a  
19 Keeyask or Conawapa, and you've take what are -- what  
20 are, to economists, the wrong kind of dollars, the ones  
21 that don't grow with time, and advance them, you  
22 decrease the net present value of the project. You  
23 make it look like a worse project.

24           And you can -- if you're not careful,  
25 you can end up skewing your decisions and making the



1 wrong decision on long-term assets because you've over-  
2 recognized the cost of that asset in the early years.  
3 You can end up being in a situation where if -- if --  
4 you know, if we had Wuskwatim's costs higher, people  
5 may have chosen not to go ahead with it. They may have  
6 found other alternatives. We may have gone more  
7 thermal.

8                   And there's a classic example of this.  
9 Manitoba is actually a poster child for an example of  
10 this. With the Church -- Nelson River Diversion --  
11 Churchill River Diversion and -- and Lake Winnipeg  
12 regulation. When the decision was made to go north, it  
13 was pretty clear that the way to develop the Nelson  
14 River was to divert the Churchill into it, and get some  
15 storage on Lake Winnipeg, and build your plants working  
16 your way down the Nelson.

17                   But the thing that was going to kill the  
18 development was the transmission. It's a massive  
19 investment. You have to invest for the future. You're  
20 putting in place a large, large transmission system,  
21 Bipole 1 and 2, which can carry many plants. But for  
22 the first many years, you only have one (1) plant on  
23 it. And so you're not -- don't have a lot of -- of  
24 power flowing to be able to pay for that asset. It's -  
25 - it's also a huge capital investment, and it had some

1 -- some technical risk associated with it.

2                   And I've been through many discussions  
3 with -- with people who are involved at various points  
4 dur -- in that period and -- and read a number of  
5 documents, and it was -- it was not an easy decision to  
6 go north. And even Mr. Warden has testified that they  
7 were -- Hydro was on the cusp of being the Manitoba  
8 ther -- thermal electric port. Coal in the South was a  
9 very, very competitive option. You know, and absent --  
10 and that's a result of capital cost barriers.

11                   And what eventually solved that problem  
12 and got the project moving was Canada coming to the  
13 table and saying, We'll take on the -- the HVDC Bipole  
14 system. And if you look back in Hydro's books, you'll  
15 find that Canada built the HVDC through AECL and  
16 financed them, and they financed them at an excessively  
17 favourable lease rate.

18                   It was actually a lease rate that was  
19 underpaying even for the interest, never mind sinking -  
20 - never mind straight-line depreciation or sinking fund  
21 depreciation. It was like negative depreciation. It  
22 was underpaying for the -- the interest. But it had a  
23 stepped leased rate that led to very low costs in the  
24 early years and costs that increased as that asset  
25 became more and more used.

1                   As a result of Canada being able to --  
2 to come to the table with that, it was able to shift  
3 the economic assessment and the economic decision in a  
4 way that made the projects favourable. That turned out  
5 to be a fantastic decision. Canada was paid off in  
6 full. They were paid off early actually, I be -- if  
7 you look in Hydro's statements, it was in the '90s, is  
8 my recollection, which is early.

9                   And -- and it -- it changed the -- the  
10 framework by making sure that things that are in -- in  
11 unitary dollars in the pas -- I don't -- original-cost  
12 dollars showed up later in the period rather than  
13 earlier. And -- and that's -- that's why, you know,  
14 when we come to review these things, one (1) of our  
15 questions is: Are you reflecting capital-related  
16 dollars in the period where those benefits arise?

17                   And if you're not, you may be meeting an  
18 accounting standard, you may have room within an  
19 accounting standard, but you're -- you're actually  
20 undermining the proper economic test of a project.

21                   MR. RAYMOND LAFOND:    Can I intervene  
22 here? And I -- I think you started with the Wuskwatim  
23 example?

24                   MR. PATRICK BOWMAN:    Yeah.

25                   MR. RAYMOND LAFOND:    But this -- this

1 is in place. This is behind us. There's nothing we  
2 can do about it now. Now we're talking about the new  
3 projects. The new projects are going to be considered  
4 in the NFAAT. The Bipole 3 and Riel Station are for  
5 reliability reasons.

6 And -- and -- and so I'm not sure that  
7 the discussions you're heading into now are helping me  
8 in -- in -- in making up my mind as to where this panel  
9 should go and what the issues are on your side.

10 MR. PATRICK BOWMAN: All right. I'll -  
11 - I'll take the comment and just say that the --  
12 there's a lot of decisions to be made as to what period  
13 costs show up in, whether that's how you treat overhead  
14 costs or whether that's how you treat depreci --  
15 depreciation costs and a bunch of things we're going to  
16 go to.

17 And people will make decisions about  
18 what period to have those costs show up in based on  
19 various objectives they're trying to achieve. And  
20 accounting standards will have one (1) set of  
21 objectives, and -- and some other pressures will have  
22 different objectives. And I'm saying that, as a  
23 Manitoban looking at the long term, as an economist  
24 looking at the -- the economic profile of projects, as  
25 a -- someone who's trying to design rates that are --

1 are fair to today and the future -- and I'll -- we're  
2 going to come to some examples -- there is a big danger  
3 of taking those costs and recognizing them in too early  
4 a period.

5                   That's for existing assets. That's for  
6 Kettle. That's for even -- well, Pointe du Bois is an  
7 exception, but Kettle, Limestone. It's for Wuskwatim.  
8 It's for any of those -- that -- those component of  
9 assets. It's probably less so for things like  
10 distribution. And -- and it -- a decision that's made  
11 on a policy aspect is going to make a difference in  
12 Conawapa if it's built.

13                   And this is why, when we look at things  
14 like depreciation studies or overhead policies or some  
15 other aspects like that, it's not just a matter of  
16 looking at what's the Iowa curve and what -- what  
17 calculus underlies it. It's a question of how is it  
18 shaping the decisions that we are making that we need  
19 to make today and that need to make in the future, and  
20 the fairness between different groups of customers and,  
21 the extreme, the -- the -- how is it shaping future  
22 decisions that are going to be made and possibly  
23 shaping them in a way that is -- is too short-term  
24 focussed and will ultimately not be as good for  
25 Manitoba as the -- the way that people made the

1 decisions when they made some of the bold decisions to  
2 go north and the like.

3                   And that -- that's why this context is  
4 so -- is so critical, even in -- even in a single GRA,  
5 because these policy decisions and these -- these  
6 approaches are not just going to apply to -- to Kettle  
7 or to Wuskwatim. They're going to apply to Conawapas  
8 and the like too. And they're -- they're fundamentally  
9 fairness questions.

10                   THE CHAIRPERSON: We are -- you are  
11 talking about ELG versus ASL now, aren't you?

12                   MR. PATRICK BOWMAN: ELG versus ASL is  
13 one. The overhead is in the same type of category.  
14 Any -- any of those aspects that relate to -- relate to  
15 full-cost accounting, those -- those pieces.

16                   MR. RAYMOND LAFOND: But -- but when  
17 you talk of great danger, it seems to me that the  
18 earlier you pay for the facilities does not add danger;  
19 it lowers the risk. I'm not saying that's what it  
20 should be. But I don't understand the great danger  
21 comment, because it reduces the risks. And -- and  
22 again, I'm not proposing that a certain level of risk  
23 not be maintained.

24                   But I don't understand the statement of  
25 -- of a great danger in paying earlier than later,

1 because, to me, it lowers the risk again.

2 MR. PATRICK BOWMAN: There's two (2)  
3 pieces to it. One (1) is the question of fairness,  
4 which is inherent to the rate setting. And that's not  
5 the danger issue. That's the fairness question. And  
6 the other is the danger of making the wrong decision  
7 because you've been -- you've been dealing with a set  
8 of -- of numbers that -- that pays too soon. And it's  
9 --

10 MR. RAYMOND LAFOND: That, I do  
11 understand. The issue was a great danger about  
12 accounting principles where overheads are ca -- are --  
13 are capitalized to a lesser extent than they were  
14 before or, again, where depreciation is actually at a  
15 higher amount than before. That's what I was referring  
16 to. I -- and I think we discussed the issue about  
17 major projects being built too early.

18 We -- but I thought this was what you  
19 were looking at, in terms of accounting principles and  
20 standards, which you qualified as subjective.

21 MR. PATRICK BOWMAN: I don't recall  
22 using the word "subjective", but I -- I --

23 MR. RAYMOND LAFOND: Oh, yeah, a few  
24 minutes ago.

25 MR. PATRICK BOWMAN: If -- if anything,

1 the -- the danger that I would relay comes  
2 fundamentally from the view, as an economist, that you  
3 can take something that would otherwise be a good  
4 decision and, by applying a particular approach to the  
5 mathematics of that, conclude that it's a wrong project  
6 and go forward with the wrong path. And -- and in that  
7 way you have a -- a complete dead-weight loss to the  
8 economy, to use the technical term.

9           You would ha -- you would lose an -- an  
10 opportunity. You would -- you would miss out on -- on  
11 a future that's just like the decision that people  
12 could have missed out on to have the Nelson River  
13 developed. Because, in the '60s, if the Bipole had to  
14 be paid for by the customers in the '60s and '70s, the  
15 '70s particularly, it would have been too onerous, and  
16 they would have built coal.

17           Like it -- it's almost that stark in  
18 that one (1) decision. And I can -- I can relay many  
19 other cases where we've worked on hydro projects or --  
20 or hydro-related projects and the thing that you lay  
21 awake at night at and you rack your brains and you do  
22 your work with all the different teams on is: How do I  
23 deal with these front-end effects, and how do I  
24 minimize these front-end effects? Because that bump,  
25 that early years' impact on ratepayers is -- is



1 something that's -- that -- that will -- could lead to  
2 the wrong decision.

3 That's not the fairness question.

4 That's the resource allocation question. That's the --  
5 and that's where the -- the danger arises. Fairness  
6 has a different argument that I can touch on in a  
7 minute.

8 MR. RAYMOND LAFOND: Okay. Can -- can  
9 you develop the -- the wrong decision? I understand in  
10 terms of new generation stations, for instance. But  
11 relate it to accounting principles, which you stated  
12 depreciation being one (1) of them.

13 MR. PATRICK BOWMAN: Well, it's --

14 MR. RAYMOND LAFOND: The issue is we're  
15 moving from too many issues at the same time. We need  
16 to deal with one (1) at the time, whether it be  
17 depreciation, whether it be the construction of a new  
18 project five (5) years in advance for export purposes.  
19 But I think we can't all put them in the same pot.

20 I mean, we have to look at them  
21 separately and discuss the principles between -- behind  
22 each of them separately so that we can have a proper  
23 understanding of exactly what you're -- the issues  
24 you're considering and the proposals you would have in  
25 lieu of what's being presented to us.

1 MR. PATRICK BOWMAN: Mr. Lafond, it's  
2 probably a -- a excellent time to move to that. I was  
3 just finishing off on the section that said: What are  
4 the principles that -- that guide us in the  
5 recommendations we're going to make? If -- it's  
6 probably a good time to move on to some of those --  
7 those recommendations.

8 And -- and to be very specific on those,  
9 the two (2) that I would highlight here would be the --  
10 the choice on depreciation methods and the overheads.  
11 If you permit me, I would probably just touch broadly  
12 on the other cost pressures that are -- exist in this  
13 Application, because it's not just a submission based  
14 on -- on accounting approaches. The accounting  
15 approaches is one (1) of a few things that we talked  
16 about. And, if anything, it's -- it's not the first  
17 one that we would -- would look to go through, if  
18 that's all right.

19 MR. RAYMOND LAFOND: Great. Let's go  
20 at it.

21

22 CONTINUED BY MR. ANTOINE HACAULT:

23 MR. ANTOINE HACAULT: Now, can you go  
24 through then, at a very high level, in IFF12 the  
25 pressures and the key things that InterGroup has looked

1 at?

2 MR. PATRICK BOWMAN: Sure. We reviewed  
3 IFF11-2 originally -- or submissions based on IFF11-2.  
4 IFF12 came a bit later. And we've updated some of that  
5 and said that we've assessed the submission against the  
6 -- the claims Hydro made about what was driving the  
7 costs. And some of those bore out and some did not.

8 Hydro said that export revenues were  
9 down, which is true. We saw that export revenues in  
10 IFF12 -- when I'm looking to the '12/'13 year, to take  
11 an example, export revenues are down 226 million,  
12 compared to what they were in IFF09-1. I think we've  
13 heard that part.

14 What sometimes gets missed in that is  
15 the corollary that there are a couple of variables that  
16 are run hand in hand when you run a hydro system. It's  
17 not just export revenues. It's fuel to supply aspects  
18 of the generation, and it's purchased power. And the  
19 fuel costs and the purchased power costs, which are a  
20 complement of that piece, and imports which is a part  
21 of that purchased power, are down 107 million.

22 And they're down 107 million for many of  
23 the same reasons. Fuel costs have dropped. Because  
24 exports are down, we would operate the system slightly  
25 differently, which will change the fuel and purchased

1 power costs. And import costs are cheaper. So that is  
2 the scenario if you -- if you look to the IF -- you  
3 compare IFF09-1 to IFF12, you'll see the fuel and  
4 purchase power number dramatically down.

5           You have to remember that IFF12 does not  
6 run a scenario in most of these pieces, especially when  
7 you look further out. It runs an average, an average  
8 which includes droughts and floods. And a lot of that  
9 cost shows up in droughts. The droughts have become  
10 much cheaper to serve. And we'll -- we'll show you  
11 something -- that in a minute.

12           The IFF09-1 worked with a interest  
13 coverage target of one point two (1.2), which Hydro  
14 continues to claim in its target. That is a net income  
15 of about 125 million in this -- in this -- in the  
16 previous GRA. And the IFF12 only has a net income of  
17 about 53 million, so it's down by 72 million.

18           And in the way that an economist looks  
19 at these applications, that fits under -- in under  
20 cost. That is a cost of operating the system. That is  
21 a cost of -- of setting rates that are stable.

22           And so the question is: Is this also a  
23 savings as a result of what's happened in the market,  
24 the fact that your net income is -- is 53 million  
25 versus a hundred and twenty-five (125)? In other

1 words, can be justified on cost factors that you're  
2 going to have a lower level of contribution to  
3 reserves.

4 And so we set out some information on  
5 this in an IR that was asked to us by Manitoba Hydro --  
6 MH/MIPUG-5 -- or MH/MIPUG-3, sorry. And that might be  
7 one that's worth getting together.

8

9 (BRIEF PAUSE)

10

11 MR. RAYMOND LAFOND: Are we referring  
12 to PUB/MIPUG-1 -- 1-3?

13 MR. PATRICK BOWMAN: MH/MIPUG-1-3.  
14 It's a three (3) page response, with some graphs on  
15 pages 2 and 3.

16

17 (BRIEF PAUSE)

18

19 MR. RAYMOND LAFOND: Can you -- is this  
20 in your book -- MIPUG book?

21 MR. ANTOINE HACAULT: No,  
22 unfortunately, it is not, members of the Board.

23 MS. ANITA SOUTHALL: Member Lafond and  
24 members of the panel, I have a PUB reference book of  
25 documents coming up --

1 MR. RAYMOND LAFOND: Yes, this --

2 MS. ANITA SOUTHALL: -- Volume V.

3 MR. RAYMOND LAFOND: This is a document  
4 -- this is this major document there which we all read  
5 la -- yesterday, the PUB/MIPUG-1-3, and we all have it.

6 MS. ANITA SOUTHALL: I'm just going to  
7 let Mr. Hacault make clear which document he's talking  
8 about. If I'm following though, I do have it in my new  
9 reference book of documents which is pending, so.

10 MR. RAYMOND LAFOND: Whoops, reference  
11 Section 2.1, page 2-2, MIPUG principles. Well, that's  
12 PUB/MIPUG-1. That's not the one, okay.

13

14 CONTINUED BY MR. ANTOINE HACAULT:

15 MR. ANTOINE HACAULT: Go ahead, Mr.  
16 Bowman. I believe people have the document now. To  
17 which page do you want us to refer?

18 MR. PATRICK BOWMAN: It's pages 2 and 3  
19 will have a series of three (3) graphs on them, if  
20 people have that. Now, this is a question posed to us  
21 by Manitoba Hydro. It wasn't a PUB question; it was a  
22 Manitoba Hydro question.

23 And their question is: Why is it, in  
24 our view, that a reduction in net income is considered  
25 a savings? And it's -- the response deals with why we

1 would view that -- why I would put into the information  
2 that this is a reasonable and practical aspect of the  
3 change in the market conditions.

4                   And what you'll see at the top of page 2  
5 is a graph that's showing you the net income that would  
6 arise. And -- and these are -- these are referenced to  
7 Hydro documents. They're not our numbers. These are  
8 from Hydro's system.

9                   It's the net income that would arise in  
10 each given year of flow conditions, were that flow to  
11 be repeated based on today's system. So it's not what  
12 Hydro made -- made in 1916. It's: What if the 1916  
13 flow happened tomorrow, or happened in 2013/'14 in this  
14 case?

15                   And they're indexed to the net income  
16 that was built into the mean in the particular IFF. So  
17 IFF09 had \$125 million net income for '13/'14. And so  
18 this graph is indexed to show at the dotted line the  
19 125 million, which is what was -- which is the mean of  
20 all of the situations, okay.

21                   And it shows what happens if you have  
22 the flows from -- for example, the 2004 drought repeat  
23 itself, it would have been a one (1) year loss of  
24 almost \$600 million. It's that very large negative  
25 bar. If you had a 1995, I believe it is, flood happen,

1 you'd have a net income of almost pos -- positive 400  
2 million.

3                   So this is all of the different water  
4 conditions, and it shows the risks and the cyclical  
5 nature of what -- what -- of what customers were  
6 exposed to based on the numbers that were prepared in  
7 IFF09-1. So it reflects export prices from that era.  
8 It reflects domestic loads from that era. It reflects  
9 pricing assumptions on gas. It reflects all of those  
10 aspects and what it would do net income.

11                   And it emphasizes why, when we get  
12 talking about risks, we talk about five (5) year  
13 droughts, because five (5) year droughts, you can see  
14 the '88 period which is the five (5) year drought that  
15 Hydro reports in its -- in its financial statements.  
16 It also talks about -- Hydro's also talked about the  
17 '30s drought, the one that's shown here as six (6) --  
18 it's actually six (6) years of bad water. They call it  
19 a five (5) year drought for indexing.

20                   And it shows the -- the impacts of that  
21 through that period. They've called that a worst  
22 drought, but that's the one they -- Hydro makes a  
23 point, they plan for that one but they're not as  
24 confident on the water records from that era.

25                   As you go down to Figure 2, you see what



1 that graph looks like; again, with the exact same axis  
2 and the exact same height, what's happened to those bar  
3 heights as the result of the change moving to IFF11-2.  
4 So what we have in IFF11-2 is a mean net income, or a -  
5 - or a net income, at least, in the year -- we're  
6 indexed to, 2013/'14, of 68 million and the  
7 distribution of the bars about 68 million. And those  
8 are the results that could arise under different flow  
9 conditions.

10                   And you'll see there's no \$600 million  
11 negative years anymore. There are years of -- the five  
12 (5) year drought has years that are barely a net loss  
13 in that -- in that scenario of that IFF. And it adds  
14 up to -- the earlier -- the earlier graph, the one from  
15 the last GRA, the IFF09, would have had a 1930s event  
16 being the losses in nine (9) years out of thirteen  
17 (13), and a total of 1.88 billion in net losses over  
18 thirteen (13) years.

19                   And if you move down to the second  
20 graph, which is where we are now, you would see the  
21 worst five (5) year droughts total 700 million in net  
22 losses, which would be the -- the '80s loss -- graph,  
23 and about 962 million over the full thirteen (13) year  
24 period in the '30s. So that's been cut basically in  
25 half.

1 MR. ANTOINE HACAULT: So --

2 MR. PATRICK BOWMAN: Now -- yeah, go  
3 ahead.

4 MR. ANTOINE HACAULT: -- the lower  
5 export prices and all the other circumstances that we  
6 now have before the Board actually reduces the  
7 variability and the -- what I maybe call the extreme  
8 nature, but the vari -- extreme variations that we see.

9 Is that correct, Mr. Bowman?

10 MR. PATRICK BOWMAN: Yes. The -- the  
11 less reliance on high export prices and less exposure  
12 to high gas prices means that flow variability is no  
13 longer nearly as costly for Manitoba Hydro.

14 Now, we went here for the purposes of  
15 particularly showing Figure 3. And Figure 3 is what  
16 happens when you take the exact same data that's in  
17 Figure 2 -- in other words IFF -- the new IFF11-2; we  
18 didn't have 12 done, but it wouldn't be much different.  
19 Take the new IFF and you say, But what if I kept that  
20 125 million net income I had? What -- what does my  
21 flow variability about 125 million look like?

22 And you see that if you go to that  
23 situation, it doesn't even really make sense to talk  
24 about five (5) year droughts anymore, because there's  
25 no net loss in three (3) of the five (5) years. If you

1 really were targeting \$125 million as contributions  
2 into reserves right now, you would have very few years  
3 where you would actually be withdrawing from those  
4 reserves at all. There's -- and -- and the largest one  
5 (1), the -- over the thirteen (13) year period of the  
6 '30s, you would have net losses of over 111 million  
7 under that. The 2004 drought would have been paid in  
8 one (1) year.

9 MR. ANTOINE HACAULT: Now, Mr. Bowman,  
10 to understand the risk numbers that are put into  
11 Hydro's documents, those numbers are not expressed as  
12 net losses; they are expected -- addressed as a variance  
13 from the expected revenue.

14 Is that correct?

15 MR. PATRICK BOWMAN: That's correct.  
16 And I'll explain why that makes a difference. If you  
17 go through Hydro's five (5) year net -- I'm going to go  
18 to the -- I'll look to the Figure 2, now, which is the  
19 IFF11-2 as it -- as existed in 11-2, and you go to a  
20 five (5) year drought, we would show that five (5) year  
21 droughts total -- the five (5) year drought in the '80s  
22 totalled about 712 million in net losses. And, again,  
23 this is indexed straight out of Hydro's numbers, 712  
24 million.

25 Hydro would also calculate into that

1 that it really had wanted to be making a contribution  
2 to reserves in that year. And so it will look at the  
3 path it thought it wanted to be on for retained  
4 earnings and compare it to the path it was actually on  
5 and consider that a difference. It's a much, much  
6 bigger number. And it's because it's comparing to the  
7 -- what would have been, had we not been on a drought  
8 and we had been at normal water.

9 In other words, it's -- the difference  
10 between the two (2) scenarios is whether you're talking  
11 about the extent to which you tap reserves, which is  
12 the way that we're presenting it, or the extent to  
13 which -- where Hydro presents it, to where,  
14 effectively, they're -- they're lamenting that they're  
15 not able to save for a drought during a drought. They  
16 would consider that a negative impact.

17 And -- and I don't think those are --  
18 you know, the numbers say what the numbers say.  
19 They're fairly presented. But I don't think it's the  
20 fair analytical assessment for -- for how much impact a  
21 drought can have on your -- on your retained earnings  
22 during that period.

23 MR. RAYMOND LAFOND: So can I simply  
24 conclude that based -- because of lower fuel and power  
25 purchases, as well as fuel exports, there will be less

1 volatility, so, therefore, the mean net income of \$68  
2 million per year is all that's required under IFF11-2,  
3 versus a mean income of 125 million per year was  
4 required under IFF09-1, correct?

5 MR. PATRICK BOWMAN: That's exactly --  
6 yes. And that's why we would call this, effectively, a  
7 savings that has arisen as a result of the changes in  
8 the market. Not only are our export revenues down and  
9 droughts have gotten cheaper, but it also means that  
10 your need to build up reserves for the droughts have --  
11 has -- has been reduced.

12 MR. RAYMOND LAFOND: Okay. But I  
13 understand that, I think. But the issue you're  
14 bringing on behalf of MIPUG is that \$125 million per  
15 year net income is not required, but rather 68 million  
16 -- well, Hydro is asking for something like \$60 million  
17 in its current rate structure, correct?

18 MR. PATRICK BOWMAN: Well, sixty-eight  
19 (68) is a number out of -- of IFF11-2. And the  
20 question is: How do you calculate that sixty-eight  
21 (68)? And that's where we're going to go now.

22 But I was saying, when we review an  
23 application that says, We're here because drought  
24 export prices are down and gas prices are down, and  
25 that's 226 million in the year we're looking at, and

1 when the members say, is that right? Did their -- did  
2 they really have a two hundred and twenty-six (226)  
3 negative variance? The response is, yes, but there's  
4 offsetting features. And one (1) of those features is  
5 they save about 107 million on fuel and purchase power.  
6 And the other offsetting feature is droughts have now  
7 gotten cheaper, so you don't need to be putting quite  
8 as much aside anymore.

9                   And so both of those are correlated  
10 fully the same underlying features that drive us to say  
11 that the -- the impact of the export market drop, in  
12 terms of a ratepayer's perspective, is -- is probably  
13 overstated. So that was -- that was the basic  
14 conclusion when we're asked to look at the -- the rate  
15 increase being requested.

16                   MR. RAYMOND LAFOND: I'm sorry, the \$60  
17 million is overstated as opposed to the 68 million mean  
18 indicated there? Could you please...

19                   MR. PATRICK BOWMAN: No, I'm saying  
20 that -- first of all, the sixty-eight (68) and the  
21 sixty (60) are -- are the same number from different  
22 IFFs. So they're the same --

23                   MR. RAYMOND LAFOND: Yes.

24                   MR. PATRICK BOWMAN: Okay. So I'm not  
25 making a distinction between sixty-eight (68) and sixty

1 (60). What I'm saying is, when Hydro says they have a  
2 -- more than \$200 million change due to export markets,  
3 we're pointing out that they have some other offsetting  
4 changes as well. It's not as dire as the \$225 million  
5 number looks.

6 MR. RAYMOND LAFOND: I agree.

7 MR. PATRICK BOWMAN: Okay. So the  
8 third feature that we looked at was the interest rate.  
9 Clearly, interest rates are down. Clearly, they're  
10 related factors. They arise out of the same drops in  
11 loads and recessionary factors that is part of the  
12 reason the power prices are down.

13 And so by the time we're done looking at  
14 -- at the overall features that has happened from Hydro  
15 from an -- an -- related economic events, the actual  
16 impact on -- on their costs or their net income or  
17 their need for higher rates is -- is actually pretty  
18 small from that event.

19 And it was one (1) of the reasons why we  
20 said, The world looks a lot different now than it did  
21 in the last risk hearing. And we've now learned that  
22 Hydro's exposure to things like booming US markets and  
23 high export prices is not nearly as high as it looked,  
24 because there are correlated factors that means when  
25 those markets drop and recessions hit and interest

1 rates drop and fuel gets cheaper, and the other factors  
2 that happen to have combined and moved together, the  
3 impact is much smaller than -- than I think this Board,  
4 or -- or even people -- me, appearing before this  
5 Board, appreciated in -- in the last hearing.

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: Thank you.  
9 Dealing with the issue of reserves, could you comment  
10 on the type of reserves that New Brunswick,  
11 Newfoundland, and Labrador have had in recent history?

12 MR. PATRICK BOWMAN: Well, we had a --  
13 an IR that asked about the ability of a utility to  
14 operate with very low -- low retained earnings levels.  
15 And we pointed out some of the things that I said  
16 earlier, which is if you're -- if you're on the  
17 development end of a -- of a project and you're backed  
18 by a government, you don't necessarily need a whole  
19 bunch of retained earnings. You're going to -- you're  
20 going to be able to borrow the money you need to  
21 develop.

22 And that -- so we said that -- we -- we  
23 pointed out that the retained earnings and the debt-  
24 equity ratios were quite low in some of those examples,  
25 including Manitoba Hydro's. So that's one (1) of the



1 features.

2                   The other thing that we commented on is  
3 -- is whether the retained earnings, as reported, is in  
4 fact fairly representing a -- a risk protection concept  
5 numerically. It's definitely representing it  
6 directionally and in magnitude. But retained earnings  
7 in the balance sheet is one (1) component of an overall  
8 picture of the utility.

9                   And it can be -- again, from a commerce  
10 perspective it can be a number you have to be very  
11 careful about when you're dealing with a utility that  
12 has assets booked in historical costs that are -- are  
13 quite low and they're dealing with certain features on  
14 their balance sheet like major depreciation reserve  
15 variances that are positive.

16                   And let me go on and explain that. If  
17 we were sitting here today and the calculations and  
18 reserve study had concluded that Hydro had been  
19 amortizing its assets over too long a period -- now, of  
20 course, it tended to conclude the other. They could go  
21 longer. But if it had concluded they were amortizing  
22 over too long a period and, as a result, they hadn't  
23 been setting aside nearly enough depreciation and they  
24 really needed to ramp up the depreciation, there would  
25 be a tendency to look at that, when someone is doing an

1 assessment of Hydro and, in my language, put a little  
2 bit of an asterisks next to retained earnings number  
3 and say, Oh, sure, that's an audited retained earnings  
4 number, but -- but just hold on a second. That's only  
5 valid to the extent that these -- these assets that  
6 have very little depreciation against them is -- is  
7 carried forward as -- as a value.

8                   If -- if your assets are really under-  
9 depreciated and you really should get on and -- and  
10 depreciate them faster, you'd better be really careful  
11 about the -- the level of that value reported, right?  
12 It -- it's a little overstated, compared to what --  
13 what we now know about the assets. But we're not  
14 dealing with that. We're dealing with it on the other  
15 side.

16                   Now, I want to be careful. I've  
17 answered an IR on this. I've been quite clear that I  
18 don't sit here saying a depreciation surplus is a  
19 refundable balance or is something that should be  
20 credited back to anybody. But there's no doubt that it  
21 represents a certain -- a certain value, a certain  
22 advancement of -- of paying down assets that we now  
23 think are going to last longer. And -- and whether it  
24 shows up as retained earnings or not, it is in effect  
25 one (1) additional level of -- of protection, in light

1 of the -- the valuation or the -- the balance sheet or  
2 the assets that are there.

3 An accountant is not under -- is not  
4 undermining the -- the reporting of the retained  
5 earnings, but it is saying that the same asterisks  
6 could easily be there and saying that the -- that --  
7 that for this -- for this reason, along with the fact  
8 that we have these very valuable assets being reported  
9 at a historic cost, we have to be a little bit careful  
10 about saying \$2.534 billion is a -- is a terribly  
11 indicative number about just how much financial  
12 protection is -- is inherent in the Utility.

13

14 (BRIEF PAUSE)

15

16 MR. ANTOINE HACAULT: And the numbers  
17 in that accumulated difference, depending on whether  
18 you include salvage or not, range in the \$500 million  
19 difference to -- up to 900 million if you take ASL  
20 without salvage. Those are the numbers that we've  
21 heard through Manitoba Hydro evidence.

22 I won't say that it's exactly those  
23 numbers, but in those ranges, correct?

24 MR. PATRICK BOWMAN: It's in that  
25 range. Now, the other thing that we were expected to

1 take a look at is the levels of spending. These really  
2 show up in Section 4.1 of our submission, and page 4-3  
3 in particular. And these are of the same data. If  
4 people -- people may want to get that out.

5

6 (BRIEF PAUSE)

7

8 MR. ANTOINE HACAULT: So we're looking  
9 at Section 4.1, around page 4-2, 4-3?

10 MR. PATRICK BOWMAN: The graph at the  
11 top of page 4-3 in particular. I have to work with a  
12 counsel who's visual, so I will end up using a lot of  
13 graphs.

14 MR. ANTOINE HACAULT: It's because I'm  
15 not an economist or an accountant. I'm just a lowly  
16 lawyer.

17 MR. PATRICK BOWMAN: Now, this was  
18 prepared, again, straight out of numbers that are  
19 referenced in the footnote, which I'm sure lawyers  
20 enjoy reading. It is keeping track of three (3)  
21 separate things. One (1) is Hydro's top-line total  
22 spending, the red line at the top. One (1) is Hydro's  
23 values that make it into the IFF, which is the blue  
24 line, which ratepayer -- it's what ratepayers are  
25 ultimately --

1 MR. RAYMOND LAFOND: We don't have  
2 colours.

3 MR. PATRICK BOWMAN: Oh.

4 MR. RAYMOND LAFOND: So please tell us  
5 the --

6 MR. PATRICK BOWMAN: I'm --

7 MR. RAYMOND LAFOND: -- symbols.

8 MR. PATRICK BOWMAN: I'm sorry. The  
9 dashed line at the top is the total spending amounts  
10 before capitalized amounts and overheads and the like.  
11 The solid line that's marked, "Ratepayer cost," is what  
12 makes it in the IFF. And the dashed line with squares  
13 at the bottom is the adjusted line where Hydro takes  
14 out the adjustments that it says ought to be removed in  
15 order to do an apples-to-apples comparison, okay.

16 So we imported all three (3). This was  
17 based on IFF11-2. If you ran the IFF11 -- or IFF12,  
18 all the dots go up, as they have been known to do, some  
19 materially, some not. But at the end of the day, the  
20 question that we're being asked is: What's happening  
21 to Hydro's costs that it's putting into rates, what is  
22 -- what is driving these increases?

23 And this is focussing on -- on the  
24 overall spending. And we used the numbers, and -- and  
25 this reflects some of the -- I think this underlies --

1 emphasizes some of the comments you'll see in past  
2 Board orders about concerns about Hydro's spending  
3 levels.

4           The percentages are lower now than they  
5 were at the time of the 2010 GRA. You can see the  
6 degree of growth that was happening in the top line,  
7 the total spending cost, the dashed line, which in the  
8 last GRA was being quoted at around 5 percent.

9           You can also see the lower numbers that  
10 Hydro is quoting in the very bottom lines. In the last  
11 GRA, those were also showing closer to 5 percent. And  
12 this one, people have been talking about more like  
13 inflation; but again, that's an adjusted number. And -  
14 - and then you see the one that's actually affecting  
15 ratepayers, which is the solid line in the middle. And  
16 that's the one that's emphasizing how much the overall  
17 O&M category is -- is affecting people and -- and  
18 moving -- moving upward.

19           Now one (1) feature of this is the DSM  
20 spending, which makes it into O&M and would otherwise  
21 have been in depreciation. So part of the reason for  
22 that last upward tick is the -- is the change in how --  
23 the policy for how to account for DSM. And we'll talk  
24 about that in a minute. But it's -- it's the only  
25 component of this that has an -- an offset in an --

1 another area, to the best of my knowledge.

2                   So our first basic conclusion for -- to  
3 the -- to the clients was export markets are down. As  
4 a result of them being down, the impacts on Hydro  
5 aren't nearly as big as -- as Hydro would like to  
6 portray them. But the impacts on Hydro from costs  
7 increasing continue to be there, including,  
8 particularly in the top-line costs, the ones that can  
9 sometimes get hidden by things like capitalization, as  
10 well as in spades in the -- the middle line, which is  
11 the one (1) that ratepayers effectively have to pay  
12 for. And --

13                   MR. RAYMOND LAFOND: Yes, ratepayers  
14 have to pay for it, but that includes DSM, which was  
15 not included before, which exaggerates the 8.9 percent  
16 per year. That would really have to be adjusted,  
17 because the depreciation was another category of  
18 expenses; that is, depreciation and amortization were  
19 reduced by a similar amount.

20                   MR. PATRICK BOWMAN: Right.

21                   MR. RAYMOND LAFOND: So we're comparing  
22 -- we're not comparing apples to apples here when we're  
23 comparing 2013/'14 with 2010/'11, for instance.

24                   MR. PATRICK BOWMAN: Yes. And that  
25 would be about \$23 million so that that -- I haven't --

1 I haven't done the math on it, but that final number,  
2 which is five thirty-one (531), instead of dipping  
3 above the five hundred (500) line, would -- would just  
4 sneak above it rather than -- rather than shoot above  
5 it in that final year.

6 And, again, this is 11-2, before the --  
7 when the IFRS was being implemented then. Now, it  
8 would actually be pushed out one (1) year. But it's --  
9 it's a total of 23 million of -- of this graph, so...

10

11 CONTINUED BY MR. ANTOINE HACAULT:

12 MR. ANTOINE HACAULT: And, Mr. Bowman,  
13 on DSM, we will be getting to that. There's actually a  
14 decrease in DSM spending that's occurring. It's not  
15 equivalent offset. We'll be getting to those numbers.

16 MR. RAYMOND LAFOND: No, we are aware  
17 of that. The issue was to really know what the impact  
18 of DSM is on that line, because that line is not  
19 actually comparable, because there are -- there --  
20 isn't there the other factor also of less overhead  
21 being capitalized based on IFRS stipulations?

22 MR. PATRICK BOWMAN: M. Lafond, the DSM  
23 is a valid offset. And if you'd like, I can update  
24 this to IFF12, and I could show the difference in the  
25 DSM by splitting that line.



1                   The -- the difference in the overhead in  
2 the IFRS impact is exactly what you're seeing in -- in  
3 the gap between the line called "Total spending" and  
4 the gap -- and the line called "Ratepayer costs."  
5 Those narrow, which is exactly the overhead feature  
6 you're talking about. And I -- I can go to that now.

7                   MR. RAYMOND LAFOND:     But that has a  
8 major impact on that line also?

9                   MR. PATRICK BOWMAN:     Absolutely, yes.

10                  MR. RAYMOND LAFOND:     So -- so the 8.9  
11 percent, we cannot rely on it as a panel?

12                  MR. PATRICK BOWMAN:     Well, as I said,  
13 I'm happy to update it for IFF12, which would add in  
14 the extra year, but -- and it would -- it would show  
15 the difference with the DSM. But I -- I think you can  
16 rely on it. Its -- its number is directly out of an --  
17 out of the IFF. The only one (1) that has an -- an  
18 offset in another area in the same year that I'm aware  
19 of is DSM, and I'm happy to show that as -- as a split.

20                  And -- and my guess is that eight point  
21 nine (8.9) would be -- would be somewhat lower, in part  
22 because it happens in a later year now, when you  
23 compound. But it would still be high enough to -- to  
24 emphasize concern about what that's doing to  
25 ratepayers.

1 MR. RAYMOND LAFOND: The impact of DSM  
2 plus the change in capitalization of overhead?

3 MR. PATRICK BOWMAN: Well, part of the  
4 reason, if -- if you want to look at a line that is not  
5 burdened by capitalization of overhead, it's the very  
6 top one (1). That's the one (1) that's telling you  
7 what people are spending.

8 MR. RAYMOND LAFOND: No. That's not my  
9 com -- that's not my question. My question is:  
10 They've changed their policy, in terms of the  
11 percentage of overhead being capitalized due to IFRS  
12 stipula -- not IFRS, but Canadian GAAP stipulation?

13 They've implemented that already?

14 MR. PATRICK BOWMAN: Yes. And that's  
15 the difference between the -- the solid line and the  
16 one (1) with the squares. The one (1) with the squares  
17 is the line that Hydro presents as the line it would  
18 like to be judged on. The solid line is the one (1)  
19 that's making it into rates. That's -- that's the way  
20 that we -- we've prepared this table.

21 MR. RAYMOND LAFOND: I understand that.  
22 My question is that there's not just the distortion  
23 caused by DSM but also by the change in policy, in  
24 terms of percentage of overhead expenses being  
25 capitalized?

1 THE CHAIRPERSON: Don't forget pension  
2 adjustments in that -- that mix as well.

3 MR. RAYMOND LAFOND: Yes, in addition.

4 MR. PATRICK BOWMAN: Well, I -- the DSM  
5 is a unique feature, because it is a change in this  
6 area that is offset by a change in the same year in  
7 another area. The others are -- are reflected in this  
8 table and are -- are properly reflected in this table,  
9 in my submission, because they are part of the basket  
10 of costs that are being put into an IFF and that are  
11 making up calculations of necessary rate levels.

12 Now, they -- they may be driven by a  
13 pension reevaluation, but I don't -- I don't dispute  
14 the -- the cause. And -- and they -- Hydro may back  
15 them out when it puts in the line with the squares  
16 where it says that's the line that it would -- it would  
17 comment that it'd like to be judged on. But I'm saying  
18 as a -- as a ratepayer, when -- when the bill arrives  
19 and someone says, Well, it's -- don't -- don't worry,  
20 it's just because their pension was revalued it's --  
21 it's very much still a rate impact.

22 And I think when you're trying to deal  
23 with a rate impa -- a ratepayer perspective it has --  
24 and it has no offset anywhere else in that same year in  
25 the IFF, it is very much an impact on customers.

1 CONTINUED BY MR. ANTOINE HACAULT:

2 MR. ANTOINE HACAULT: Thank you. Now,  
3 on the cost impact it was -- your visual lawyer had  
4 also referenced some of the graphs that you had  
5 prepared in response to PUB Interrogatories 12 and 15.  
6 So that was PUB/MIPUG-12 and 15.

7

8 (BRIEF PAUSE)

9

10 MR. RAYMOND LAFOND: And this is which  
11 page in your pre-filed testimony?

12 MR. ANTOINE HACAULT: The graphs  
13 themselves -- these are interrogatories that were asked  
14 by the PUB of MIPUG. And I had saw some of the Board  
15 members have that package. It was a package that said,  
16 "PUB/MIPUG," and it's starts MIPUG-1, MIPUG-2, MIPUG-3.  
17 They were all questions asked by this Board of  
18 InterGroup.

19 MR. RAYMOND LAFOND: You're looking at  
20 PUB/MIPUG-1-3?

21

22 (BRIEF PAUSE)

23

24 MR. ANTOINE HACAULT: The ones in  
25 particular I drew everybody's attention was the twelfth

1 intercro -- interrogatory and the fifteenth  
2 interrogatory. So it's MIPUG-12 and MIPUG-15. The one  
3 with the graph is MIPUG-15. It's on page 2 of 3.

4

5 (BRIEF PAUSE)

6

7 MR. RAYMOND LAFOND: I think that's  
8 what I'm looking at on your November 16th pre-filed  
9 testimony, page 4-5.

10 MR. ANTOINE HACAULT: You're correct  
11 that there's a similar graph there, but this one has  
12 been updated in the MIPUG-15. So that was why I was  
13 referring the parties to the MIPUG-15, page 2 of 3.

14

15 (BRIEF PAUSE)

16

17 MS. ANITA SOUTHALL: We're just going  
18 to attempt to locate that for the panel members, Mr.  
19 Hacault.

20

21 (BRIEF PAUSE)

22

23 CONTINUED BY MR. ANTOINE HACAULT:

24 MR. ANTOINE HACAULT: Yes. We'll start  
25 with the graph on page 2 of 3 of MIPUG's response to

1 the PUB's Interrogatory 15. The difference, Board  
2 members, between this graph and the graph in the  
3 originally filed testimony is that there was further  
4 information, as I understand it. And if you compare  
5 what was reproduced at page 4-5 of the original  
6 evidence, you'll see that the 2013/2014 number is -- is  
7 different. It actually shows the adjustments for the  
8 CGAAP changes.

9                   And I'll let Mr. Bowman address the  
10 issue of employee spending and costs.

11                   MR. PATRICK BOWMAN: So the question  
12 here is in relation to the overhead. And it ties back  
13 to the principles that I was setting out earlier about  
14 caution, about it repres -- of -- reflecting the cost  
15 of a capital program in -- in rates or in costs or in  
16 decisions before those benefits ever show up.

17                   And Hydro, we've heard, has implemented  
18 various aspects of changes to its overhead which tended  
19 to reduce the reflection of costs into capital and  
20 increase the reflection of those costs into -- into  
21 current day rates. And it was -- it referenced that it  
22 did those in part in response to comments by this Board  
23 and in part in preparation for IFRS, although it did  
24 note that a number of those changes it's considering to  
25 be CGAAP changes, because they're permitted under

1 CGAAP.

2                   This Information Request was PUB asking  
3 us at the time if -- if overhead costs don't meet  
4 capitalization criteria under IFRS, should they be  
5 deferred. And our comment was that you have to  
6 approach decisions that affect rates from a perspective  
7 of fairness and the test Mr. Williams referenced, in  
8 terms of just and reasonable, not just the test that  
9 arises when you look at something like an IFRS or -- or  
10 things that are permitted under CGAAP.

11                   And the fairness and the just and  
12 reasonable tests, combined with the concept of  
13 ratepayers paying for the assets they're using and not  
14 the assets they're not using, means that you have to  
15 look at Hydro's organization and say: Well, what is  
16 properly costs that are being incurred that relate to  
17 future benefits and future assets, opposed to current  
18 assets?

19                   And that's not quite the same test that  
20 you would use under an IFRS or under a CGAAP. And --  
21 and the main reason is because they have different  
22 motivations. When I've been dealing with people who  
23 deal with accounting standards, they have various  
24 features that drive decisions on how you implement and  
25 how you set accounting standards that are designed to

1 do things like take out discretion and to make sure  
2 that you're focussing on incremental costs - pure,  
3 truly avoidable, incremental costs.

4                   It's an effort to avoid creativeness.  
5 It's an effort to avoid what Mr. Hacault calls mad  
6 accounting magic. And so above all, the -- the  
7 accounting standards are aimed at -- at consistency and  
8 clarity and -- and avoiding estimation and -- and  
9 discretionary decision making, while rate making is --  
10 is coming from a different perspective. It's coming  
11 from a perspective of fairness. It's coming from a  
12 perspective of when benefits arise. It's coming from a  
13 perspective of how you treat one (1) ratepayer group in  
14 time versus another and how do you treat different  
15 classes.

16                   And for that reason, the rate making  
17 principles are much more aligned with and comfortable  
18 with the full-cost accounting environment, whether  
19 that's in cost of service or whether that's in  
20 overheads, than an accounting standard is. And it's  
21 part of the reason why people who have been pushed in  
22 this direction have sought to avoid having to implement  
23 accounting standards that -- that just -- that, rightly  
24 so, have a motivation in a different direction than --  
25 than rate making.



1                   Sometimes those two (2) converge. And  
2 net salvage is probably a good example of that. The  
3 IFRS will say you don't record a net salvage because  
4 net salvage, as utilities have traditionally done it,  
5 is a very discretionary concept. You -- you use that  
6 net salvage when you don't have a physical liability,  
7 when you can't point to when something might happen,  
8 when you can't point to the agreement that says you  
9 have to spend that money.

10                   And the accountants and the -- the  
11 auditors will say, Where's the liability? How do I --  
12 how do I just let you report something on a -- on a  
13 balance sheet as an obligation or a liability when you  
14 have no -- no decent information about when it might  
15 occur and how much it might cost? I don't let you do  
16 that for court judgments. I don't let you do that for  
17 anything. Why would I let you do that for this net  
18 salvage because you happened to have decided to put  
19 aside 10 percent?

20                   While a -- a -- it's -- if you have a  
21 real obligation, and you have a timeline for it, and  
22 you have a budget, and you expected to do it, or you  
23 have an agreement, or you're a pipeline that wants to  
24 remove your assets from Alaska, then, yes, report it.  
25 Report it as an asset retirement obligation and tie it

1 to the actual obligation and the agreement you can  
2 point to. And you might even have to set it up as a  
3 trust fund in some of those situations. And you call  
4 it an asset retirement obligation or a trust asset, and  
5 you -- you go forward on that basis.

6 But this -- this sort of, Oh, no, I'm  
7 going to put aside some money because someday I -- I  
8 might have to remove a pole and I'd sure like to have a  
9 place to charge it that isn't called capital and isn't  
10 called operating, that -- that doesn't typically easily  
11 pass the muster unless you've got a regulator saying,  
12 No, I'm going to call that a regulatory asset or  
13 liability. And we know that IFRS isn't too keen on  
14 those, to date.

15 Rate making would have a similar  
16 conclusion, often, about net salvage. Mr. Kennedy may  
17 argue a different side of it, but the -- the trend in -  
18 - in recent years, and -- and certainly the practice of  
19 most of the utilities that we've reviewed or worked  
20 with, rate making would also say, Don't set aside these  
21 net salvage amounts in events like that.

22 It also has the concern about  
23 speculative. But it all -- but as -- as I referenced a  
24 KPMG report in Newfoundland, it also has a concern  
25 about not recognizing future value and that, as Mr.

1 Warden pointed out about Bipole 1, if you ever had to  
2 take down Bipole 1, you have a substantial value as a  
3 leg up on building the next one. I won't call it  
4 Bipole 4, because it's a --

5 MR. RAYMOND LAFOND: Mr. Bowman, can we  
6 go back just about in the last two (2) minutes? I am  
7 not sure if what you are proposing is to remove net  
8 salvage value or leave it in there.

9 MR. PATRICK BOWMAN: I'm saying that  
10 for rate-making purposes, similar to IFRS purposes or  
11 any other accounting standard purposes, the requirement  
12 to record net salvage in rates is -- is -- it doesn't -  
13 - is not appropriate and it need not be included in  
14 rates here.

15 MR. RAYMOND LAFOND: So you're  
16 proposing that they should not be included?

17 MR. PATRICK BOWMAN: I'm saying that --  
18 that in Manitoba and Manitoba Hydro's framework, you  
19 need not be setting aside net salvage, whether it's  
20 driven by accounting standards or not.

21 MR. RAYMOND LAFOND: And is that not  
22 what Manitoba Hydro is proposing, not to include net  
23 salvage value?

24 MR. PATRICK BOWMAN: Right. And that's  
25 what we put in our -- in our pre-filed testimony, that

1 on that point, we agree with them. The point we  
2 disagree with them on is that they're only proposing  
3 that when an accounting standard makes them. I'm  
4 saying from a rate-making perspective --

5 MR. RAYMOND LAFOND: I'm sorry,  
6 proposing that when, what?

7 MR. PATRICK BOWMAN: Hydro -- Hydro is  
8 only proposing to remove net salvage when an accounting  
9 standard makes them do it. And I'm saying that  
10 removing net salvage need not be linked to an  
11 accounting standard. It is an entirely appropriate  
12 practice even under any rate making.

13 Whether regulatory liabilities and  
14 assets are accepted, whether rate-regulated accounting  
15 is under the IFRS, whether Hydro finds a way not to go  
16 to IFRS, totally separate question. But under any of  
17 those, removing net salvage is not -- not a -- would --  
18 would be supported by -- by rate-making theory.

19 MR. RAYMOND LAFOND: So what you're  
20 telling the panel is that this should be removed  
21 immediately rather than removed in -- at the same time  
22 that they implement other measures, including IFRS  
23 measures?

24 MR. PATRICK BOWMAN: That's part of our  
25 recommendations. On the other matter of overheads, the

1 rationales that drive IFRS and financial reporting are  
2 different than the rationales that drive rate making,  
3 and they lead to different conclusions.

4           In the accounting standards -- and --  
5 and you'll see the same type of -- of consideration,  
6 that they're concerned about making sure these are  
7 truly incremental; that -- that they're -- you don't  
8 leave a lot of room for discretionary; that you need to  
9 see very strong linkages to a capital, or else you  
10 can't capitalize something; that they don't want to see  
11 policies that vary among companies or looking to help  
12 companies -- or help make sure that companies can't use  
13 overheads or something of that nature, fully cost  
14 account to hide costs; or to fail to reflect things  
15 that are -- that are not incremental over the short  
16 term in their books.

17           If you can avoid it, don't put it in  
18 overheads, would be the -- the principle. And it's in  
19 -- it's in Hydro's submission, in terms of why the IFRS  
20 goes that direction. And it's a -- it's a valid  
21 rationale if your purpose is to achieve an accounting  
22 standard that has the purposes that IFRS has.

23           It's a different conclusion when you're  
24 sitting here, trying to make rates. And the reason is  
25 because rate making in general rejects pure incremental

1 costing. It is very comfortable with the concept of  
2 full-cost accounting. It's very comfortable with using  
3 estimates, if needed, in order to assign cost to  
4 different customer classes in different periods.

5                   And it is -- it's part of the -- the  
6 discretion and the art of -- of working through setting  
7 rates, whether that's across classes or across periods.  
8 So for that -- for that rationale, we would say when  
9 you come to something like overheads CGAAP allows you  
10 to use full-cost accounting. Rate making would say  
11 that's the appropriate way to go, is to use full-cost  
12 accounting. And those things should be capitalized.

13                   If IFRS doesn't let you, then you've got  
14 a variance, and this Board is going to have to decide  
15 whether that's something you can live with, in terms of  
16 the impacts of not being able to do that. But there is  
17 nothing to suggest that proper rate making wouldn't  
18 allow, permit, demand, using a fully loaded cost in  
19 order to fairly reflect a thousand (1,000) employees  
20 that Hydro has added in the last six (6) or eight (8)  
21 years, most of which are to work on capital.

22                   MR. RAYMOND LAFOND: Okay. But I -- I  
23 hear you. However, to my understanding, CGAAP is  
24 moving towards IFRS. I mean, that's a Canadian  
25 direction which is different than in the US. And --

1 and therefore, am I hearing that -- I mean, and -- and  
2 I think all Canadian companies have to follow IFRS,  
3 whether you're a hospital, whether you're a school.  
4 And -- and I would vouch that all your -- your members  
5 are moving to IFRS.

6 Now, that being said, are you there --  
7 therefore then saying that MIPUG would -- would propose  
8 to the government that it change its legislation so  
9 that -- so that we move away from -- so that Manitoba  
10 Hydro moves away from IFRS?

11 MR. PATRICK BOWMAN: Well, Mr. Lafond,  
12 I think when people have bothered to put their mind  
13 around this issue with a fair set of facts before them,  
14 there's a number of times where people, including  
15 governments, have concluded exactly that. This Board  
16 has the recommendation power. MIPUG can make  
17 recommendations. We don't have power to do it. And --  
18 and I think that's a possible outcome.

19 But -- but I go back a step and say, Not  
20 putting the cart before the horse means this Board has  
21 its job under the Act to deal with rates and to make  
22 sure that they fairly reflect fairness and fair rate-  
23 making principles. If those are the same as Hydro's  
24 accounting standard in its IFRS, then so be it. Then  
25 we're at the world of one (1) set of books, which is an

1 anomaly, almost an exception, in regulatory circles.

2 But we're in the world of one (1) set of books.

3                   If it's not fairly reflected -- if -- if  
4 you can't achieve fair rates with Hydro's accounting  
5 standards, this Board -- my submission, the Board can't  
6 throw up its hands and say, Oh well, I guess we have to  
7 live with what London decided. It's not -- it's not  
8 practical and it's not fair to --

9                   MR. RAYMOND LAFOND:    My -- my -- I  
10 think saying that Lon -- what London decided is not  
11 proper. It is what Canadians are deciding. It is what  
12 the Canadian Institute of Chartered Accountants are  
13 deciding. It is what governments, through regulation,  
14 are wanting.

15                   Even in the US though, they're delaying  
16 because of the -- of the recession because they want to  
17 avoid the fiasco, the financial fiasco, that has just  
18 occurred in North America -- or in the US, more  
19 particularly.

20                   MR. PATRICK BOWMAN:    I guess, Mr.  
21 Lafond, I'd go back to two (2) points, and it's -- it's  
22 certainly not my intention to -- to debate the wisdom  
23 of accounting standards. It's my submission that  
24 accounting standards are one (1) aspect of what Hydro  
25 has to deal with.



1                   But the prime aspect this Board has to  
2 deal with is fairness. And you look to people who work  
3 in the utility sector -- whether that's the utilities  
4 themselves, the organizations who represent them, the  
5 governments who own them in cases -- almost all of them  
6 are on record, including the regulators -- CAMPUT -- on  
7 record, saying, If we just accept IFRS holus-bolus, we  
8 will get distortions. We will not get fair outcomes.

9                   Those record -- those -- most of those  
10 are on the record. Some are available publicly. And I  
11 am -- cannot reference a single jurisdiction that is  
12 regulated by a Board such as this that has said, IFRS  
13 statements are perfectly acceptable for regulation and  
14 I won't, either, take a statement that is not IFRS  
15 because the utility has gone a different direction, or  
16 expect you to prepare statements in -- in my style.

17                   I -- and I can go through a long list  
18 that have gone the other way and have said, No,  
19 regulatory statements need to meet these tests. If  
20 that's what your accounting does, then -- then we're  
21 all good. But if it doesn't, then -- then we need some  
22 reconciling items.

23                   And -- and I'm -- I'm perfectly in  
24 favour of and have helped utilities work through  
25 limiting the number of those reconciling items. We've

1 -- we've just done it in a hearing in Northwest  
2 Territories.

3                   And it's not to dismiss the value of  
4 audited statements. Audited statements are -- are of  
5 fantastic value to -- to a Board like this, even  
6 audited statements that are audited on a different  
7 standard than the Board is working on. It's because  
8 you can work through a list of -- of reconciling items.

9                   But if your motivations are different,  
10 if your motivations are -- are fairness versus  
11 discretion, are -- are fully allocating costs to  
12 different time periods and different customer classes  
13 rather than purely reflecting incremental costs so that  
14 an -- an investor or a lender can see -- can see the --  
15 a different financial picture of the utility, then you  
16 -- you can't end anywhere but, We need to have two (2)  
17 different ways of portraying the --

18                   MR. RAYMOND LAFOND:    Okay.  So your  
19 recommendation is that you agree that Hydro moves to  
20 IFRS standards for auditing purposes but that Hydro  
21 also produce some reconciling statements with issues  
22 such as depreciation and a few others?

23                   MR. PATRICK BOWMAN:    Yeah.  Mr. Lafond,  
24 my recommendations would go the other direction.  My  
25 recommendations would be this Board determine what it

1 needs and Hydro determine how to deal with that, in  
2 terms of its standards.

3                   But practically, if we want to go  
4 straight to the standards, I would say that there has  
5 not been fair information provided about the full  
6 impact of IFRS. There has been mistaken information,  
7 there has been some interpretations that I would like  
8 to go through, in terms of how people have defined the  
9 IFRS issues. And as a result, the line that says,  
10 "IFRS impacts on Hydro are minimal," is incorrect. The  
11 IFRS impacts on Hydro and its customers are actually  
12 quite large.

13                   And I would -- you know, if it were up  
14 to my control, I would say an outcome like BC went  
15 through may be very practical for Manitoba, which says,  
16 Fine, adopt IFRS, but I'm going to give you two (2) or  
17 three (3) things that I say on these items we're going  
18 to use a different standard. And as long as it's clear  
19 and transparent, it doesn't seem that it causes huge  
20 issues for BC getting audited, for example; or Ontario,  
21 who has a Crown that's -- that's been using a different  
22 standard than -- than the BC has -- directs; in their  
23 case, a holding company using US GAAP.

24                   It's really not my place to say, I found  
25 the accounting standard and it's -- it's -- it's US or

1 it's IFRS with exceptions or it's -- it's any of these  
2 things. That's, effectively, a separate decision.

3 THE CHAIRPERSON: I do have a question  
4 though. The implication that by -- the Board's setting  
5 of rates based on IFRS standards were being unfair,  
6 could you explain that to me how -- how it is that the  
7 Board agreeing to set rates based on IFRS statements is  
8 unfair, given that this has become the standard for  
9 reporting in Canada?

10 I mean, when the accounting profession  
11 in Canada follows IFRS, are you suggesting that that is  
12 unfair?

13 MR. PATRICK BOWMAN: I don't believe  
14 IFRS or financial reporting is a -- is a forum that is  
15 -- spends a whole lot of time worrying about questions  
16 of fairness like would arise in this forum. They have  
17 different motivations. And I would say --

18 THE CHAIRPERSON: Well, let's -- let's  
19 address --

20 MR. PATRICK BOWMAN: Yeah.

21 THE CHAIRPERSON: Let's get down to the  
22 point that you're suggesting, is that by virtue of this  
23 Board asking for a different calculation of overheads,  
24 that would be fairer than using the calculations that  
25 Manitoba Hydro has used for its Rate Application?

1 MR. PATRICK BOWMAN: Yeah. I -- I am  
2 saying that, and I'm -- I'm saying that it's -- it's  
3 almost universal in the voices that were also  
4 commenting on problems with IFRS when people were  
5 reviewing it. And I'm saying it's the same standards  
6 that are being applied by other utility boards who have  
7 utilities who are regulated under different standards,  
8 US GAAP or IFRS or any of them. They're saying, We  
9 need to find a way to find a standard that meets a test  
10 of fairness. And their conclusion was, in -- in almost  
11 all of these cases, the -- the pure IFRS version does  
12 not meet all of the tests I require to meet the test of  
13 fairness.

14 THE CHAIRPERSON: Okay. So looking at  
15 overheads, this Board -- pardon me, this panel --  
16 pardon me, the previous panel suggested to Manitoba  
17 Hydro that it needed to re-examine its overhead policy,  
18 which Manitoba Hydro's -- Manitoba Hydro has now done.

19 Now, you're now suggesting that that was  
20 an unfair decision?

21 MR. PATRICK BOWMAN: I'll have three  
22 (3) comments on that. One (1) is -- and -- and I have  
23 been through the -- the order in some detail and was  
24 involved in the proceeding. One (1) comment is, the  
25 review was done at a time when I do not believe there

1 was a full appreciation of the magnitude of impacts of  
2 -- of IFRS, for sure. And -- and matter of fact, the  
3 review even -- even says that in the Board order. And  
4 it says, A decision will be made in the future, once we  
5 know more as to whether we're going to use two (2) sets  
6 of books. It did -- said it wasn't time to do that at  
7 that point. So tha -- that's one (1) comment.

8                   The second one is that the Board is  
9 quite clear in that decision -- and I -- I have it here  
10 if you'd like me to pull it out -- that one (1) of the  
11 impacts of an aggressive overhead capitalization policy  
12 that Hydro was using is that it gives a lot of room to  
13 hide cost increases, that that line that we just saw  
14 that was scaling up at 5 percent --

15                   MR. RAYMOND LAFOND: I'm sorry, the  
16 aggressive method that was used by Manitoba Hydro or  
17 that Manitoba Hydro is proposing? Like in other words,  
18 ASL versus ELG?

19                   MR. PATRICK BOWMAN: This isn't  
20 depreciation. This is overheads alone. And -- and in  
21 the '08 decision the Board used the word "aggressive"  
22 in terms of Hydro's overhead capitalization policies.  
23 And one (1) of the rationales it used for saying  
24 they're concerned about the aggressive policies is  
25 because it means that top line can grow and it's -- it

1 can be masked by having aggressive capitalization  
2 policies. And I share their concern on that point,  
3 that you need to be able to see that top line quite  
4 clearly.

5                   The other thing that the Board said was,  
6 My goodness, if we're headed inevitably to IFRS and we  
7 haven't yet concluded we're going to go to two (2) sets  
8 of books, maybe we should get on and try to implement  
9 some of this stuff.

10                   And -- and they even recommend Hydro  
11 file some IFRS reports and fi -- file some transition  
12 documents, which -- which Hydro did, and -- and in a  
13 year when people were talking about, you know, impacts  
14 of 20 or \$30 million a year. And -- and it -- the  
15 Board said, Maybe we should get on, because this is  
16 where we're inevitably headed un -- unless we  
17 ultimately conclude we're going to do two (2) sets of  
18 books. So that -- that, I think, is -- is fair.

19                   I think the one (1) point, and it's part  
20 of the reason that Mr. Hacault asked me to go through  
21 it, is I don't believe the Board had a whole lot of  
22 evidence before them in that hearing about this concern  
23 of intergenerational equity related to really large,  
24 capital intensive projects like -- like Wuskwatim and  
25 the like; that the Board was saying, We're concerned

1 that you're capitalizing these costs to Wuskwatim, and  
2 as a result, we're going to overburden people in year  
3 30 or 40 or 50 with this asset that has these costs  
4 built into it that were incurred today.

5                   And what I'm suggesting to you is that I  
6 don't believe the -- the evidence leads to a conclusion  
7 that we are overburdening people thirty (30) and forty  
8 (40) and fifty (50) years from now with costs which  
9 are, on a fair, full-cost accounting basis, driven by  
10 capital by sticking them with an asset that is -- is  
11 disadvantaging them forty (40) and fifty (50) years  
12 from now, just like I don't think full-cost accounting  
13 on Kettle stuck to us with an -- stuck us with an asset  
14 that -- that was -- was inappropriately loaded or -- or  
15 ought not have been so loaded with -- with accounting  
16 costs.

17                   I think, if anything, the thing you've  
18 got to be very careful about is that the costs that  
19 people have to bear for Conawapas or for Wuskwatims  
20 aren't showing up now when we're also bearing a project  
21 that's not even paying for itself. That -- that's the  
22 period in which -- which fairness can lead to a real  
23 concern about not overburdening people.

24                   I don't think we would be disadvantaged  
25 by Kettle being at one point eight (1.8) cents versus



1 one point seven (1.7) cents today, in terms of its  
2 overall loaded output. And -- and if I go through  
3 whether that's on overheads or whether that's on ELG,  
4 the same principles arise.

5 But there is -- there is a significant  
6 and acute and -- and dominant feature of new projects  
7 like Wuskwatim or Conawapa in our system today, where  
8 they will become small and beneficial and -- and  
9 valuable projects like -- in the future like Kettle is  
10 today. And in that -- under that profile, I think that  
11 the caution needs to be not by saying, Oh, it'd be  
12 unfair to the future to capitalize these. It would it,  
13 in fact, be saying it's actually unfair to today to  
14 capitalize them. It's the future who can -- who can  
15 just -- handle them just fine.

16 MR. RAYMOND LAFOND: I -- I appreciate  
17 the -- the principle, in theory. I have to say that  
18 outside of the utility sector, I've been the financial  
19 controller of some corporations like Standard Aero, and  
20 I've been on boards of different corporate...

21 No one, absolutely no one, capitalized  
22 any overhead. No such thing as a penny from the CEO's  
23 salary or the controller, or whomever it would be,  
24 capitalized. What was capitalized were essentially the  
25 direct costs: engineering costs, architectural costs

1 and, of course, the -- the cost of construction.

2                   So -- so I hear you in theory. But this  
3 is really not applied in practice in other sectors.

4 And I think what accounting standards are really  
5 concerned about is -- is exactly about over-  
6 capitalizing. And it can be very easy to capitalize  
7 expenses which should probably not be capitalized and -  
8 - and which it is very difficult to find any type of  
9 discounted value on them.

10                   So what I'm hearing, or have been  
11 hearing, is that Manitoba Hydro is still capitalizing a  
12 lot of its cost, but less than it was. It's less  
13 aggressive, in -- in other words, than it was. So  
14 you're saying that we should go back to where -- to how  
15 it was and be much more aggressive and, for instance,  
16 if -- if in the summer close to, I don't know, a third  
17 (1/3) or more of the employees are working on  
18 construction, that we should capitalize a third (1/3)  
19 of the overheads, IT expenses and CEOs and -- and  
20 controllers, et cetera.

21                   MR. PATRICK BOWMAN: Well, Mr. -- Mr.  
22 Lafond, I completely agree with your statements. I --  
23 I have worked for non-regulated businesses, as well.  
24 And I completely agree with you that if you're working  
25 in that environment, you -- you would be driven by the

1 exact type of considerations you've -- you've just laid  
2 out. And -- and it's perfectly reasonable and it's  
3 perfectly part of -- of accounting in that environment.

4                   But it's one of the reasons why I  
5 emphasize that when you review Manitoba Hydro and you  
6 review them in a rate-setting environment, you have  
7 some different considerations than you do when you  
8 review a competitive company or a non-regulated  
9 company, or perhaps a company that's not quite as  
10 capital intensive. Now, some of those companies are  
11 quite capital intensive like, say, airlines or  
12 something, but -- but there are a lot of businesses  
13 where capital intensiveness doesn't matter that much.

14                   But those who -- where it really does  
15 matter, particularly the utility sector, have different  
16 considerations that go into it. And one of the things  
17 that Standard Aero probably did not have to fuss itself  
18 with was ensuring it recorded its costs in an  
19 appropriate manner to ensure that its prices to its  
20 customers were fair because, its prices to its  
21 customers would have been based on market -- what the  
22 market would bear, what the competitive features were,  
23 and all of that. Its costs would have been its own  
24 problem and its profits would have been the difference.

25                   MR. RAYMOND LAFOND: I -- I understand

1 all that. Now, the issue is, if -- if I'm trying to  
2 understand, a few minutes ago you said in theory, in  
3 principle we should be accounting for net salvage  
4 value. However, because accounting standards are  
5 changing, et cetera, we should take it out immediately,  
6 but on the other hand we should be more aggressive on  
7 the overhead.

8 To me, there's a contradiction there.

9 MR. PATRICK BOWMAN: Let -- let me  
10 clarify. What I was saying was if you're under an  
11 accounting standards heading, you -- you account for  
12 liabilities, including removal costs liabilities, when  
13 they're real, when they're a legal obligation or a  
14 construction obligation, when they're forecast, when  
15 they're estimable. Then you account for them. And you  
16 discount -- discount their value, and you put them on  
17 your -- on your books, because you -- you better put  
18 them on your books. They're a real liability.

19 Outside of that, you don't start putting  
20 aside 10 percent just because 10 percent seems like a  
21 good number. That's the accounting side, and that's  
22 why account -- the accounting side doesn't -- doesn't  
23 deal with net salvage well.

24 And I'm telling you, I've been in these  
25 discussions with -- with some of the auditors who --

1 who weren't too keen on the concepts of net salvages,  
2 because they -- you can't point to the liability. All  
3 you can point to is, This is how much I happen to have  
4 set aside to date that I haven't spent yet.

5 MR. RAYMOND LAFOND: But do you agree  
6 with that?

7 MR. PATRICK BOWMAN: No. I'm saying  
8 that -- that the -- the accounting side would say,  
9 Don't record this as a liability unless it's real.  
10 When I go to a rate-making side, I put on my economist  
11 hat, in fairness. And in that environment, I'm saying,  
12 You don't need to be as concerned about net salvage --  
13 that the same outcome arises.

14 You don't need to be concerned about net  
15 salvage on these assets because you -- they do have a  
16 future enduring value. And so I'm not that concerned  
17 that we -- we have to collect from ratepayers today the  
18 cost of taking down Bipole 1 because those folks who  
19 are going to use it as whatever it is at the time --  
20 Bipole 6, I don't know -- are -- are -- it would be  
21 unfair to charge them for the cost of taking down  
22 Bipole 1.

23 Well, the fact of the matter -- and like  
24 I said, I'm not the only one who's echoing this -- is  
25 the people who go to deal with Bipole 6 will be very

1 appreciative and see value in the fact that we had a  
2 Bipole 1 that we left for them. Even if they had to  
3 take it down to clear the site, they've got a  
4 significant leg up on the next tier of -- of the asset.

5 MR. RAYMOND LAFOND: But -- but that is  
6 assuming that in so many years, that we still need  
7 that, that there's not a new technology that renders  
8 this obsolete.

9 MR. PATRICK BOWMAN: Well, yes,  
10 absolutely.

11 MR. RAYMOND LAFOND: But -- but again,  
12 I mean, there's the principle and then the application.

13

14 (BRIEF PAUSE)

15

16 MR. PATRICK BOWMAN: There is a  
17 principle and an application, and -- and I'm -- I'm  
18 more than happy to speak of both. And I believe they  
19 lead to the same outcome. The principle, from a rate-  
20 making side, would be that you charge customers for the  
21 value they're receiving and the -- the assets they're  
22 using and the value they're receiving from those assets  
23 in the period where that value arises. And that one  
24 (1) leads to the outcome I was talking about.

25 There's also a practice -- practical

1 side, which says when you have an asset like a Bipole 1  
2 and you go to replace it with something, when you go to  
3 re-string it, you're going to have a heck of a time  
4 separating the cost to begin with of what cost was  
5 taking out the old fi -- wire versus putting the new  
6 one in. It's going to be very discretionary.

7                   And it's going to be -- the -- the cost  
8 of removal will be very small compared to the cost of  
9 replacement. And, in fact, they will -- they will  
10 reflect more, as -- as an economic value, an advantage  
11 to the next generation of customers from having had it.  
12 And so it's not that we're burdening them by having to  
13 have those costs carried in that generation.

14                   So two (2) different sets of logic  
15 between IFRS and rate making. In this case, they lead  
16 to the same conclusion, which is you don't need to  
17 reflect net salvage except when you have something like  
18 a very real ARO.

19                   I think there are other examples, like  
20 insurance recoveries, that we could talk about, or  
21 overheads, where we have two (2) different sets of  
22 logic and they lead to different outcomes because we're  
23 applying different tests and different motivations.

24                   MR. RAYMOND LAFOND: Okay. Let -- let  
25 me get back to the fairness issue. And -- which was

1 brought about five (5) minutes ago or so. And -- and  
2 one (1) of the issues is this whole depreciation issue.  
3 For instance, ASL versus ELG, forgetting the net  
4 salvage value for the time being.

5                   If I heard correctly from Mr. Kennedy,  
6 the ELG is -- corresponds more closely to reality. So  
7 therefore, based on fairness, this would be the method  
8 to use for customers to be charged -- to carry -- for  
9 the customers to carry the cost of the actual  
10 depreciation, rather than an even amount over, for  
11 instance, in some cases fifty (50) years, some other  
12 cases, a hundred and forty (140) years, correct?

13                   MR. PATRICK BOWMAN: That was Mr.  
14 Kennedy's evidence.

15                   MR. RAYMOND LAFOND: Based -- from what  
16 my -- what I understood, was based on -- on research,  
17 et cetera, and that -- and if I recall correctly, ASL  
18 is acceptable for audit purposes, pending breaking down  
19 in many components, et cetera, but that the fairer one  
20 (1), or -- or the most -- the most proper one (1) to  
21 really match actual depreciation and -- and also allow  
22 for the recording of -- of gains and losses on  
23 retirement or disposal was a better method.

24                   So based on the issue of fairness, this  
25 is one (1) that should be used, am I correct?



1 MR. PATRICK BOWMAN: Mr. Lafond, you're  
2 -- there is a question of economics tied into what you  
3 just asked, which was of fairness. The question that  
4 was assessed in the 1930s by Iowa was not a question of  
5 rate making. It was a question of -- of technically  
6 representing the retirement of large groups of property  
7 and -- and an assessment by a -- a group of people  
8 about how property retires. So I just want to make --  
9 make that distinction at the outset.

10 The question of ELG versus ASL, and --  
11 and I'll --

12 MR. RAYMOND LAFOND: I -- I understand  
13 how it works. I don't need an explana -- I just want  
14 to discuss the principle of fairness in regards to  
15 these two (2) methods.

16 MR. PATRICK BOWMAN: Right. So -- so  
17 let me go through that. The ELG method is put forward  
18 as a method that, when you have large groups of  
19 property, tracks -- is -- is intended to track, so long  
20 as your Iowa curve is accurate, is intended to track  
21 the retirement of those groups of property where those  
22 properties would be retired and removed and from  
23 capitalization and the next generation would be put  
24 into service, okay?

25 Now, there's a couple of key things in

1 that -- in that statement that I want to relay, because  
2 they're very important to the utilities that I've  
3 worked with, and I think they're very important here.  
4 One (1) is that your Iowa curve needs to be accurate or  
5 else the ELG method is not more accurate. The second  
6 one (1) --

7 MR. RAYMOND LAFOND: Well, this is like  
8 -- this is just like life expectancy. It has to be  
9 accurate, otherwise it doesn't -- but this is something  
10 that has to be reassessed over the years to make sure  
11 that it does represent the actual scenarios as time  
12 advances?

13 MR. PATRICK BOWMAN: Right. The  
14 difference with the ELG is that you are immensely  
15 sensitive, not just to something like a life estimate,  
16 you are immensely sensitive to the -- that shape of  
17 that curve. And if that shape of that curve is wrong,  
18 it doesn't necessarily lead to a more accurate result,  
19 okay? That -- that's -- but that's a -- almost a  
20 tautology. Like, that's a given. If your assumptions  
21 are wrong, your outcome's wrong.

22 But -- but with an ELG versus an ASL, an  
23 ELG you're putting more eggs in the basket of my  
24 assumptions must have been -- must be accurate, okay?  
25 Because you're relying on that curve for so many more

1 calculations, okay? So that -- that's the first thing.  
2 But that's a -- that -- that was in the Fortis  
3 auditor's comments and all of that. I'm -- you know,  
4 I'm not going anywhere particularly new on that.

5                   The second is that the ELG method is --  
6 is premised on the fact that you're going to have some  
7 -- like you say, some assets last less long and some  
8 assets last longer, and that when you finish the life  
9 of one (1), you're going to retire it and you're going  
10 to recapitalize the -- the replacement. But that means  
11 you have to have capitalization policies that also  
12 match that, and Manitoba Hydro doesn't.

13                   One (1) of the comments we heard from  
14 Manitoba Hydro was about something like replacing  
15 poles, okay? And Mr. Warden said, If we have a pole  
16 that -- I can find the quote if you like, but if we  
17 have a pole --

18                   MR. RAYMOND LAFOND:     That's okay, I  
19 remember that's --

20                   MR. PATRICK BOWMAN:     -- that -- that is  
21 -- is retired, due -- not due to the end of -- not due  
22 to life expiry but due to something else, we put it  
23 through O&M. Well, Mr. Kennedy's curves --

24                   MR. RAYMOND LAFOND:     Oh yes. But that  
25 was in regards, for instance, a car hitting a pole.

1 MR. PATRICK BOWMAN: Absolutely.

2 MR. RAYMOND LAFOND: That was the  
3 example he gave.

4 MR. PATRICK BOWMAN: Absolutely. A car  
5 --

6 MR. RAYMOND LAFOND: But that has  
7 nothing to do with the life expectancy of -- of a pole;  
8 it's just because some external factor. Whether -- I  
9 mean, it's like a building may have a life expectancy  
10 of seventy-five (75) years, but if there's a fire after  
11 -- after ten (10) years, it doesn't mean the formula's  
12 incorrect.

13 MR. PATRICK BOWMAN: Mr. Lafond, I'd --  
14 I'd encourage you to review Mr. Kennedy's presentation  
15 to the accounting community. He has an exact picture  
16 of a car hitting a pole as a reason for a retirement.  
17 And he counts on that as part of the curve that would  
18 show that some poles only last a year, because they get  
19 hit by cars.

20 That's part of the basic theory of the  
21 ELG, is I need to amortize that pole off in one (1)  
22 year, because at the end of that year, it's going to be  
23 hit by a car, and we'll recapitalize another pole.  
24 Hydro doesn't recapitalize another pole; it puts it  
25 through O&M. So if that actually happens under Mr.

1 Kennedy's theory, you actually have no asset for that  
2 pole, because one (1) side was put in O&M, the other  
3 one was fully retired. So that's --

4 MR. RAYMOND LAFOND: So the only thing  
5 is, though, is I think we have to be careful here.  
6 This was -- this is and was the policy followed by  
7 Manitoba Hydro under ASL, which they are still using  
8 and will be using for another few years. I'm not sure  
9 that, if that is the case in the formula, that their  
10 policy will not change accordingly on adapting -- on  
11 adopting ELG. That is a question. I appreciate that.

12 MR. PATRICK BOWMAN: I'm sorry. It's a  
13 fair enough comment, but it's actually one (1) of the  
14 very things we ask them is, What are your plan changes  
15 -- your capitalization policy? And we were told there  
16 are basically none. So that -- for that exact reason.  
17 I -- I -- you and I are on the same page.

18 The third thing that is critical is that  
19 the ELG is based on -- and again, this is very  
20 prevalent through the literature -- is based on large  
21 numbers of -- of plant. And so an ELG over something  
22 like distribution poles will -- you know, as long as  
23 your Iowa curve is correct and your capitalization  
24 policies are aligned with it, it -- it will pick up the  
25 fact that some poles will last shorter and some will

1 last longer. But it relies on the statistics that come  
2 with large groups.

3                   On something like the one (1) that you  
4 raised of Wuskwatim spillway, or something of that  
5 nature, you don't have large groups. You have your own  
6 rate for Wuskwatim's turbines and generate -- Wuskwatim  
7 has three (3) turbines. We don't have eighty-six (86)  
8 classes of assets to retire; we have three (3). And so  
9 the ELG can run into issues properly representing that  
10 type of small category, too, okay?

11                   But I -- I think it's probably more  
12 fruitful for me to move where you were commenting,  
13 which is not just is -- is ELG more accurate, your  
14 question was, Is it more fair? And -- and these are  
15 all comm -- comments that -- that are often raised as  
16 to why ELG is more accurate in theory but it may not be  
17 more accurate in practice.

18                   The question about more fair is a  
19 different one, and -- and it's one that I raise in  
20 regard to -- I don't know if you'll recall, but I -- I  
21 think you may, because it was -- it seemed to be a  
22 pretty important moment when Mr. Kennedy went through  
23 his example of a ten (10) year asset, one (1) of which  
24 lasted five (5) years and one (1) of last -- which  
25 lasted fifteen (15). And he said, If you put those in

1 the same category together you're going to get a lower  
2 rate with ASL because you're averaging, and you get a  
3 higher rate will ELG. And if you -- only you  
4 componentize, the more you would get the same outcome,  
5 the same rate.

6                   And I -- I would make two (2) comments  
7 on that. The first one is that the comment that if  
8 only you componentize them more you would theoretically  
9 get the same outcome with ELG is a theoretical concept  
10 that cannot be applied in practice. And the reason it  
11 can't be applied in practice is because you rely on  
12 being able to determine at the outset which asset's  
13 going to last how long. You don't have that knowledge  
14 at the outset. You know a statistical likelihood, but  
15 you don't know which is going to last how long.

16                   So I was taking the example -- I was  
17 trying to walk Mr. Hacault through this, and he -- he  
18 hoped I would do the same here, that if you take  
19 something that's infinitely componentized, let's take  
20 poles, let -- and -- and we can take the extreme  
21 example of 65 foot Western cedar poles, if you like,  
22 installed in clay, I think was the one that I was using  
23 with him, and you put those in a group together, you  
24 have a thousand or ten thousand (10,000) of them,  
25 there's no issue with componentization. We've now got

1 it down to the finest level of component possible. And  
2 ELG is still going to say one (1) of those poles only  
3 lasts a year, and it's still going to try to amortize  
4 that one (1) pole over one (1) year. And it's going to  
5 say another pole only lasts two (2) years, and it's  
6 going to amortize those at 50 percent, and it's going  
7 to amortize the others. And ASL is still going to say,  
8 What's our average life, and we ran it over a straight  
9 line.

10                   So this -- this theory that if only  
11 we're componentized enough we'll get the same outcome  
12 with ASL, only happens if you actually create an ASL  
13 category for poles that'll last a year, and then  
14 another category for ASL that are poles that'll last  
15 two (2) years, and another one for poles that'll three  
16 (3) years. And, of course, it's -- it's not possible;  
17 you can't do that.

18                   So it's -- it's one of those, you know,  
19 university textbook type of concepts that -- that could  
20 never be applied in practice and -- and isn't even sort  
21 of set out in practice. So that -- that's one (1) of  
22 my comments.

23                   But -- but even to go directly to your  
24 fairness question, I get concerned about  
25 oversimplification examples. And -- and Mr. Kennedy's



1 is a classic one that's used often, of the asset that  
2 last five (5) years and the asset that last fifteen  
3 (15) years, and if you knew in advance that one (1)  
4 would last five (5) and one (1) would last fifteen  
5 (15), you'd use this particular ELG rate.

6 But you don't know that one (1) will  
7 last five (5) and one (1) will last fifteen (15). You  
8 know there's a dispersion curve of what they may last,  
9 but you don't know that.

10 But our fairness question, let's say  
11 that we take that fifteen (15) period and we're trying  
12 to have two (2) assets in service. Take the example of  
13 a family that has two (2) fridges and they're going to,  
14 on average, last ten (10) years. So over that fifteen  
15 (15) year period it's going to go through three (3)  
16 fridges, you know, thirty (30) service year lives.  
17 It's going to go through three (3) fridges. And we  
18 don't know how long each one's going to last. We know  
19 that it will be some distribution around ten (10)  
20 years. But we know that the family is getting a  
21 service out of two (2) fridges at any given point in  
22 time. They can't choose which fridge serves them.  
23 They don't -- they don't get a different higher quality  
24 of service out of one (1) fridge than another; they  
25 have two (2) fridges over fifteen (15) years.

1                   The question is how do you fairly  
2 recover that cost of two (2) fridges over that fifteen  
3 (15) years. And if those fridges reach a thousand  
4 dollars you have a three thousand dollar (\$3,000)  
5 expense to recover over fifteen (15) years from a  
6 family that's only going to have one (1) level of  
7 service quality over that entire period.

8                   I don't know how you can go through that  
9 example and say, Well, in the first year I have to  
10 charge more, I have to charge two hundred and thirty-  
11 three (233) or two hundred and sixty-six (266), because  
12 somehow they're receiving this superior service  
13 quality. They're -- they're not. They're receiving a  
14 cooling service out of a fridge.

15                   And that's -- that's where,  
16 fundamentally, you can get the most accurate result  
17 possible and not even have a -- even if we were at the  
18 point of not having a debate about the most accurate  
19 result possible, it doesn't necessarily mean it's the  
20 fairest result, because you're trying, at the end of  
21 the day, to reflect an economic conservative value.

22                   THE CHAIRPERSON: Okay. I'm looking at  
23 the clock; it's three o'clock. I suggest that we take  
24 a ten (10) minute break and resume our proceedings  
25 after the -- after the recess.

1 MR. BYRON WILLIAMS: Mr. -- Mr. Chair,  
2 I -- I'm going to just suggest, at the break, among  
3 counsel, we have a little caucus about timing. I've  
4 got a commitment somewhere else at 4:00. I've -- I've  
5 let them know I -- I expect to be late. And -- and  
6 I'll -- certainly will be respectful of -- of this  
7 process, but I'm -- I'm just a little worried about the  
8 scheduling.

9

10 --- Upon recessing at 3:00 p.m.

11 --- Upon resuming at 3:14 p.m.

12

13 THE CHAIRPERSON: I believe we're ready  
14 to resume proceedings, Mr. Williams.

15 MR. BYRON WILLIAMS: Just two (2) very  
16 quick things. One (1) is there are some undertakings  
17 outstanding from Mr. Dunsky. I've made some inquiries.  
18 I'll -- I'll report back to the Board as soon as I --  
19 as soon as they're available. At two o'clock today  
20 they weren't yet available. So we're checking into  
21 that in terms of his undertakings.

22 And secondly, cognizant of what appears  
23 to be the schedule for -- for today, I'm going to, with  
24 the Board's permission, excuse myself at five (5) to  
25 4:00. I don't -- I don't believe it will delay the --

1 the proceedings. And I'll review the transcript with  
2 regard to the -- the piece of the hearing I miss.

3 THE CHAIRPERSON: Thank you, Mr.  
4 Williams. M. Hacault, before you start, I want to make  
5 sure, are we using a specific document at this time?  
6 Do I need to ensure that the Board members have a  
7 document before them before you start, or...?

8 MR. ANTOINE HACAULT: Not for my next  
9 question, no.

10 THE CHAIRPERSON: Okay.

11 MR. ANTOINE HACAULT: Just, members of  
12 the Board, a lot of your questions dealt with parts of  
13 the presentation we were going to make, so there's some  
14 items I'm trying to cross off that have been dealt with  
15 through your questions.

16

17 CONTINUED BY MR. ANTOINE HACAULT:

18 MR. ANTOINE HACAULT: The one (1) thing  
19 on the -- the fairness issue and whether or not ASL and  
20 ELG lead to the same result if there's enough  
21 componentization, I would ask Mr. Bowman, who was  
22 involved in the Newfoundland exercise -- and that, the  
23 Board may recall, that's where it was explained that it  
24 was breakdown to the unit -- to provide some  
25 information to this Board as to what the results of the

1 studies were and -- and how -- whether those  
2 statements, in fact, were true -- or correct, sorry. I  
3 shouldn't say 'true'. Correct.

4 So, Mr. Bowman, could you go through the  
5 depreciation exercise that Mr. Kennedy went through at  
6 a high level in Newfoundland, and explain to this Board  
7 the context of that and the results between the ELG and  
8 ASL in each of the reviews, because there's was more  
9 than one (1).

10 MR. PATRICK BOWMAN: I can try. As I  
11 noted, I'm -- I'm not going to be able to comment on  
12 the detailed work Mr. Kennedy did. I -- I don't  
13 practise in that area and -- and it -- it wasn't  
14 actually something I was retained to review the -- the  
15 detail of the study. What I was asked to review was  
16 the implications of the study.

17 And in the case of Newfoundland, much  
18 like the case of Hydro Quebec, for what I consider to  
19 be a very good reason, but accountants don't like so  
20 much, they had, for many years, applied a sinking fund  
21 method of depreciation in the past. The sinking fund  
22 method, just in ten (10) words or less, is basically  
23 the way you pay your mortgage. It's like your  
24 principal and interest payments are -- are blended and  
25 levelized over the -- the time of the investment, as

1 opposed to just having a straight line depreciation and  
2 interest on top of that.

3                   And there's a good reason they used  
4 that. That's a method that economists are very much in  
5 favour of when you're dealing with very large, long  
6 lived assets, and people of the day would have used --  
7 would have gone to that route. The accounting  
8 standards have changed, so they've adopted going to a -  
9 - to a straight line method. And in Newfoundland's  
10 case they went back to the regulator to get approval to  
11 change the method.

12                   At -- it was debated over a number of  
13 years. They debated both the ASL and the ELG. They  
14 had studies done by Mr. Kennedy at various times over  
15 that period under each of the ASL and ELG methods.

16                   Newfoundland, as Mr. Kennedy noted, is -  
17 - is more componentized in many of its areas than  
18 Manitoba Hydro, although, I think if you -- we -- we  
19 did provide in the -- by book of documents, the list of  
20 components. And I think you'll notice a -- a large  
21 number of them are fairly token components, but  
22 nonetheless there -- there is a longer list. They  
23 don't do it by plant, which is one (1) of the big  
24 advantages Manitoba Hydro has. But, nonetheless, they  
25 were an example Mr. Kennedy used of a -- of a

1 componentized -- heavily componentized utility.

2                   When it came time to make the change  
3 they were going one (1) of two (2) routes; either from  
4 sinking fund to ELG, or from sinking fund to ASL. And  
5 the decision was made by the company to use -- to go to  
6 an ASL approach rather than an ELG, even though it --  
7 they had had ELG studies prepared, and had even filed  
8 those publically. And the reason was because the ASL  
9 was considerably less costly.

10                   It was less costly for ratepayers, and -  
11 - and that transition was going to be expensive to  
12 begin with, because no matter where you go from sinking  
13 fund you're -- you're going up. They had also, as a  
14 side note, incorrectly applied the sinking fund for  
15 many years so the were really in the hole on their  
16 depreciation amounts, and Mr. Kennedy had noted that.  
17 But even had the applied it correctly they would have  
18 been going up.

19                   And so they made the decision to go to  
20 ASL in order to mitigate rate impacts, and -- and  
21 that's what the Utility Board ultimately accepted. I -  
22 - I only raise this because I -- I think of it as an  
23 example that would go again to the point of -- of  
24 showing that, in practice, the argument that once you  
25 componentized enough the two (2) methods lead to the

1 same result; that didn't arise in that case, that even  
2 though they are componentized to the level that Mr.  
3 Kennedy was noting and had both options, they still  
4 found the -- the ASL method to be lower cost and -- and  
5 to better match their -- their assets.

6                   And -- and I'm not surprised. Like I  
7 had said earlier, regardless of how componentized or  
8 regardless of how they treat gains and losses, I am  
9 not aware of a -- of a utility of the type we talked  
10 about, Crown owned, hydro based, capital intensive, who  
11 has ever used the ELG -- or uses the ELG method today.  
12 I know one who did and it was Yukon Energy, and they  
13 changed to ASL once they -- once they learned what  
14 method they -- they had been using.

15                   MR. ANTOINE HACAULT:     And in that  
16 context, can you comment on the fairness of choosing  
17 ASL when matching intergenerational issue, and the used  
18 and useful issues?

19                   MR. PATRICK BOWMAN:     Well, taking  
20 fairness as an -- again as an economic concept, which  
21 is where my background comes from, I give the example  
22 of the household with two (2) fridges. That would lead  
23 to -- if the ASL method and the application there would  
24 lead to a fairer outcome than the use of the ELG  
25 method. It would -- it would still not be an optimal



1 economic outcome as I noted, because it is ignoring the  
2 implications of inflation and the implications of the  
3 cost of the capital tied up. But, once you bring those  
4 in you -- you end up at a sinking fund method, and  
5 that's not seriously under -- under debate here so.

6                   So it's -- as far as straight-line  
7 methods go that's the reason why, from a rate making  
8 perspective, when you're dealing with capital intensive  
9 assets, my conclusion, and the conclusion of pretty  
10 much every utility and utility regulator I'm aware of,  
11 has been that -- that ASL is a -- is a preferable  
12 method.

13                   MR. ANTOINE HACAULT: Now, could you  
14 address, with respect to IFRS, the preliminary  
15 assessment of MIPUG that the switch to ELG would have  
16 over the IFF12?

17                   MR. PATRICK BOWMAN: Well, yes. We --  
18 as I noted, we -- we separate out considerations of  
19 salvage versus ELG/ASL, because they're -- they are  
20 different thinking processes. And we went to look at  
21 Mr. Kennedy's study and determine its impact on the  
22 IFF, and we determined that it was quite large.

23                   The switch to ELG that Hydro is quoting  
24 is \$37 million a year. When I looked through Mr.  
25 Kennedy's study I get a little bit lower number, but

1 it's -- nonetheless it's -- it's not far enough off to  
2 take a bunch of issue with. And that's significant.  
3 It's 750 to \$800 million over the course of the twenty  
4 (20) year IFF.

5 But the thing that I was really  
6 concerned is the --

7 MR. ANTOINE HACAULT: So sorry, how  
8 much?

9 MR. PATRICK BOWMAN: Seven (7) -- well  
10 it's thirty-seven (37) times twenty (20), never mind  
11 interest impacts. Thirty (30) -- so 750 million.

12 The thing that -- I was really concerned  
13 though was the new assets, and that's why we spent some  
14 time understanding what Mr. Kennedy's study said about  
15 -- about new assets like Wuskwatim, and ultimately  
16 looking to the Keeyask and the Conawapa and the Bipole  
17 rates. And that -- that concerned us more that it -- I  
18 -- I don't mean to dwell on things that we've gone  
19 over, but that -- that there is a significant  
20 understatement of the future costs of those plants  
21 under an ELG method in the event that they do go to  
22 ELG. And Wuskwatim we had estimated at -- at 4  
23 million, and I think the latest numbers probably have  
24 it at about 3.6 million difference in the IFF.

25 And, you know, ballparking that impact,

1 because I -- we weren't able to get any capital  
2 breakdowns by components for Conawapa and Keeyask,  
3 which -- which is reasonable, that we weren't able to  
4 get it. But just ballparking it, the same way that  
5 Hydro would have in developing its rates, that would be  
6 about a ten (10) times as big an impact once you get to  
7 those plants. It's the -- they're a ten (10) times  
8 larger investment.

9                   And that's one (1) side on the  
10 generation. Bipole has a different set of features  
11 going on where a rate that's being used is including a  
12 true-up. And you have to be very careful when you look  
13 at a true-up that's calculated in a study and how you  
14 apply it on future assets, because you take a true-up,  
15 a single number at a point in time, you divide it by an  
16 average remaining life to come up with a dollar value  
17 that you'd look to credit back in a given year. And  
18 then there will be another step that converts that into  
19 a percentage on the base of assets, and you apply that  
20 percentage to your assets in service. And that's part  
21 of the piece that Mr. Kennedy called 'Step 2' that  
22 carried back to his Schedule 1.

23                   And that only works if you have -- are  
24 not materially growing your assets. So in the case of  
25 the Bipole, the one (1) example we went through, you're

1 trying to credit back about a million dollars a year on  
2 the assets that are there. And I -- I don't have those  
3 numbers in front of me, but it was very close to a  
4 million dollars a year. And you say, Well, my  
5 depreciation is, say, 10 million, so I'll do that at a  
6 -- at a ten (10) per -- or 1 percent of the asset, 10  
7 percent of the depreciation. So you're crediting back  
8 that million dollars a year. But if you double your  
9 asset value and you apply that same percentage, you are  
10 all of a sudden crediting your true-up back at twice  
11 the rate at, say, \$2 million a year, even though  
12 there's no true-up associated with that asset you just  
13 added.

14                   So what happens is it -- it sort of  
15 fallaciously makes it look like you're going to  
16 accelerate the refund of the true-up, which -- which  
17 you're not going to do. The next time you read the  
18 study, you're going to recalculate and -- and re-base.  
19 And that's built into the Bipole rates that have been  
20 estimated here, too.

21                   So -- so that's another feature that's  
22 missing in the IFF about the full impact of ELG. Never  
23 mind that the Bipole rates are based on transmission  
24 categories that are -- tend to be twenty (20) to thirty  
25 (30) years old, and -- and, of course, Bipole 3 will be

1 a large value coming in in the early years, so that --  
2 that's -- that's missing in the IFF. And -- and that's  
3 before we talk about something like a Pointe du Bois  
4 rebuild or -- or the normal capital.

5           And -- and those may not -- may not be  
6 skewing, because all the other assets get older at the  
7 same time as you add new ones. Those may cycle  
8 themselves and not be a big impact.

9           But just focussing on the ones that we  
10 were able to quantify, we had about another \$600  
11 million impact from ELG over the course of the -- of  
12 the GRA -- or over the course of the IFF, compared to -  
13 - compared to the IF -- IFF12. And that's -- you know,  
14 I was using the numbers of 4 million from Wuskwatim  
15 times the full twenty (20) years, and about 5 million  
16 for Bipole times the fifteen (15) years it's in  
17 service. And then Keeyask and Conawapa, if their scale  
18 -- Wuskwatim's estimated at about 16 million a year for  
19 Keeyask times twelve (12) years, and about 28 million a  
20 year for Conawapa times seven (7) years. And you add  
21 those up, and you're about \$550 million of -- of future  
22 'shoe to drop' in the IFF that -- that hasn't been  
23 built in yet.

24           And so I -- I take issue with Mr.  
25 Kennedy's characterization of the ELG as a bit of an

1 increase. And -- and I -- this goes directly to the  
2 reasons why I think it's important that the study  
3 itself not be held up as providing all the answers,  
4 because there is a significant step between reading a  
5 study, understanding what it says, figuring its  
6 implications for an organization, and building into its  
7 financials, which -- which is different than what  
8 utility personnel do every day of the week, and it's  
9 not automatically following out of the study when you  
10 retain someone like Mr. Kennedy.

11 MR. ANTOINE HACAULT: So if we just  
12 look at these additional items which did not form part  
13 of the study, do you have a rough estimate as to what  
14 the rate increases are just related to these  
15 unspecified calculations in Mr. Kennedy's study, and  
16 unspecified in the IFF?

17 MR. PATRICK BOWMAN: I was just to the  
18 terminal year, and you'll have heard that the way that  
19 the numbers like the 3.95 percent number in the IFF,  
20 the one (1) that goes out the next twenty (20) years,  
21 are designed by drawing a straight line.

22 And on the cost front alone, by the  
23 terminal year, we're -- we're talking, you know,  
24 somewhere in the order of 50 million -- 50 to 60  
25 million more per year. And so that's about an -- about

1 4 percent higher rates by the end of the twenty (20)  
2 years. And plus, that's not counting any other  
3 compounding impacts to things that are -- that are  
4 otherwise built in.

5                   So it could be that range. It's  
6 possible it's -- it's a bit lower because were you to  
7 charge those higher rates, the rest of the  
8 depreciation, of course, a non-cash impact, so you  
9 might actually have a lower debt. So it -- it's  
10 possible there's some offsetting impacts. But I was --  
11 I was estimating on the basis of that, that rather than  
12 three point nine five (3.95), you'd probably find a  
13 number closer to four point one five (4.15) or four  
14 point two (4.2) as the -- as the long-term number. And  
15 I'm -- I'm not doing anything more -- more magical than  
16 taking 4 percent and divide it by -- by twenty (20)  
17 years or eighteen (18) years.

18                   And -- and I guess I -- I would only  
19 stress out of that that when these things happen --  
20 like Manitoba Hydro could make the comment that being  
21 regular in a cost of service basis means that they can  
22 handle the impacts on ratepayers by simply phasing  
23 things in. But once something shows up in an income  
24 statement or on an IFF, it will make its way through to  
25 ratepayers in -- in basically a 1:1 ratio or -- or over

1 time. And it may not happen the first year, but it --  
2 it's got to happen or else you're not going to end up  
3 in the same place in terms of overall reserves, so.

4 And -- and that's for no changes to  
5 underlying costs whatsoever. Everything we're debating  
6 here is just about the timing for recognition of these  
7 costs. And -- and I think that -- that starts off with  
8 a --

9 MR. RAYMOND LAFOND: Okay. Could you -  
10 - what -- are the -- the precise factors that would  
11 increase it from three point nine five (3.95) to four  
12 point one five (4.15) or four point two (4.2) over the  
13 next eighteen (18) years, or over -- not the next  
14 eighteen (18) years, but starting next year?

15 MR. PATRICK BOWMAN: Right. Well, I  
16 said Wuskwatim we had been estimating at 4 million a  
17 year that's not shown in the IFF, and -- and it may be  
18 a smidge lower than that. We estimated Keeyask is  
19 about four (4) Wuskwatims, so about sixteen (16). We  
20 estimated Conawapa's about seven (7) Wuskwatims, so  
21 roughly -- roughly 28 million. There you're up to --  
22 getting pretty close to -- to fifty (50).

23 And a bipole is a little bit trickier to  
24 estimate. We come up with about 5 million due to the -  
25 - the factors we could get our heads around. So you're



1 -- you're somewhere on the order of -- of, you know,  
2 say 50 million a year, that -- that type of range,  
3 maybe -- maybe 55. And -- and that's, you know,  
4 roughly -- roughly 4 percent on rates, is right. We  
5 were talking 12 -- or \$12 million per percent.

6 MR. RAYMOND LAFOND: So that -- so on  
7 these projects, due to the -- the movement to -- to  
8 moving to ELG versus ASL?

9 MR. PATRICK BOWMAN: Yes.

10 MR. RAYMOND LAFOND: That's the impact?

11 MR. PATRICK BOWMAN: That -- that's --

12 MR. RAYMOND LAFOND: Thank you.

13 MR. PATRICK BOWMAN: That's solely the  
14 -- yeah, that's solely the ELG impact.

15

16 CONTINUED BY MR. ANTOINE HACAULT:

17 MR. ANTOINE HACAULT: Now, the other  
18 thing --

19 THE CHAIRPERSON: I'm sorry, could you  
20 just clarify just -- ASL without salvage value?

21 MR. PATRICK BOWMAN: Well, yes. But  
22 even then it's not quite ASL without salvage, because  
23 we now know that IFF12 was run with numbers that are  
24 actually a little bit different than ASL without  
25 salvage. Like we have, for example, the numbers for

1 Wuskwatim as to what was in the IFF, and -- and they're  
2 shown as 18.8 or 18.9 million a year for depreciation.

3                   And now, after we got the corrected  
4 version, we have the estimate of Wuskwatim as  
5 depreciation, ASL without salvage, and it comes out  
6 higher than eighteen point eight (18.8) or eighteen  
7 point nine (18.9).

8                   You know, Hy -- Hydro said it ran the  
9 IFF on the basis of ASL without salvage. Apparently  
10 that was a misunderstanding, but nonetheless, it was  
11 run that way. And -- and the numbers actually show it  
12 wasn't even quite run that way; it was run a little bit  
13 lower than that.

14                   So you've got the IFF number, you've got  
15 the -- the ASL no-salvage more detailed number, and  
16 then you have the ES -- EGL no salvage number. But --  
17 but we're taking the gap in the -- in -- between what's  
18 in the IFF and -- and what's in the ELG and -- and how  
19 much -- how much off might the -- the IFF be.

20                   And I have learned over the years that  
21 there's a lot more that goes into running an IFF than -  
22 - than just that -- than just one (1) to ones alone.  
23 But -- but there's no -- that's why I said there's no -  
24 - no doubt it will go in -- in an upward direction.  
25 There's no doubt that -- that there will be pressure

1 compared to what's shown there on -- related to the new  
2 projects, and -- and that it will mean the three point  
3 nine five (3.95) comes out to a higher number.

4 I -- beyond that, I would -- I would  
5 think you'd want to see a better estimation of the  
6 componentization of things like Conawapa and Keeyask,  
7 which I'm assuming you get for an NFAAT to -- to really  
8 be able to get your heads around -- around the -- the  
9 impact of that depreciation.

10

11 CONTINUED BY MR. ANTOINE HACAULT:

12 MR. ANTOINE HACAULT: Now, in that  
13 discussion, could you comment on -- Hydro has shown  
14 some scenarios where the -- there's retirement of  
15 capital in some of its explanations. But can you  
16 comment on what the scenario is if you're adding, as  
17 we've seen in the CEF, the capital extend --  
18 expenditure forecast, over \$30 billion of capital  
19 assets that are all new assets when you use the ELG  
20 rate?

21 MR. PATRICK BOWMAN: Right. So the  
22 arguments that I've had to review a number of times for  
23 people, in respect of ELG versus ASL, is -- is that,  
24 yes, it may mean you recognize costs earlier, But you -  
25 - we see the benefit of having less costs later. And

1 ignoring a economic bias that says there is a time  
2 value of money, the recognition of some costs earlier  
3 versus more of the costs later, only is relevant when  
4 you decide you're applying on a declining plant bal --  
5 basis, or -- or analyzing one (1) facility or one (1)  
6 dam, not a -- not a system.

7           So there's a very interesting example in  
8 -- in the -- the study. It's extremely instructive.  
9 And the Board asked some pre-asks which actually helped  
10 us understand it. And it's -- it's Kettle.

11           Kettle generating station is now forty  
12 (40) years old. It was built in '71. It's got a --  
13 it's a very attractive plant. It's got a -- whatever,  
14 one point six (1.6) or so cent output.

15           And Kettle, being forty (40) years old,  
16 when you run the ELG and the ASL in a pure basis  
17 without getting into the true-ups, you end up with  
18 basically exactly the same depreciation expense. It's  
19 at that theoretical crossover point, okay? But then  
20 when you --

21           MR. ANTOINE HACAULT:    So what's the  
22 year again? What's the crossover? How -- it's like  
23 it's a 1970 facility; how many years out do we have to  
24 go before we get a crossover?

25           MR. PATRICK BOWMAN:    Well, this -- this

1 one is year 40. And it -- it would depend on the  
2 particular mix of assets, but Kettle is -- is just  
3 surprisingly aligned. So it gives you an idea about  
4 where this crossover occurs.

5                   But the other thing it says about Kettle  
6 is: When you flip to the second schedule and you say,  
7 What is the surplus or deficit accumulat -- accumulated  
8 depreciation? How much ought be set aside against  
9 Kettle at this point in time? And that's where you get  
10 the different answer.

11                   And the answer for the target  
12 accumulated depreciation for Kettle under ASL is 137  
13 million, and under ELG it's 147 million. So you have a  
14 plant now that is producing power at a hundred and  
15 seven and a half (107 1/2). It's got a net book value  
16 of about 200 million. And you're going to pay -- be  
17 paying the same amount for depreciating it. But the  
18 question is: Ought the people who used Kettle in the  
19 past have paid effectively \$10 million more for it over  
20 that period, and primarily in the first few years,  
21 because the -- the lines converge, than under one (1)  
22 method than the other?

23                   And -- and that's where the early part  
24 of the presentation, the economic fairness piece went.  
25 We would someday see a Wuskwatim cross over and -- and

1 people would either be seeing more set aside or less,  
2 if it stay -- if it -- if it's done on ELG versus ASL.  
3 And -- and the question is whether us here today ought  
4 have paid more for Wuskwatim in order to help it get  
5 depreciated quicker, or whether -- whether we're  
6 comfortable having future ratepayers have that -- that  
7 cost.

8                   And -- and on something like Kettle,  
9 it's -- we're not -- I don't think we're lamenting that  
10 -- that the people in the '70s and '80s didn't pay  
11 themselves high -- didn't pay higher rates to set aside  
12 the extra \$10 million so we could have a -- a little  
13 bit cheaper now -- power -- now out of Kettle, when  
14 we're getting it for a penny and half. And -- and if -  
15 - had they done that we'd be getting it for one point  
16 four-nine (1.49) or something. That's the fairness  
17 question.

18                   THE CHAIRPERSON:     The counter to that,  
19 of course, Mr. Bowman, is that repairs that will happen  
20 in the future from Kettle, stemming from the use of  
21 people who enjoyed the power in the early years, will  
22 be paid by future ratepayers. So, I mean, we heard  
23 from Mr. Kennedy that ASL will lea -- yield lower  
24 depreciation in future years, offset to some extent by  
25 repairs that will occur because of an aging facility.

1 So what do you say to that?

2 MR. PATRICK BOWMAN: Well, I -- I would  
3 have two (2) comments. One (1) is, yes, it is -- it is  
4 one (1) characteristic of a hydro plant's economics is  
5 that -- is those -- those costs. As I noted, it's --  
6 it's a relatively small proportion of a hydro's plants  
7 cost. It's O&M.

8 And -- and in setting a depreciation  
9 method and -- and just like -- just like the standards  
10 will say, Don't -- you don't set depreciation based on  
11 the revenue you can generate; this would be a question,  
12 You don't set the depreciation based on -- on the O&M  
13 repair costs that you might -- might incur later; that  
14 that's a -- that's not necessarily a core consideration  
15 of the -- of the plant.

16 But I'd also say I think you will find  
17 that even those O&M costs are by far a minority of the  
18 costs that are related, and -- and would be a  
19 relatively small feature for -- for future ratepayers.  
20 And the other thing is that when they are substantial  
21 they will ultimately be capital costs, and those  
22 capital costs will be subject to the exact same profile  
23 we're talking about here.

24 And, you know, a good -- I guess a good  
25 example of that is something like Pointe du Bois. We

1 have some historical documents that Hydro's produced  
2 that says when Pointe du Bois was built it was promised  
3 that they'd be able to build it for three (3) cents a  
4 kilowatt hour and it ended up being seven and a half (7  
5 1/2) cents a kilowatt hour. But that was in in 19 --  
6 1911 dollars it was seven and a half (7 1/2) cents a  
7 kilowatt hour.

8                   Its economic profile would have improved  
9 since then. I can't imagine how large a bill that  
10 would have been in -- in 1911 dollars. But -- but its  
11 cost would have depreciated. It -- the -- the cost  
12 profile would have improved up until more recently when  
13 the people have had to really do some -- some  
14 reinvestment in it.

15                   And -- and as a result, when you now go  
16 look at it, Pointe du Bois is not one of the cheapest  
17 plants on the system, right. It's -- it's -- I think  
18 our last number we had was about four (4) cents.

19                   But it's still not in -- at this point  
20 in time it's not an poor economic profile for a plant  
21 at, you know, four (4) cent power that it -- that it's  
22 producing all in, even though it's at that point where  
23 it's having that -- that very large -- that very large  
24 operating cost. And I -- and I can't imagine that it  
25 would have made sense to have rates higher than -- or



1 costs higher than seven and a half (7 1/2) cents or  
2 three (3) cents, or whichever they came in at, in 1911  
3 in order to have that number be -- be somewhat smaller.

4                   Once it's rebuilt it's -- will -- we'll  
5 be back in the same situation as basically a new plant,  
6 that you'll start with ten (10) cent, or possibly north  
7 of ten (10) cent power for -- for Pointe du Bois,  
8 depending on -- on how you record the cost.

9

10 CONTINUED BY MR. ANTOINE HACAULT:

11                   MR. ANTOINE HACAULT:    Mr. Bowman, can  
12 you have a bit of a discussion on the componentization  
13 issue and whether or not -- and the gains and losses,  
14 and -- and whether that's really something this Board  
15 should be concern -- or concerned about.

16                   MR. PATRICK BOWMAN:    Yes.  There are  
17 two (2) -- now that I seem to have wandered my way  
18 through seeming like somebody who was an ELG naysayer  
19 or taking it down a notch, let me just clarify that  
20 there are two (2) aspects of the ELG approach that make  
21 it attractive for those utilities who adopt it, and --  
22 outside of technical precision which I'm not sure is a  
23 big motivator for -- for most of the people in -- in  
24 some of the management -- making a lot of management  
25 decisions.

1                   You'll find ELG is very heavily used by  
2 private sector utilities. It's very heavily used by  
3 thermal utilities, such as I said in Alberta: Fortis,  
4 Nova Scotia Power. And for them, in terms of their  
5 generation, it -- it gives certain benefits, and -- and  
6 in terms of say distribution, it could still give  
7 Manitoba Hydro benefits in terms of distribution.

8                   But why do they use ELG? One of the  
9 reasons is because fundamentally ELG doesn't change  
10 your cash outflows but it does change your cash  
11 inflows. If you're a utility looking to make that  
12 decision, your cash flows can be linked to how your  
13 depreciation -- of course, a non-cash expense. My  
14 depreciation's higher, it gets me higher rates, but one  
15 (1) is non-cash and one (1) is cash, it improves the  
16 cash flow. And -- and it's irrelevant to -- it won't -  
17 - it won't increase your net income, but it will  
18 improve your cash flow and, of course, you're not --  
19 you're not taxed based on net income, but on the  
20 capital cost allowance.

21                   So if you're -- if you're a private  
22 sector utility and you're given a choice, there would  
23 be real benefits to ELG in terms of pumping up the cash  
24 flow. And -- and that's why I think you'll find a lot  
25 of those people will -- will move to ELG and turn to

1 Mr. Kennedy to -- to provide that type of study to  
2 them.

3                   The other one is -- is this issue of  
4 gains and losses. And if your utility, who's regulated  
5 on a very strict rate-base rate of return basis, where  
6 you come in here and you -- I'm not sure this -- I'm  
7 not sure a lot of people in Manitoba have run across  
8 this type of regulation because it doesn't really exist  
9 here -- but where you come in and you justify a case  
10 that my revenue requirement is exactly two hundred and  
11 forty-two million nine hundred and sixteen thousand  
12 dollars and fourteen cents (\$242,916,000.14) and -- and  
13 you argue your case and you come up with your end  
14 product and you set your rates, you're basically at  
15 risk of everything else that happens after that, to the  
16 better or to the worse and your shareholders, frankly.  
17 You don't get to come back like Manitoba Hydro and say,  
18 Oh, we had worse last year, so we'd like our rates back  
19 up or our reserves are down. You know, there isn't --  
20 there isn't that concept built in for -- for private  
21 sector utilities or a lot of the thermally generated  
22 utilities.

23                   And so for them, they would view certain  
24 instability that can go through their statements in  
25 terms of gains or losses on disposal as a -- as a

1 fairly major problem. And something like in ELG, if it  
2 can help them avoid some of those gains and losses --  
3 it doesn't take it all entirely away, but if it can  
4 help them avoid some of those gains and losses, would  
5 be a stabilizing factor in their shareholder returns in  
6 relation to their -- their revenue requirements  
7 approved.

8                   But you don't find that same concern  
9 over, you know, stability of a couple of million  
10 dollars of disposals in any given year, if -- if that -  
11 - across most of the Crowns, and that's why people are  
12 usually not that concerned about booking gains and  
13 losses. And -- and Mr. Kennedy and Manitoba Hydro  
14 spoke to that, that a lot of these other Crowns are --  
15 are very comfortable booking gains and losses as they  
16 occur, and it's -- and it's not that big a deal. And -  
17 - and if you -- if you need to do that, then -- then do  
18 that, and the numbers are going to be well, well, well  
19 below the type of instability that -- that Hydro's  
20 system is made to -- made to handle through their --  
21 their reserve mechanisms.

22                   And we -- we specifically asked Hydro  
23 how big the gains and losses might be, and -- and they  
24 weren't able to provide a number. But we know from the  
25 number of retirements occurring, that it's -- it's

1 really small.

2 MR. ANTOINE HACAULT: I'm going to take  
3 you back to overheads and, specifically, I'd like you  
4 to -- we've seen in the MIPUG-1-15, the table that  
5 showed with the new accounting adjustments, that we  
6 lower the employees by over six hundred (600)  
7 employees. That was at page 2 of three (3).

8 Now, I want to try and better understand  
9 your concept of fairness and full accounting. Take,  
10 for example -- and perhaps I don't know if this is an  
11 example you can work with -- if I have a number of  
12 engineers that work at Manitoba Hydro, they're housed  
13 in the three sixty (360), or somewhere else, building,  
14 and I make the decision instead, in accordance with the  
15 BC Hydro recommendations, to outsource that work and  
16 hire Acres or KGS engineers.

17 If I hire the KGS engineers, what comes  
18 with that?

19 MR. PATRICK BOWMAN: My understanding  
20 would be that under Hydro's capitalization policies, if  
21 you're hiring an outside firm all the costs associated  
22 with the rates that you pay to that outside firm to  
23 work on capital would be capitalized, because they  
24 would all be considered incremental. And I'm assuming  
25 the rates that you're paying to Acres covers not just

1 Acres's staff cost but Acres's vehicles and IT, and  
2 Acres', building. But that -- that would be the -- the  
3 basic premise of the -- of the external resource to do  
4 the work.

5 MR. ANTOINE HACAULT: And how does that  
6 relate to rate regulated full-cost accounting? How --  
7 why is it important or not important to properly  
8 allocate the full costs of that employee to a  
9 particular project?

10 MR. PATRICK BOWMAN: Well, that was one  
11 (1) of the examples that I gave where you say IFRS and  
12 -- or even CGAAP, and regulatory principles would lead  
13 to the same outcome. The CGAAP or IFRS would say, Is  
14 this incremental and can you cut it off if you need to?  
15 And -- and the answer would be yes. So you'd be able  
16 to capitalize it. And it's directly related to the  
17 project.

18 The -- the regulatory would say, Is this  
19 a fully loaded cost associated with carrying on that  
20 project? And -- and you'd probably say, Yes, plus  
21 maybe a bit of my contracting department to be able to  
22 handle that work. And so you'd capitalize that.

23 But they'd lead to basically the same  
24 outcome. All of that cost associated with that  
25 resource would be -- would be capitalized.

1 MR. ANTOINE HACAULT: And that's hiring  
2 an external consultant? That's what you were talking  
3 about right now?

4 MR. PATRICK BOWMAN: You asked the  
5 question about Acres, so, sure.

6 MR. ANTOINE HACAULT: And now how do we  
7 achieve the same full-cost accounting if the employee  
8 is not an Acres employee?

9 What has been the approach until the  
10 accounting changes?

11 MR. PATRICK BOWMAN: My -- my  
12 understanding is that Hydro had applied what they  
13 called full-cost accounting to its own resources. And  
14 so when it deployed its own engineers, it would have  
15 loaded them, in effect, with the same type of costs  
16 that you would have found loaded in the Acres  
17 engineer's rate and charged that to the project, both  
18 for the purposes of regulatory principles and for the  
19 purposes of -- of CGAAP or -- or financial statement  
20 presentation.

21 And it's my understanding that that is  
22 what Hydro has changed, is looking to further change,  
23 is to start recording in its financial statements a  
24 reduction in the loadings on the basis that the  
25 accounting standards are looking for true

1 incrementalism in costs.

2                   So if you're -- if the building that  
3 engineer works in is -- is not specifically rented for  
4 that project but is a general company resource  
5 building, you -- you wouldn't assign a portion of it to  
6 that -- that engineer, because it's not incremental;  
7 whereas on a full-cost accounting basis and -- and what  
8 I submit is a fair regulatory test, you're still in the  
9 same original principles, which is somebody's got to  
10 pay for that building.

11                   And -- and you would have a hard time  
12 convincing me that twenty-five hundred (2,500)  
13 employees working on capital don't drive any  
14 incremental costs or don't drive any costs at all, so -  
15 - other than their salaries or their direct -- their  
16 direct vehicle or something.

17                   So on a full-cost basis, you would --  
18 you would look through your ledger of costs and  
19 conclude which -- which are fundamentally supporting in  
20 capital program and -- and capitalize those. And --  
21 and that's still the practice that -- that I'm aware of  
22 in -- in many of the utilities and -- and -- but that  
23 will become problematic when -- when IFRS is here.

24                   I -- I just note that I do accept the  
25 evidence of Hydro that some of their capitalization



1 policies going back to the -- the 2008 or before were  
2 likely outside the norm. They gave some examples that  
3 -- that are definitely things that I must admit I -- I  
4 don't believe I've ever run across before. If I did,  
5 it would be the exception, with things like  
6 recapitalizing depreciation expense. That would be a  
7 good example of a -- of a very odd -- odd type of  
8 accounting practice. And -- and -- but it'd be by far  
9 the minority of the -- to my knowledge, of the -- of  
10 the costs that are reflected in -- in what's reported  
11 as accounting changes.

12 MR. ANTOINE HACAULT: Now, with respect  
13 to Crown-owned utilities, apart from Yukon Energy --  
14 and perhaps you can explain that circumstance -- are  
15 there any Crown-owned utilities, to your knowledge,  
16 that have moved to ELG as opposed to ASL?

17 MR. PATRICK BOWMAN: No, not to my  
18 knowledge. And I believe we asked this question of --  
19 of Manitoba Hydro, and they didn't point any out. They  
20 pointed out some municipals in -- in Alberta. But I  
21 believe the municipals in Alberta would probably  
22 largely follow the regulatory framework in Alberta,  
23 which is -- is driven by the -- the bigger outfits,  
24 like ATCO and the like.

25 Yukon Energy situation was a bit

1 different. That was a case where the Yukon government  
2 bought the assets of the Northern Canada Power  
3 Commission and set up its own company to own them,  
4 Yukon Energy, in 1987, and then hired ATCO to operate  
5 that utility for ten (10) years. And it established  
6 all of the accounting and financial policies and rates  
7 for Yukon Energy for about ten (10) years. And -- and  
8 Yukon Energy was a shell staff of a couple of -- of  
9 contract managers, basically. In 1997, they took over  
10 direct management of the utility and -- and finally  
11 made it before the utility board in 2005.

12                   And -- and as part of the lead up to  
13 that hearing, we did a depreciation review. And -- and  
14 the people running it sort of learned that -- that  
15 these depreciation rates that were in their system that  
16 no one really understood that well, were -- were --  
17 actually had been calculated by ATCO based on an ELG  
18 approach. And -- and that's when they did a fairly  
19 major policy review of -- of what's the appropriate  
20 approach for -- for Yukon Energy. And -- and I  
21 participated in that review.

22                   And they looked at the other Crowns  
23 across the country, and they looked at the principles  
24 and the logic behind each. And -- and they spoke to  
25 their utility regulator and its advisors. and -- and

1 they ultimately applied under the ASL method and -- and  
2 were approved for that.

3 THE CHAIRPERSON: Are we talking ELG  
4 for rate-setting purposes or ELG for financial  
5 statement purposes?

6 MR. PATRICK BOWMAN: To -- to -- they  
7 were used for both. But in -- yeah, in 2004/2005, they  
8 -- they -- when they discovered they were on ELG and  
9 they discovered the impact it was having on customers,  
10 in terms of costs, the utility elected to move to ASL,  
11 applied to the utility regulator for that permission,  
12 and the utility regulator gave them approval.

13 And I believe in Yukon there's actually  
14 a clause in the act that says that they must use  
15 depreciation policies that the utility board approves.  
16 So -- so they -- they switched from ELG to ASL for both  
17 purposes and continue, to this day, to use that.

18 THE CHAIRPERSON: I wasn't specifically  
19 talking about Yukon. I should have been more specific.  
20 In terms of the other jurisdictions, your statement was  
21 that nobody else has moved to -- nobody else has  
22 adopted ELG.

23 And I'm trying to square that with your  
24 early -- earlier testimony that many public utilities  
25 are using ELG because of the benefits that flow from

1 ELG for financial statement purposes.

2 MR. PATRICK BOWMAN: Mr. Hacault's  
3 question, as I understood it, was related to --  
4 strictly related to Crowns and that no Crowns, I was  
5 aware of, was using ELG.

6 MR. RAYMOND LAFOND: However, this is  
7 probably very true. But if a survey was done and  
8 Manitoba Hydro was asked what it was using, the  
9 response would be ASL. And it will still be the case  
10 in one (1), two (2), and maybe in three (3) years from  
11 now. And it's only then that it changes.

12 So what it is now, what it has been, as  
13 -- as based on what you know, is that being studied  
14 and reviewed in other Crown utilities?

15 MR. PATRICK BOWMAN: Let me -- I'll go  
16 through it quickly. In each of -- in -- Newfoundland  
17 certainly moved to ASL for the purposes of moving to  
18 IFRS and being modif -- regulated on a modified IFRS  
19 and had every intention of continuing to use ASL  
20 through IFRS. Saskatchewan, which is already on IFRS,  
21 uses ASL.

22 BC Hydro, which is going to this  
23 modified IFRS, but their -- their exemption doesn't --  
24 to -- to my knowledge, is not meant to cover  
25 depreciation. But my knowledge is they're -- they're

1 still on the ASL.

2 And certainly, Yukon Energy just had a  
3 study completed by KPMG. And it was meant to be --  
4 cover componentization and -- and rates for -- that  
5 they can transition through to -- to IFRS. And -- and  
6 that's based on ASL.

7 And in -- in the Northwest Territories,  
8 Mr. Kennedy participated in the -- the preparation of  
9 an ASL study for Northwest Territories, who is -- who  
10 is headed to -- to IFRS. And -- and they've done their  
11 componentization review and -- and does have to add one  
12 (1) -- one (1) category, is my recollection,  
13 specifically in their capital assets for overhead -- or  
14 overhauls. Overhauls is one (1) that gets particular  
15 attention under -- under the IFRS. Otherwise, they're  
16 using the -- the old FERC system of accounts which is  
17 basically the same as the OAB one and -- and that many,  
18 many utilities are using.

19

20 CONTINUED BY MR. ANTOINE HACAULT:

21 MR. ANTOINE HACAULT: And those are the  
22 accounts to -- which I had put to Mr. Kennedy. He --  
23 the NERC accounts with a very limited components, is  
24 that correct?

25 MR. PATRICK BOWMAN: The NERC accounts

1 have -- for hydro generation, would have -- my  
2 recollection is seven (7) components for thermal. It -  
3 - it may be one (1) or two (2) more when you add in  
4 fuel holders. It doesn't have an overhaul category,  
5 but like I said, there'd -- there'd be need to add in  
6 an overhaul category.

7                   Mr. Kennedy had testified about exciters  
8 and exciter casings and -- and generator windings and  
9 the like. And I -- I can't recall ever having seen a -  
10 - a depreciation study that has reference to generators  
11 separate from generator windings, separate from  
12 exciters. But -- but Mr. Kennedy has certainly  
13 reviewed more of those than I have.

14                   MR. ANTOINE HACAULT: I'd like you to  
15 address your mind to salvage again. And -- and in  
16 particular you discussed, in the exchange between the  
17 Board, the Bipole 1. That was one (1) example.

18                   But I'd like you to discuss net salvage  
19 value and your experience with respect to the  
20 difference between the greenfield redeve -- or  
21 development and somebody purchasing an existing site of  
22 a generating facility such as -- I think you had  
23 referred to Bluefish?

24                   MR. PATRICK BOWMAN: I did. Bluefish  
25 is the hydro generating station in the North. It was

1 the first hydro plant built north of 60. And it was  
2 built by a mine, the Con Mine, Consolidating Mining and  
3 Manufacturing in the -- my recollection is in late  
4 1930s. That plant was sold to Northwest Territories  
5 Power in about 2003. I participated in some aspects of  
6 the purchase of the plant and certainly the regulatory  
7 review of the purchase of the plant.

8           And I will say -- and -- and since then,  
9 I've done considerable more work on -- on redevelopment  
10 of the plant, including the project I referenced for  
11 the dam has been entirely rebuilt. And -- and I was  
12 involved in the contract negotiations and the  
13 management committee for that -- that major project.

14           But the facility that was built -- the  
15 majority of that facility was -- was probably in a  
16 situation that's at least as advanced as Pointe du  
17 Bois, if not more, when it was purchased. As a matter  
18 of fact, the dam started leaking and needed emergency  
19 project within -- within six (6) or seven (7) years,  
20 and that was sort of well known that that would --  
21 would occur and that they needed to wait for that to  
22 occur to -- to move on.

23           But nonetheless, there was a relatively  
24 sizable price paid. The utility board agreed with that  
25 price and put it into rates in full. And -- and the

1 prime reason is because the value inherent in a hydro  
2 site, there's only so many hydro sites around. Once  
3 you've developed certain infrastructure and once you've  
4 developed access, and once you've gotten a first round  
5 of -- of water permits and -- and you've gotten a  
6 public used to the idea that this is a place where a  
7 hydro plant goes, there is a -- there is a huge -- huge  
8 value in -- in that -- in that asset.

9                   And -- and the people in future are --  
10 are highly likely to continue to benefit for that for a  
11 -- for a long time.

12                   MR. ANTOINE HACAULT:     So in this  
13 example, even though the plant's life had basically  
14 expired, there was actually a purchase price paid for  
15 it, and then they tore down some of the old structures  
16 and rebuilt it, that -- so we had no negative salvage  
17 value here, so no negative amount that had to be  
18 absorbed with respect to this old facility?

19                   MR. PATRICK BOWMAN:     There was a  
20 certain amount charged related to -- to tearing down  
21 the old dam after the new one was built. It's -- it's  
22 clearly a removal cost. But my submission is the  
23 future value of the plant and of the site that was  
24 purchased far exceeds and -- and benefits future  
25 ratepayers far more than -- than the -- the cost of --



1 with -- with a relatively small and -- and, frankly,  
2 somewhat difficult to disentangle cost of -- of  
3 removing one dam versus -- versus building the other  
4 when you're dealing with the same crews and the same  
5 equipment and the same site, and -- and many other  
6 reasons why it's a little bit discretionary to even  
7 carve those up.

8 MR. RAYMOND LAFOND: But the removal  
9 was charged to expenses and not to capital, correct?

10 MR. PATRICK BOWMAN: The removal in  
11 that case was actually charged to a net salvage reserve  
12 which they had put in place years before. But  
13 interestingly enough, because they had just bought this  
14 facility it -- it never really had a removal reserve  
15 associated with it. So it's -- it's over a group of --  
16 of pooled assets. And -- and as a result, it'll --  
17 it'll be recovered through -- through -- effectively  
18 through future rates.

19 MR. RAYMOND LAFOND: Charged to a  
20 salvage reserve, that means charged through retained  
21 earnings? That's the only place where you can take  
22 reserves.

23 MR. PATRICK BOWMAN: Well, no, sir.  
24 Much like Manitoba Hydro, this utility in the past had  
25 a net salvage component in their depreciation rates.

1 And just like Manitoba Hydro's net salvage, if it takes  
2 10 percent of -- of Wuskwatim for -- for net salvage  
3 all that effectively does is -- is build up the  
4 accumulated depreciation faster. And -- and,  
5 therefore, when you finally go spend that money, it's -  
6 - it's effectively spent out of accumulated  
7 depreciation. It's one (1) of the odd -- odd  
8 accounting features.

9                   A lot of the utilities who still do this  
10 have made an effort to break those two (2) out. They  
11 really want to report that salvage separately on their  
12 balance sheet, but not all of them find it easy. And  
13 we did ask Manitoba Hydro if -- if they could even  
14 account for them separately, and we were told they're -  
15 - they're un -- you can't unscramble that omelet.

16

17 CONTINUED BY MR. ANTOINE HACAULT:

18                   MR. ANTOINE HACAULT: I'm moving to  
19 some very specific points leading to some other items.  
20 It was suggested by Manitoba Hydro in its rebuttal  
21 response that you were, with respect to the  
22 depreciation method, advancing some kind of a revenue-  
23 based standard.

24                   Do you have any comments with respect to  
25 that?

1 MR. PATRICK BOWMAN: Yes. In -- in no  
2 way am I suggesting that they adopt a revenue-based  
3 standard for depreciation. I'm saying that you have a  
4 choice of how you implement straight-line depreciation.  
5 Straight-line depreciation is, if anything, it's still  
6 linked to the asset. It's not linked to the revenues  
7 the asset generates.

8 What I'm saying is that you want to be  
9 guided in that decision by things like value and  
10 fairness and -- and -- and ratepayers. And -- and by  
11 mentioning the word "value", people took that to mean  
12 revenue, and -- and I'm not suggesting that. If I --  
13 had I been suggesting that, I certainly wouldn't have  
14 been suggesting an ASL. I'd be suggesting a sinking  
15 fund or beyond, because that's -- even the sinking fund  
16 is -- doesn't get as far as an economist would like,  
17 because it does not provide for in -- inflationary  
18 pressures in the mix. So it's -- so, no, I'm not  
19 suggesting a revenue standard at all.

20 MR. ANTOINE HACAULT: And -- and I  
21 guess that leads to another point of misunderstanding.  
22 I gathered from the transcript that some people took my  
23 indication that we weren't actually going to be  
24 presenting with respect to DSM that somehow that issue  
25 wasn't important to -- to MIPUG. Could you comment on

1 the importance of DSM to the industrials?

2 I think some people mistook my comment  
3 on prioritization of where we were involved in the  
4 hearing to mean something with respect to whether --  
5 what the industrials thought about DSM. And that was  
6 totally taken out of context if it was stated that way.

7 So I'd like Mr. Bowman to comment on the  
8 importance of DSM for industrials.

9 MR. PATRICK BOWMAN: Yes. The  
10 industrial DSM program is of major importance to the  
11 customers I've dealt with. It's also of major  
12 importance to Manitoba Hydro. It is -- the Performance  
13 Optimization Program, in particular, is -- is the  
14 largest single DSM program Manitoba Hydro runs, and  
15 it's among the lowest cost and most economic. I was  
16 just flipping through the power resource plan; and as  
17 much as people will have their comments on the RIM  
18 test, this program has a RIM test of one point five  
19 (1.5), which means that as a result of the program --

20 MR. ANTOINE HACAULT: So what's RIM,  
21 for dummies like me?

22 MR. PATRICK BOWMAN: Rate impact  
23 measure. It is a measure of how much benefit  
24 ratepayers see through their rates as opposed to how  
25 much cost the utility is incurring. And a RIM test

1 above one (1) means, as a result of pursuing the  
2 program, everybody's rates went down.

3                   And there will be a -- a certain view  
4 that RIM is excessively strict to standard. But even  
5 on that excessively strict standard, this program  
6 passes in flying colours. It's got a RIM of one point  
7 five (1.5). It's 346 gigawatt hours. It's the biggest  
8 single program. And the only other program that's even  
9 close is commercial lighting, and it's got a RIM of  
10 about one (1).

11                   So industrial DSM is an entirely  
12 different beast though than -- than residential or  
13 commercial customer DSM. It's not a marketing concern.  
14 It's -- you're dealing directly with these customers.  
15 And -- and in most of them, Hydro will have a full-time  
16 employee pretty much dedicated to one (1) or two (2)  
17 customers. They work on a very close basis. And --  
18 and the customers, once there's an economic investment  
19 opportunity, will generally be able to come up with the  
20 money to pursue it. The -- it's not -- it doesn't  
21 generally fall into -- it doesn't at all fall into it,  
22 but, I understand, to Ms. Morrison's area. And it's a  
23 very different set of considerations than we understood  
24 much of that area or the hearing to be going.

25                   So, to my knowledge, the customers are -

1 - outside of two (2) specific areas, the customers have  
2 -- have expressed no concern, didn't ask us to pursue  
3 it in this proceeding.

4                   The only two (2) exceptions I would note  
5 is the curtailable program. We'd comment on the  
6 curtailable. And I'd only say on the curtailable  
7 program, similar to the performance optimization, the  
8 curtailable program is a -- is a very important program  
9 to the customers who participate in it. And it gives  
10 excellent long-term value to the customers and to  
11 Manitoba Hydro. And it's been reviewed and approved by  
12 this Board many times over. And it actually arose  
13 because of and pushed by this Board to Manitoba Hydro  
14 to help develop some options that they could work with  
15 industrial customers on to find joint benefit.

16                   So that program is -- is very important.  
17 It's -- it's very valuable. And -- and the customers  
18 are actually somewhat disappointed that Hydro would  
19 choose to propose to cap it at this time, because  
20 they're -- even though no one has signed up for many  
21 years, there is still the potential that a customer  
22 might come along and want to bring Hydro a very good  
23 and long-term capacity resource that -- that maybe lost  
24 because of -- because at this very moment, Hydro would  
25 cap it lower even though it may become a greater value

1 in the future.

2 MR. ANTOINE HACAULT: Now, with respect  
3 to curtailable program and options -- and the Board  
4 doesn't need to turn to this -- but I'd like you to  
5 address two (2) issues that you responded to in pi --  
6 PUB Interrogatory 4 of MIPUG.

7 Firstly is whether or not a jurisdiction  
8 like Newfoundland Hydro has lower rates for some  
9 industrials. And I'll ask the next one following.

10 MR. PATRICK BOWMAN: We prepared a  
11 response to PUB-4 where the Board was asking us, based  
12 on our -- our Chapter 2, Tab 2 of our evidence, where  
13 we were explaining the customers' concerns and the --  
14 the assignment they charged us with, that we said that  
15 one (1) of the concerns of the customers is that  
16 Manitoba is actually not -- not the lowest cost for  
17 power available to them.

18 I -- I put that comment in there so that  
19 people understood the context under which I was -- was  
20 sent off to do our assignment. And -- and I -- I put  
21 it in there as a -- as a framing of the customers'  
22 concerns.

23 We were asked to give an example. And -  
24 - and I'm personally only aware of one (1). And it's -  
25 - it's a company in -- in Newfoundland who is connected

1 and -- and was told by Newfoundland Hydro what the  
2 published rate would be and -- and went to the utility  
3 board to say that that's, in -- in the appropriate  
4 application, the published rate.

5                   And they were told that -- and they --  
6 and -- and the utility board agreed with them and --  
7 and said that, No, there's a lower rate that they  
8 should be charged. And -- and that's the rate that  
9 they're paying going forward, and it is significantly  
10 lower than Manitoba's rate.

11                   Now, it may not be for long, but it was  
12 one (1) example I was aware of. The -- the clients had  
13 some others, but I -- I'm not involved with them in --  
14 in doing that power cost estimating.

15                   MR. ANTOINE HACAULT: And the detail of  
16 that discussion is at page 2 of 3, if people are  
17 keeping track, MIPUG-1-4. At that same page, there's a  
18 bit of discussion with respect to rate options that  
19 could be developed to the mutual benefit of Manitoba  
20 Hydro and industrial customers.

21                   Could you take us through one (1) or two  
22 (2) examples of what that might be?

23                   MR. PATRICK BOWMAN: Well, the main --  
24 I can give two (2). Just to clarify, they're some --  
25 they've been talked about a bit. One (1) is something



1 that Gerdau referenced when they were before this  
2 Board, is something called demand response. I think it  
3 may have -- it's possible it was -- it was  
4 mischaracterized at -- at one (1) point.

5           Demand response is simply a type of  
6 program or a type of offering where -- where a customer  
7 is provided the opportunity to see the cost pressures  
8 that Hydro is under at a given point in time, or the  
9 cost opportunities. And they're given an option to  
10 amend their load and adjust their load in order to help  
11 Hydro profit from or save money from particular supply  
12 conditions on the system.

13           And, M. Lafond, I believe you asked a  
14 question of Mr. Cormie about curtailable and whether  
15 you'd be curtailing someone because the prices went way  
16 up in another jurisdiction. And Mr. Cormie rightly  
17 said that that would not be a reason for a curtailable  
18 program, because a curtailable program is about  
19 capacity. It's about how do you meet your peak. It's  
20 not about how do you go ahead and sell that power.

21           Demand response would be what you're  
22 talking about. It would be a means by which a customer  
23 who's operating and -- and may have some options about  
24 how it operates its load and -- and which production  
25 lines it's going to run could potentially voluntarily

1 sign up for a program. This exists in some other  
2 places.

3                   And the utility can phone them up and  
4 say, Hey guess what guys, it's -- it's 34 degrees in  
5 Minneapolis and we've got room on our transmission  
6 lines, and if you want to drop your load back, we'll  
7 sell some of that power and we'll find a way to share  
8 the benefits.

9                   And right now that doesn't exist at all.  
10 There's no way to do that. The customers don't even  
11 get that signal. They're not aware of it and -- and  
12 Hydro therefore has -- has no opportunity to -- to  
13 capture those -- those events. They're -- at this  
14 point in time they're probably somewhat few and far  
15 between but I'm not sure we know without having  
16 something set up.

17                   And -- and the customers have asked --  
18 asked Hydro about moving on something like this, I  
19 know, and -- and -- but I'm -- I'm not in the middle of  
20 -- of any discussions. But it's one (1) example of a  
21 way that when you're customer sitting and running a  
22 plant here, and -- and you get an IFF that lands on  
23 your desk saying, Your rates are going up 4 percent a  
24 year for the next two (2) decades, you start to say,  
25 well, what can I do about it.

1                   It's great that I'm a customer of  
2 Manitoba Hydro. I can't pursue another supplier. I've  
3 done all the DSM, or -- or I'd love to pursue more DSM  
4 but is there anything else I can do to help manage my  
5 bill. Well, the curtail department is closed and  
6 demand response isn't available, and pretty quickly  
7 they -- they loose out on those options.

8                   So -- so that's where -- why these get  
9 raised and demand responses is very much in that light.  
10 It can be called DSM. Some people would call that DSM,  
11 some wouldn't, but -- but for sure it's -- it's a way  
12 of -- of managing a person's load to -- to work jointly  
13 with the utility.

14                   The other one that's been raised and  
15 it's been around a long time is -- is related to self  
16 generation. And it's not very common in Manitoba.  
17 It's -- it's not -- it's not a huge opportunity in  
18 Manitoba. We don't have a lot of like lumber mills  
19 like you have in British Columbia or something where --  
20 where self-generation is -- is relatively common.

21                   But there are examples where customers  
22 have waste products that they could use to supply  
23 electricity to the grid. Those waste products are  
24 generally going to waste today and whether that's low  
25 grade heat, or whether that's hydrogen that's being

1 vented, or whether that's, you know, more wood waste  
2 that could be used, these are resources that exist in  
3 Manitoba that -- that it's possible could economically  
4 produce power.

5                   The one thing we know is that they're  
6 not currently economically producing power, and -- and  
7 part of the reason is because of -- of Hydro's policy  
8 that says, Well if you're going to -- if you're going  
9 to go ahead and use your hydrogen to generate power,  
10 you have to use it first before I'll take any of it.  
11 And -- and there's a certain logic to that.

12                   I won't disagree that if you're a  
13 customer buying power from Hydro for -- for an average  
14 of about four (4) cents and -- and Hydro is busy  
15 saying, Well if I -- if I get a wind company coming in  
16 here, if I get a DSM program in here and it can meet a  
17 test of about eight (8) cents I'd be interested. And  
18 you walk up and say, Hey guys I got some power we can  
19 develop for eight (8) cents. And they say, I'm not so  
20 sure I want to be selling you at four (4) and buying at  
21 eight (8) so why don't you go supply your own load  
22 first.

23                   And -- and we end up where we end up  
24 today. Like I said, it -- it has a certain logic but  
25 it also has an outcome that -- that maybe quite sub

1 optimal, and -- and so at times the customers have --  
2 have queried whether that policy makes a lot of sense  
3 because of the -- the end result.

4                   You know, it's -- just because the --  
5 the hydrogen generation or the -- or the -- the waste  
6 heat recovery has a -- has a logo on it of Enbridge  
7 Pipelines or someone who's already a customer, and  
8 that's not to say Enbridge is one of the good examples,  
9 but that somehow it's -- it's less valuable to Hydro as  
10 a kilowatt hour than -- than a landfill gas or a -- or  
11 a wind or something.

12                   And so those are -- those are places  
13 where -- where the disadvantage of dealing with a  
14 monopoly is you get one shot. Manitoba Hydro says, No,  
15 you got -- you go home and -- and you don't -- you  
16 don't pursue these opportunities as a province. So  
17 that's -- that's one that -- that the members have  
18 mentioned at times.

19                   Like I said, even if someone changed the  
20 policy I can't guarantee there's any power that would  
21 come on tomorrow but I can guarantee that with the  
22 policy there -- there's no power of that sort really  
23 coming on the system now as an IPP.

24                   MR. RAYMOND LAFOND:    But that policy  
25 would have to have provisions, for instance using your

1 example, whereby if Manitoba Hydro was I guess forced,  
2 if I can use that expression, to buy the production  
3 from that customer, or -- or that industrial customer,  
4 it would need to be able to at least sell it to others  
5 or export it for at least the same amount otherwise the  
6 other ratepayers are -- would be generating a loss.

7 MR. PATRICK BOWMAN: Oh, absolutely,  
8 Mr. Lafond. And that -- but it's the same premise that  
9 the wind turbines down in St. Leon are approached.  
10 Like -- I'm not involved in those negotiations. My  
11 understanding is Hydro and that company worked out a  
12 business arrangement that was beneficial to both. And  
13 the ratepayers are ahead because they have that -- that  
14 wind generation. And the price that was paid was --  
15 was a negotiated price reflecting the value of that  
16 power.

17 What I'm saying is that in this unique  
18 situation, where you happen to already be a customer of  
19 Hydro, you don't even get to talk about the value of  
20 the power. You're stuck with, your power is only going  
21 to be able to be valued at four (4) cents, until you  
22 fully offset your own load.

23 And so, like I'm saying, I totally  
24 understand that the concept that Hydro doesn't want to  
25 be at the same time selling power to a customer for

1 four (4) and buying it for eight (8); like that's --  
2 that's basic. But -- but this is where sometimes  
3 regulated utility environments are different. And --  
4 and the -- the rational outcome is you're going to be  
5 selling it for four (4) anyway. That's what you're  
6 doing now, you're selling the entire load for four (4).

7           The only question is whether you could  
8 have an economic supply coming in and -- and maybe  
9 you're cutting off a good option for Manitoba and even  
10 a good option for Manitoba ratepayers by -- by that  
11 aspect of the policy. And it's -- it's a difficult  
12 area, but it's -- it's one (1) that people haven't seen  
13 Manitoba Hydro budge on.

14

15 CONTINUED BY MR. ANTOINE HACAULT:

16           MR. ANTOINE HACAULT: Mr. Bowman, while  
17 you were tangentially on DSM, it might be appropriate  
18 to draw the Board's attention to -- we're getting into  
19 the recommendations and kind of look at the revised  
20 IFFs.

21           Part of what's been happening there, as  
22 I understand it -- it is the DSM issue I'll call it.  
23 And it's at Tab 20H of our -- 20 -- 'H' as in Harry -  
24 in our book of documents, pages 368 and 369.

25           MR. RAYMOND LAFOND: I'm sorry, that

1 was Tab 20?

2 MR. ANTOINE HACAULT: Tab 20, page 368  
3 and 369.

4

5 (BRIEF PAUSE)

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: It looks like  
9 everybody's located the pages, so please address the  
10 DSM issue as I'll call it, with respect to firstly, I  
11 guess, removing it from capitalization and -- and  
12 what's included in the expense side going -- following  
13 that.

14 MR. PATRICK BOWMAN: Sure. And -- and  
15 I think this may be the -- the last piece that I needed  
16 to touch on. I made a comment earlier that some very  
17 difficult decisions about accounting standards were  
18 made in places like British Columbia, because they knew  
19 that the impacts of IFRS were going to be very, very  
20 large on the utility.

21 Manitoba Hydro has put together these  
22 tables to effectively show that the impacts of IFRS are  
23 very small on Manitoba Hydro. So we don't need to  
24 worry about going through some of the gyrations that  
25 happened in places like BC.



1                   And my -- my comment was that all hinges  
2 on definition. There's some very curious definitions  
3 that go into Manitoba Hydro's interpretation of what  
4 the IFRS impacts are.

5                   So one (1) of those definitional issues  
6 is that Hydro has managed to take some very large  
7 accounting changes, including those that have not yet  
8 occurred, or were not -- have not been part of any  
9 actual year yet, and say, Oh, no, those are -- those  
10 are CGAAP changes. They're not driven by IFRS.  
11 They're not an attempt to move towards an IFRS  
12 standard. They're -- they're just CGAAP. So -- so we  
13 won't count those as IFRS impacts, we'll put those  
14 outside.

15                   I think if you read this Board's Order  
16 and some of the encouragement that they received, it  
17 was -- it was very much saying IFRS is coming, and so  
18 let's get on and try to start to make these changes.  
19 And I -- and I think -- so I think it's a little bit  
20 hard to say those are not at all whatsoever linked to  
21 IFRS in terms of definition.

22                   But the second one is the one that Mr.  
23 Hacault raised, which is the DSM. And -- and I do  
24 believe people have seen this table before. And on the  
25 page 369, it shows the benefits to depreciation expense

1 from eliminating DSM, right? Which is 38 million in  
2 the first year. A row called Reduction in Rate-  
3 regulated Assets.

4 MR. ANTOINE HACAULT: So has everybody  
5 found that reduction in rate rel -- rate-regulated  
6 assets under the year 2015? Is that what you were  
7 referring to?

8 MR. PATRICK BOWMAN: Yes. Thirty (30)  
9 -- 38 million under 2015. It's an -- it's listed as an  
10 IFRS change. We save 38 million from rate-regulated  
11 assets. And -- and just to be really clear, this is  
12 the amount that would have been depreciated on the DSM  
13 programs in that year.

14 And the DSM programs are effectively  
15 currently done on an amortization accounting type of  
16 basis. Amounts are spent each year, they're  
17 capitalized and they're -- and they're amortized, and  
18 so long as your program is relatively constant size,  
19 the -- the ins and outs will tend to be about the same.  
20 You'll tend to spend the same as you amortize.

21 So 38 million is what they've been --  
22 what they're scheduled to amortize in -- in four (4) --  
23 2014/'15. But that we don't have to amortize anymore;  
24 that's an IFRS benefit.

25 But then you flip back a page and you

1 see three sixty-eight (368). You see a row called  
2 "DSM" under "IFRS changes".

3 MR. ANTOINE HACAULT: And where is  
4 that? In the middle of the page?

5 MR. PATRICK BOWMAN: Under the 2015  
6 column in the middle of the page. DSM -- IFRS changes,  
7 it's the first row, thir -- 23 million.

8 And, again, there's been some evidence -  
9 - or a lot of evidence, about whether 23 million is the  
10 right spending level, but -- but I'm not here  
11 necessarily to talk about that. My concern to point  
12 out is that DSM spending is clearly lower than the  
13 levels it has been, and by a substantial margin, \$15  
14 million in terms of a sustainable level.

15 And the effect of them being presented  
16 this way in the table is that materially reducing  
17 spending on DSM is not being called a DSM reduction,  
18 it's being called an IFRS change. That -- part of the  
19 reason IFRS doesn't seem to hit the income statement  
20 that much is because DSM is being scaled back.

21 And -- and indeed, if someone wanted to  
22 manage it more, they would scale back DSM even more.  
23 Because now it's a direct one-to-one to the income  
24 statement. And that's a -- I think that's probably a -  
25 - it could be a bit of a concern that something that's

1 a long-term asset, a long-term valuable program with  
2 real benefits that sustain for -- for the customers and  
3 for the utility, become something -- they can become,  
4 you know, shuffled around in annual budgets. And --  
5 and if we need to find some savings, we'll just scale  
6 back on -- on DSM this year.

7 Part of the benefit of having it in the  
8 capital program is that capital program is not  
9 necessarily reviewed or scaled back in the same way.  
10 And -- and in particular, I take quite an exception of  
11 calling less DSM spending an IFRS benefit. It's --  
12 it's not based on an IFRS benefit, it's a -- it's a  
13 factor of -- of -- of putting less emphasis on that  
14 area of the company.

15 MR. ANTOINE HACAULT: And -- and that  
16 amount gets reduced if we go across that line to the  
17 right in the future? It doesn't stay constant at \$22  
18 million?

19 MR., PATRICK BOWMAN: Right. Well,  
20 both -- both drop off as you -- as you go across.

21 So when we looked at this table and --  
22 and heard the assertion that, don't worry, IFRS isn't  
23 costing us much, we said -- I guess it depends on how  
24 you -- how you define IFRS. You're getting 15 million  
25 in offsets because you're cutting back your DSM

1 program. You're getting 60 million in added costs to  
2 ratepayers that you're kicking out of the analysis  
3 because you're saying, it's not really IFRS, it's sort  
4 of pre-IFRS. But it's not even really pre-IFRS, it's -  
5 - it's allowed under CGAAP, even if it's not required  
6 under CGAAP.

7                   And then you add to that that these  
8 tables would not yet adjust for the ELG error that we  
9 talked about which is missing at least 3.6 million for  
10 Wuskwatim plus ELG impacts to the future projects,  
11 because these are based off of the IFF and the IFF has  
12 the incorrect approach to -- to dealing with future  
13 projects. So at least 4 million in the first years,  
14 scaling up to perhaps past 40 million in -- in the  
15 back-end.

16                   And the final thing that these -- these  
17 tables do is that they -- they fully take credit for a  
18 salvage reduction as a -- as an IFRS benefit. And --  
19 and again, I noted, I believe you could -- could,  
20 should, ought do that in any event, whether you're  
21 going to IFRS or not and whether it's -- and without  
22 waiting for the IFRS year, but it also notices that  
23 numbers used in this table are way beyond the estimates  
24 of how much salvage is being put aside each year in the  
25 other documents filed. These will report salvage

1 benefits at -- it's at 63 million in this table. I  
2 think if you look in -- and that's at page 369, 63  
3 million.

4 I think if you look at the IFF you'll  
5 see that reported at 68 million. And yet if you look  
6 at -- compare Mr. Kennedy's studies that we now finally  
7 have a study of ASL with and ASL without, and -- and  
8 there has never been an ELG with -- prepared, we're  
9 told, you'll find that the difference between the two  
10 (2) is only 32 million, not -- not anywhere near 68.

11 Now, 32 million, on -- on an ongoing  
12 basis, there -- you could -- there's also a -- because  
13 you eliminate net salvage, you also eliminate -- how do  
14 I put it? You -- you increase the calculated variance  
15 in your depreciation -- in your cumulated depreciation  
16 because all that accumulated depreciation that's arisen  
17 over the years, because you were setting aside salvage,  
18 you don't call salvage anymore. You just call it  
19 accumulated depreciation for the purposes of amortizing  
20 assets.

21 And you don't net it out and -- and do  
22 an adjustment and take out this amount. You just leave  
23 it in there and say that now I'll consider that asset  
24 amortization. And that amount's about \$400 million.  
25 It's -- it's the difference between Mr. Kennedy's ASL

1 with and ASL without studies. And -- and I wouldn't  
2 expect it to be much different in an ELG study, but we  
3 don't have an ELG study to compare them.

4                   So that's about 400 million, 420,  
5 actually. And as a result of there being this 420  
6 million in the calculated salvage provision that's  
7 supposedly not -- or it's -- it's determined by policy  
8 not to be needed anymore, it starts to become part of a  
9 true-up, and it changes the true-up by about 14 -- 12  
10 or 14 million.

11                   So -- so what's the benefit of  
12 eliminating salvage? It -- it's not anywhere near the  
13 sixty-eight (68) in the IFF or the sixty-three (63)  
14 here, according to Mr. Kennedy's studies. It's -- it's  
15 probably thirty-two (32) on an ongoing basis and -- and  
16 possibly forty-six (46) if you -- if you consider the -  
17 - the true-up impact, but...

18                   So by the time we were done we -- we  
19 really didn't end up with a -- with a no net impact of  
20 IFRS at all. We would be inclined to say you have  
21 fifteen (15) too much you're crediting, you have sixty  
22 (60) too much, you're -- you're ignoring, you have  
23 between four (4) and forty (40) depending on the year  
24 that you're ignoring from ELG and -- or you got an --  
25 an error from ELG and you have somewhere between 15 and

1 30 million that you're calling salvage benefits here  
2 that doesn't seem to be borne out in the study.

3                   And -- and those are big enough numbers  
4 that I think considered carefully we're -- we're in a  
5 range that's approaching -- approaching a hundred  
6 million dollar impact. And a hundred million dollar a  
7 year impact is -- even if it's only half that, I would  
8 -- I would think a hundred million dollars a year  
9 straight through the income statement is probably of a  
10 sufficient magnitude that somebody might -- might want  
11 to have a discussion more along the lines of what I'm  
12 sure happened in -- in British Columbia.

13                   THE CHAIRPERSON: Maitre Hacaault, I'm  
14 just wondering in terms of our time -- I'll just check  
15 with my panel members to see what their availability's  
16 like.

17

18   (BRIEF PAUSE)

19

20                   MR. ANTOINE HACAULT: I don't think so.  
21 All I was going to get -- Mr. Bowman had filed two (2)  
22 revised responses to requests that the PUB had made. I  
23 don't intend to go to the old ones because they're  
24 revised to update with respect to IFF12. And I just  
25 need him to explain those two (2) responses and that



1 basically finishes his testimony.

2 I'm assuming in that that the Board has  
3 had the opportunity to read his recommendations and his  
4 evidence and his recommendations in the IFF. But these  
5 tables I think merit a little bit of time to make sure  
6 that the Board understands the tables and -- and these  
7 two (2) responses that were -- or questions that were  
8 asked of the -- by the Board of Mr. Bowman.

9 THE CHAIRPERSON: Agreed. Let's do  
10 that.

11 MR. PATRICK BOWMAN: PUB 20, you said?  
12

13 CONTINUED BY MR. ANTOINE HACAULT:

14 MR. ANTOINE HACAULT: I believe it's  
15 your updated PUB/MIPUG-11.

16 MR. PATRICK BOWMAN: Oh, you want to  
17 start -- start there. Okay.

18 MR. ANTOINE HACAULT: It was revised  
19 for IFF12.

20 MR. PATRICK BOWMAN: So this -- this  
21 version that I have in front of me is dated January  
22 17th, and it's -- it is at the top PUB/MIPUG-1-11. And  
23 it does say specifically, "Revised for IFF12."  
24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: M. Hacault, you're  
2 talking about 1-11?

3 MR. ANTOINE HACAULT: Yes, it's 1-11,  
4 but there was a request by PUB to revise it. And in  
5 the bottom left-hand side there's the date January 17,  
6 2013. And at the very top it says, "PUB/MIPUG-1-11."  
7 And then in parentheses, "Revised for IFF12."

8 So that -- the Board had asked that  
9 previous tables that had been prepared by Mr. Bowman  
10 and InterGroup be revised to reflect IFF12, which if  
11 everybody recalls, we received very close to the start  
12 of the hearing. So nobody really had a chance to  
13 analyze that document.

14 And what I asked Mr. Bowman, and this  
15 leads to why he makes recommendations or what his  
16 recommendations are finally, and this is also part of a  
17 material at page 2 of 6 of PUB/MIPUG-1-11. There's a  
18 table, and I'd like Mr. Bowman to please explain how he  
19 comes to that table and how it responds to the Public  
20 Utility Board's request of him.

21

22 CONTINUED BY MR. ANTOINE HACAULT:

23 MR. ANTOINE HACAULT: Could you please  
24 proceed, Mr. Bowman?

25 MR. PATRICK BOWMAN: Thank you. We

1 have provided a series of recommendations in our -- in  
2 our pre-filed testimony which, frankly, haven't changed  
3 much on the basis of IFF12. So -- so this -- if people  
4 have recently read the pre-filed testimony, this will  
5 be quick, I believe.

6 This is basically an IFF presentation of  
7 the first five (5) years of the IFF. It is taking  
8 directly the numbers out of Hydro's IFF and -- and  
9 making adjustments for the items that we say merit  
10 adjustment.

11 And in each case we've done a -- a full  
12 adjustment. We haven't added in speculative things  
13 like -- like we say there's still clearly a need for  
14 Hydro to have pressures at internal cost control.  
15 Those aren't in here. We've expressed some concern  
16 over budgeting based on vacancy rates that are far  
17 below what's actually achieved; that's not in here.  
18 This -- this is strictly taking account -- the  
19 accounting and timing things like the depreciation into  
20 account, and as well as our recommendations on rates.

21 And you'll see the recommendations on  
22 rates, the first one that we had was that Hydro be  
23 granted an increase. We thought -- or my -- my view  
24 looking at it was that the rates that are in place  
25 today have 5 1/2 percent increases, or a 5 1/2 percent

1 higher level than was finalized at the last GRA.  
2 That's a -- a sum of a 1 percent rollback reinstated --  
3 or -- or not yet -- not yet refunded. A -- a 2 percent  
4 increase at April 1, and a 2 1/2 percent increase at  
5 September 1.

6                   So -- so the sum of those, the 5 1/2  
7 percent increase. And my basic conclusion was I did  
8 not see a reason to -- to either reduce those, or to  
9 add the increase that's proposed for April 1, 2013. It  
10 appears that there's more than enough room to not have  
11 the subsequent increase, and that would lead to 5 1/2  
12 percent over the two (2) GRA years, which is, you know,  
13 roughly in line with, perhaps a bit above, inflation.

14                   It's already built into people's budgets  
15 and -- and it -- it certainly begins and moves towards  
16 what we would say is a sensible and predictable  
17 transition to higher rate levels. There's no doubt  
18 when you get further out in the IFF, higher rate levels  
19 will be required. We're moving towards growing loads  
20 and need for new resources and higher cost resources.  
21 And certainly costs go up on things, aspects of  
22 operating and maintenance costs for example.

23                   So -- so it's not an objection to rate  
24 increases. It's a -- it's a chance to say, How do we  
25 do this on a sensible and orderly basis. So we built

1 into this in the first row the -- the proposed rate  
2 which are Hydro's rates. We added one (1) row which  
3 was -- which is a bit of a concern of mine. I -- I  
4 work for a lot of Utility Boards. I consider their  
5 decisions to be quite important for how we go forward,  
6 and -- and I think it's quite important that people be  
7 able to read them with -- with some confidence that  
8 what's been decided is -- is going to be implemented,  
9 and -- and despite some words mixed in the middle of  
10 it, I would read Board Order 5/12 to be -- to be making  
11 a point that -- the people could reasonably respect --  
12 accept -- expect a 1 percent lower rate.

13                   And so even though the start of this GRA  
14 April 1, 2012, I can accept that 1 percent being part  
15 of the increase, I'm not sure that I -- I was not  
16 accepting of the concept that that 1 percent from the  
17 deferral be just rolled into retained earnings. So  
18 that's the 26 million shown there. I think we've seen  
19 a few different numbers for it; somewhere between  
20 twenty-four (24) and -- and twenty-six (26), and maybe  
21 even a little bit off -- off of that range.

22                   But nonetheless it's -- it seemed that  
23 if -- if people are going to have due regard for this  
24 Board's orders, the -- that -- that decrease was -- was  
25 merited. Now, how it gets dealt with I -- I had some

1 suggestions. I think with bigger customers you could -  
2 - you could do a bill adjustment with smaller  
3 customers. You'd need to -- you'd need to think of a  
4 way that you could fundamentally apply that to their  
5 benefit. But it's not like you can go to every  
6 residential customer and restate their bill or write  
7 them a cheque. I don't believe --

8 MR. ANTOINE HACAULT: Mr. Bowman, I'm  
9 not too sure the Board's following you. When you're  
10 saying the 1 percent that's the one (1) -- there is a  
11 difference that I had brought up in my cross-  
12 examination between what was actually approved and then  
13 Hydro expressed the view that that 1 percent that had  
14 not been approved and was supposed to be put in a  
15 deferral account could continue to be charged as an  
16 interim rate until the Board said something about that  
17 1 percent.

18 That's the 1 percent that we're talking  
19 about?

20 MR. PATRICK BOWMAN: Right. And I'm  
21 saying that in their 2011/'12 statements Hydro -- my  
22 understanding is it was -- it was put in a deferral  
23 account. It was deferred. It does represent a balance  
24 that they have not taken into income, and that they're  
25 proposing to take into income in 2012/'13 as a one-time

1 amount.

2                   And -- and I'm suggesting that the  
3 amounts that relate to past years, not the test year,  
4 be credited back to customers in -- in some way or  
5 other to their benefit. And that's the \$26 million  
6 reported there. So instead of Hydro's one three-three-  
7 one (1,331) as revenues I would say one three-o-five  
8 (1,305) is an appropriate level of revenues.

9                   The second thing that's shown there is  
10 that Hydro is proposing another rate increase, of  
11 course, the 2013/'14. The way Hydro runs its IFF the  
12 past increase is already in general consumer revenues,  
13 so, Hydro is proposing another increase which is the  
14 sum total of 48 million in '13/'14 and going forward,  
15 and I'm saying that's a -- that's a rate increase that  
16 need not be implemented at this time but as far as  
17 years after that I've kept every other increase the  
18 same as what Hydro has put in.

19                   So instead of the forty-eight (48) in  
20 '13/'14 we've used zero. Instead of the one-o-four  
21 (104) in '14/'15 we've -- we've taken out the forty-  
22 eight (48) again and used fifty-six (56). We haven't  
23 touched extraprovincial. We've not touched the others  
24 so that you end up with the revenues shown there.

25                   On expense side it shows Hydro's

1 expenses across the board. Our suggestion is that --  
2 is that at least for the purposes of rate regulation if  
3 not something broader full-cost accounting as a  
4 principle be maintained. We've put in the full benefit  
5 of -- of an overhead practice based on full-cost  
6 accounting. It's possible that is -- has more that can  
7 be justified.

8                   That there are some things that Hydro  
9 was adjusting that is -- are perfectly reasonable. In  
10 which case the downward adjustment would not be as  
11 large as 56 million shown. Has less change in  
12 capitalized overhead. We -- we've used the fifty-six  
13 (56) from the previous schedule we just looked at.

14                   And fifty-eight (58) in the following  
15 years, and then we have said, Do not do your adjustment  
16 to DSM. It doesn't -- is not appropriate to put DSM  
17 through -- through net income -- or through O&M, I'm  
18 sorry. And --

19                   MR. ANTOINE HACAULT:    Sorry, on which  
20 line is that? When you say, DSM. I don't see DSM  
21 anywhere on this sheet.

22                   MR. PATRICK BOWMAN:    You would see less  
23 IFRS changes-DSM. And then below that you would see,  
24 Less IFRS changes-admin in general, and those are the  
25 further overheads that Hydro is proposing not to -- not



1 to capitalize. And so we've done those adjustments so  
2 that we've come up with an alternative operating and  
3 administrative cost for the purposes of this -- of this  
4 forum.

5 As a result of those adjustments and  
6 less revenues, we've put in a small amount of added  
7 interest expense just to make sure that the -- the  
8 compounding impact was not lost.

9 When it comes to depreciation and  
10 amortization, we have put back in depreciation as a --  
11 as a deferred amount. We've put back in the  
12 capitalized overhead impact. We have reversed out the  
13 change to Equal Life Group, assuming that an average  
14 service life is maintained and we have advanced by two  
15 (2) years the implementation of stopping net salvage,  
16 which is 60 million a year, but only for two (2) years,  
17 because by '14/'15, Hydro's already assuming net  
18 salvage is out of the mix.

19 And, again, I use sixty (60) on -- on  
20 the basis of -- of what was in Exhibit 55. Again,  
21 based on Mr. Kennedy's evidence, I don't believe the  
22 number may -- may quite be that large, but I've tried  
23 to use a consistent set of Manitoba Hydro numbers.

24 We -- we said there's no -- we have no  
25 comments on water rentals and assessments or fuel and

1 purchase power or capital and other taxes or corporate  
2 allocation to end up with the net income shown there.  
3 Manitoba Hydro's net income was numbers  
4 people were quoting of 60 million, I believe, and we're  
5 saying the net impact of all of the above is -- is a  
6 beneficial impact of 68 million despite not awarding  
7 the rate increase so that we would be saying, if all of  
8 these measures were adopted, nothing changed in O&M,  
9 nothing changed in budgeting for -- for vacancies, but  
10 all these measures were adopted and no rate increase  
11 was granted in '13/'14, Hydro would -- would, on the  
12 same basis, end up with a net income on the range of  
13 120 to 130 million, which -- which is -- was, in our  
14 view -- or my view, sufficient that I wouldn't be  
15 recommending a further -- a further rate increase. So  
16 that's all that table's doing.

17 As part of that, we also did an  
18 adjustment to the debt/equity ratio; that's two (2)  
19 pages back, and -- and all it is effectively doing is  
20 saying, when you go to calculate a debt/equity ratio,  
21 there's been fairly major amounts of spending on  
22 Keeyask and Conawapa which are not in service. We have  
23 netted those out of the debt and said that is not  
24 approved, it's not part of an NFAAT yet, it's not been  
25 received its OAC, it's not serving customers, it's not

1 used and useful, and so it's not appropriate to build  
2 those costs into the debt/equity calculation. And so  
3 we did an adjustment to debt/equity ratios, and it  
4 shows that rather than plummeting quite as far as Hydro  
5 said, the debt/equity -- what we call the regulated  
6 debt/equity, it would be a little higher.

7                   We would also say -- which is a point  
8 I'm happy to talk about, if you like. Hydro -- we  
9 agreed with Hydro earlier on that accumulated other  
10 comprehensive income is probably not a measure that's  
11 appropriately included in debt/equity ratio. My  
12 understanding is Hydro does look to include that at  
13 this point. But -- but AOCI is -- is not really  
14 something that -- that fits with the concepts of sort  
15 of a long-term type of number like that. So we've done  
16 that -- taken that out as well.

17                   The -- the end result, I think it's no -  
18 - no surprise, because I believe I've been through it.  
19 The recommendations to complete our pre-filed testimony  
20 are -- are at PUB-20. I don't know that anyone needs  
21 to go there, but in essence, as far as rates go,  
22 finalized rates at the level from September -- of  
23 September 1 on, not allow Hydro to retain the defer --  
24 deferred amounts from before April 1st, 2012. And, as  
25 I said, that might be 20 to 25 million. Get on with

1 doing a cost of service review and im -- and  
2 differential rates, because fairness is also related to  
3 between the classes.

4           And the only other thing I added is, in  
5 my understanding, the -- what was meant to be a -- a  
6 hearing based entirely on across-the-board rates has,  
7 in effect, been implemented with something a little bit  
8 different than that. Some total of about .2 percent,  
9 and -- and I'm suggesting that that be -- be adjusted  
10 to ensure that if -- if you're going to have a hearing  
11 that's based on across-the-board adjustments, that it's  
12 -- it's appropriate to make sure that each class is  
13 treated the same and fairly.

14           If there's evidence of different classes  
15 paying different amounts then that's fine, but -- but  
16 that would be, you know, relatively small. At .2  
17 percent of rate adjustments, it might be a -- it's --  
18 it's a total of seven (7) or ten thousand dollars  
19 (\$10,000) a year probably through, you know, a one (1)  
20 cent increase or something in -- in residential --

21           MR. RAYMOND LAFOND:    You meant seven  
22 (7) or \$10 million per year?

23           MR. PATRICK BOWMAN:    No, I mean seven  
24 (7) or ten thousand (10,000). It's a -- that -- that -  
25 - the effect of that rate change that was implemented,

1 and it was an Exhibit on this, was -- was that some  
2 classes received about a 2.3 percent, and some received  
3 about a 2.5 percent increase. And -- and it's not --  
4 again, it's not a grievous difference, but -- but if  
5 you're going to deal with a regulated environment, you  
6 make decisions based on evidence, evidence justifying  
7 different rate increases between classes, needs to be  
8 based on evidence showing how their costs relate to  
9 their rates. And -- and that evidence hasn't been  
10 reviewed. It's not intended to be reviewed in this  
11 proceeding.

12                   And so -- so I think the Board was quite  
13 -- quite wise in saying that this is a hearing that  
14 should be based on across-the-board. And -- and all  
15 I'm saying is that -- that that's -- that's a practical  
16 way to deal with things. But it should be implemented  
17 in full, as across-the-board, so -- which means that  
18 the revenues from each class should be -- should be  
19 changing by 2. -- 2.5 percent. And if that means  
20 changing customer charges versus energy charges, that's  
21 a question of rate design within a class.

22                   But across the classes, it's -- it's not  
23 appropriate, I don't -- I would submit, to do  
24 differential rate changes without -- without evidence  
25 of -- of a justified cost of service study.

1 MR. ANTOINE HACAULT: The Board may  
2 recall, and I don't know if I have the numbers exactly,  
3 but when I was asking questions of Mr. Wiens, I had  
4 tried to determined and -- because they had identified  
5 there was about seven hundred thousand dollars  
6 (\$700,000) short from the residential, and -- and I  
7 had asked him to do the number for the industrials, and  
8 it was about half a million dollars difference.

9 So if the same philosophy had been  
10 applied to the industrials, the industrials would have  
11 paid about five hundred thousand dollars (\$500,000)  
12 less. And my -- the reason for that questioning was  
13 that that continues to be in the rate base going  
14 forward. So that's what Mr. Bowman is com --  
15 commenting about.

16 MR. PATRICK BOWMAN: And -- and I'm not  
17 voicing a strong view as to whether its reduction of  
18 five hundred thousand (500,000), which is quite small  
19 to industrials, or an increase of seven hundred  
20 thousand (700,000) to residential and -- and others,  
21 or -- or whether it's some combination of the two (2).  
22 I'm -- I'm just saying the -- the premiss for across-  
23 the-board rates works at a class level and -- and the  
24 overall class revenues. And -- and if you're going to  
25 have a hearing premised on -- on across-the-board, and

1 I'm not getting into different impacts on customers, I  
2 would say whether it's here or elsewhere, you'd --  
3 you'd want to ensure that -- that you were achieving  
4 that end result.

5 THE CHAIRPERSON: Mr. Bowman, I -- just  
6 a follow-up question to -- to the document we just  
7 examined. Did you calculate the impact of what you're  
8 recommending on the other ratios that are cited by  
9 Manitoba Hydro as being key ratio, namely, the interest  
10 coverage ratio and the capital coverage ratio?

11 MR. PATRICK BOWMAN: No. I -- I could,  
12 but I -- I didn't, no.

13 MR. ANTOINE HACAULT: We could  
14 certainly do that for the Board.

15 THE CHAIRPERSON: Would Manitoba Hydro  
16 have any objection if we...?

17 MS. PATTI RAMAGE: No, I don't think we  
18 would.

19 THE CHAIRPERSON: Would it take you a  
20 while to prepare that?

21 MR. PATRICK BOWMAN: No. I could have  
22 it by tomorrow morning.

23 THE CHAIRPERSON: I think -- I think  
24 that would be useful for the Board. Thank you very  
25 much.

1 (BRIEF PAUSE)

2

3 MR. ANTOINE HACAULT: We're undertaking  
4 to provide to this Board the further details, with  
5 respect to page 2 of 6 in MIPUG -- or PUB/MIPUG-1-11  
6 revised for IFF12, with respect to other key metrics,  
7 such as the interest coverage ratio. And the...

8

9 --- UNDERTAKING NO. 95: Mr. Bowman to provide  
10 further details with  
11 respect to page 2 of 6 in  
12 PUB/MIPUG-1-11 revised for  
13 IFF12, with respect to  
14 other key metrics, such as  
15 the interest coverage ratio

16

17 CONTINUED BY MR. ANTOINE HACAULT:

18 MR. ANTOINE HACAULT: The last point.  
19 Mr. Bowman was referring you to MIPUG's response to the  
20 Public Utility Board Interrogatory 13. And that one  
21 was -- was not revised, but is just to explain the  
22 table that's found at page 2 of 3 in that particular  
23 response. So that's PUB/MIPUG Interrogatory 13.

24

25 And you produced a table in that  
document. Could you please obtain the source of that



1 table and provide comments with respect to that table.

2 MR. PATRICK BOWMAN: Yes. The question  
3 that was posed to us by the Board was: Provide  
4 comparative staffing levels for BC Hydro, and staffing  
5 levels per gigawatt hour, which presumably is a metric  
6 that the Board wanted to look at. They're referencing  
7 our -- our evidence at pages 4 -- 4 to 47, where we  
8 said Manitoba Hydro staffing has continued to grow and  
9 its O&Ms continue to grow.

10 And it struck me that the -- the  
11 framework there was quite a bit different than what had  
12 just happened in BC and -- and that soon -- we were --  
13 Quebec, where a Public Utilities Board can review a  
14 utility, but it becomes very hard to get very deep into  
15 the bowels. And so their reviews will have a tendency  
16 to be very much based on incremental changes, and  
17 percent year-over-year, and those type of things.

18 And instead, in BC they -- on top of a  
19 public utility board process, for a regulated utility  
20 they commissioned a committee of deputy ministers who -  
21 - who did the review of BC Hydro and -- and came back  
22 and said when -- when you get beyond incremental and  
23 you actually get into the bowels, they concluded that  
24 they could -- could identify some savings.

25 And so the Board -- we were referencing

1 that. The Board asked us to show what the staffing  
2 levels were. And we indicated we had some data to do  
3 that, which is in the tables and text, but I know how  
4 much Mr. Hacault prefers graphs. So I believe we would  
5 jump to the second page.

6 And on the second page is a graph that  
7 we didn't produce. This is -- we were asked to compare  
8 per gigawatt hour. We didn't have the data to be able  
9 to do that. But, conveniently, this graph had recently  
10 come out of that same BC review, so we -- we published  
11 it here. I -- I can't attest to the calculations.

12 But -- but they provided this graph on a  
13 -- on a basis that you're trying to do gigawatt hours  
14 produced per FTE. So gigawatt hours would be the --  
15 the numerator and full-time equivalents would be the  
16 denominator. And, as a result, their -- their  
17 assertion would be lower is worse. So, you know, lower  
18 means less gigawatt hours produced for every employee.

19 It's -- and -- and you can debate the  
20 metric, but their evidence here was -- BC Hydro done  
21 two (2) different ways. One (1) with the ex-Centra  
22 employees included, which I can explain if you like.  
23 One (1) without them. And then it compares to Hydro  
24 Quebec and Manitoba Hydro and -- and the -- for people  
25 who like graphs, I take it the graph sort of speaks for

1 itself, it shows Manitoba Hydro where it does and --  
2 and in -- relatively flat, but with a somewhat downward  
3 direction.

4 MR. ANTOINE HACAULT: And what's your  
5 understanding of the recommendation that was made to BC  
6 Hydro with respect to the reduction of its staffing?

7 MR. PATRICK BOWMAN: BC Hydro was  
8 recommended to review its staffing and reduce its  
9 staffing levels. I've -- I've -- as I've said, I've  
10 primarily gotten that information from reading the  
11 report. I've only talked to limited people about it,  
12 and I wasn't involved in the review. But I -- I am  
13 sceptical that this graph was a substantial part of the  
14 basis for that decision. I would think that decision  
15 comes from a whole bunch of other evidence.

16 I think this graph is -- is the kind of  
17 graphs that people have a tendency to produce to want  
18 to benchmark. And -- and I -- I'm sort of sceptical  
19 that it tells you very much in comparison between  
20 utilities. I don't think one (1) utility being higher  
21 on the graph and another being lower is -- is all that  
22 insightful, because their operations are -- are  
23 dramatically different, including the services they  
24 provide.

25 But -- but I do think it's possible

1 trends on this graph could be -- could be insightful.  
2 And -- and I think that's probably the key evidence  
3 that their -- that their committee was looking at, that  
4 Hydro Quebec was generally flat, Manitoba Hydro was  
5 generally decreasing in performance, and BC Hydro was  
6 dramatically decreasing in its -- in its performance  
7 and its output related to its employees, so.

8 MR. ANTOINE HACAULT: Thank you.  
9 Subject to any questions that this Board has of -- and  
10 it will continue to have them obviously during the  
11 cross-examinations, this completes the direct testimony  
12 of Mr. Bowman. And we thank the Board.

13 THE CHAIRPERSON: I have some questions  
14 that I would like to ask. In relation to the  
15 recommendations you have just made to this panel, Mr.  
16 Bowman, what is the impact to Manitoba Hydro's cash  
17 flow if we go ahead with your recommendations?

18 MR. PATRICK BOWMAN: Well, most -- most  
19 of the recommendations are non-cash. But the impact to  
20 the cash flow is -- is exactly the thing that we'll be  
21 preparing overnight to bring you back the targets and -  
22 - and perhaps it's your call, but perhaps it would be  
23 better to speak with that in the morning with the  
24 figures in front of us.

25 Is that -- if that's acceptable?

1 THE CHAIRPERSON: Now, in respect of  
2 the net income that would show up on the financial  
3 statements of Manitoba Hydro, do you have a sense of  
4 what that impact would be if we follow through with  
5 your recommendations? Specifically, I'm thinking of --  
6 beyond the impact on revenues, I'm thinking of what  
7 happens to the reported net income from Mani -- from  
8 Manitoba Hydro as a result of the implementation of  
9 your recommendations.

10 Specifically, I'm thinking of the  
11 earlier adoption and net salvage, if -- if Manitoba  
12 Hydro was to adopt that as part of their financial  
13 statements, would you know if they would have to  
14 qualify their financial statements or not?

15 MR. PATRICK BOWMAN: I've been directly  
16 involved in -- in one (1) utility who changed its net  
17 salvage policies on the basis of a recommendation  
18 utility board, and I've been involved in one (1) who  
19 changed their net salvage accruals on their own basis,  
20 and I'm generally aware of BC Hydro's, which was the  
21 one (1) that set a lot of this off, who -- who tried to  
22 go one (1) direction and the utility board directed to  
23 go another. And, to my knowledge, none of them were  
24 qualified.

25 BC Hydro's -- sought to do exactly what

1 Mr. Warden set out, which was to say, I'm going to  
2 change my policy and, as a result of changing my  
3 policy, I'm going to recalculate my accumulated  
4 depreciation, and I'm going to take that portion that  
5 was previously related to net salvage, and I'm going to  
6 report it as retained earnings. And they did propose  
7 that very adjustment.

8                   Now, I -- to my knowledge, it never made  
9 it to an audited financial statement because it  
10 received significant opposition in a BCUC hearing, and  
11 it was rejected by the BCUC. They said: Go ahead and  
12 stop setting aside. We accept no salvage in your  
13 rates.

14                   But for a utility that's regulated on a  
15 return-on-equity basis, taking a bunch of money that's  
16 been paid by customers to be set aside to take down  
17 assets, and all of a sudden calling that equity,  
18 investor's equity, in which the investor gets to earn a  
19 return, was -- was really quite offensive to that --  
20 that forum and customers objected, and the Board  
21 ultimately agreed with the customers.

22                   So they were -- they were made to keep  
23 that on the balance sheet as -- as a net salvage  
24 reserve. And even though nothing more is going towards  
25 it, nothing more is being put towards it, there's no

1 more salvage in rates, it -- it was still reported as a  
2 -- as some form of regulatory liability. And I'm not  
3 really sure what's happened to it since then.

4                   The others I'm aware of -- like I said,  
5 Yukon Energy was -- was directed to do the same thing  
6 BC had done, so they stopped accruing for net salvage,  
7 and their -- their policies now do not accrue for net  
8 salvage. There was no qualification on their  
9 statements, and they're -- they were audited by the  
10 Auditor General of Canada who can even be a little  
11 difficult on those points. But no qualification.

12                   And the Northwest Territories had a  
13 change in policy, that they still have a net salvage  
14 account. They still charge net salvage against that  
15 balance, but they have stopped accruing to that  
16 balance. And -- and again, they have not had a  
17 qualified statement, although, I'm not positive they've  
18 actually had statements since that decision -- well,  
19 wince that proposal was made and that policy change was  
20 made. It only -- I believe it was yesterday the Board  
21 finally issued its decision in that case, so.

22                   THE CHAIRPERSON:    So in terms of the  
23 rating agencies, the organizations that -- that have  
24 adopted a different methodology for rate setting than  
25 what appears in audited financial statements, now they

1 -- they submit what to the -- to the bond rating  
2 agencies for -- for an exposition of their financial  
3 results? Do they submit their rate setting data, or do  
4 they submit the audited financial statements to the  
5 bond rating agency?

6 MR PATRICK BOWMAN: Just to clarify,  
7 are we speaking in respect of net salvage now or -- or  
8 all matters generally?

9 THE CHAIRPERSON: All matters in  
10 general.

11 MR. PATRICK BOWMAN: Well, certainly,  
12 any one of those that I've dealt with, when they've had  
13 to -- had to submit information to lenders, for sure,  
14 there -- clearly is included their -- their financials.  
15 But it's -- it's usually included a fair bit of  
16 information about their -- their regulator, and the --  
17 the actions of their regulator, and the decisions of  
18 their regulator. Those -- those have certainly been  
19 reviewed.

20 Part of the -- part of my job in some of  
21 those cases has been to -- to participate in  
22 discussions with auditors about what Board decisions  
23 mean. And so auditors look at that, lenders look at  
24 that, bond rating agencies, I presume, look at that;  
25 I've never worked at a bond rating agency.



1                   And -- and so, from that perspective, I  
2 believe both parts of information are -- are relevant.  
3 As -- as I noted, certainly, the bond rating reports  
4 will make a point of referencing whether a utility is  
5 in a jurisdiction where a regulator is -- is reliable,  
6 and is accommodating of -- of rate increases when --  
7 when justified, and -- and is expected to -- to  
8 continue in a regulated forum. Like if there's a  
9 change in the legislation being debated, that -- that  
10 will be noted.

11                   But I guess to the -- to the greatest  
12 extent, people would -- people would make an effort to  
13 -- to align these two (2) things as much as possible  
14 where -- where that exists. And so something like net  
15 salvage, I would expect there's no requirement under  
16 GAAP for -- for Hydro to maintain net salvage. I would  
17 think if this Board said, We're not comfortable with  
18 your rates including net salvage at this time, my -- my  
19 expectation is Hydro would have to think long and hard  
20 whether it really wanted to -- to report or to fight to  
21 try to report some form of liability, and if it even  
22 could; that this Board is saying, you know, We don't --  
23 we don't think that's -- that's something you need to  
24 include in your rates.

25                   MR. RAYMOND LAFOND:     Just a follow-up

1 subsidiary question of the last one by the Chair. In  
2 ref -- in reference to -- to rating agencies, et  
3 cetera, of course, they would look at the utility,  
4 namely, Manitoba Hydro, but they would look at the  
5 whole province. So when you consider BC Hydro, for  
6 instance, and compare it to Manitoba in terms -- and  
7 these -- in terms of debt amount, what would that debt  
8 in Manitoba -- in BC Hydro, for instance, be, in  
9 proportion to the BC GDP or -- or the total debt of the  
10 province as opposed to Manitoba?

11                   And the point is because with the  
12 current debt levels and the projected debt levels with  
13 new generation, it becomes a very important proportion  
14 of the total Manitoba debt, and a very important  
15 proportion of Manitoba's gross product.

16                   Now, when you look at other provinces in  
17 that regards, you have to take that into consideration.  
18 Have you done that?

19                   MR. PATRICK BOWMAN: I -- I don't have  
20 any data on BC and the rel -- relative levels of BC  
21 Hydro's debt to the BC government debt. I -- I would  
22 say you've hit the nail on the head in terms of a  
23 rating agency taking a look at Manitoba Hydro and what  
24 matters in Manitoba Hydro.

25                   I would submit that \$20 million to

1 refund a 1 percent rate increase or -- over two (2)  
2 years or -- or even a \$60 million change to its net  
3 salvage policy where -- where this Board is saying,  
4 That's fine, we're -- we're comfortable, you have a  
5 policy of rolling those costs into new construction, I  
6 think those would be blips on the radar. People are  
7 looking at \$10 billion projects, not -- not 60 million  
8 in salvage, would be my submission.

9                   But I make one (1) more comment, which  
10 is it -- we -- we put a little bit at the front of our  
11 -- of our pre-filed testimony on the challenge of this  
12 GRA, and I -- I haven't necessarily hit on it too much.  
13 But this is an extremely difficult GRA to review, in a  
14 sense, because the IFF is just dominated by the future  
15 levels of development. It's -- it overwhelms anything  
16 else going on in the IFF, in a big way. And there are  
17 huge costs associated with that, there's huge  
18 variables, there's major uncertainty, and -- and it's  
19 not this Board's jurisdiction to make decisions on that  
20 and it's not in the test years. And Hydro will  
21 probably argue the same thing: It's not in the test  
22 years, so let's all not, you know, fuss ourselves with  
23 that right now. We'll get to that in due time.

24                   And I think that's -- that's a real  
25 challenge here, because we don't have what I would call

1 a baseline long-term scenario for reviewing Manitoba  
2 Hydro. And when I've been involved in these types of  
3 things in other places or -- or if you think logically  
4 about how you would want to look at the picture, your -  
5 - would fundamentally want to start with some form of  
6 baseline that says: Wait a minute, before I go chasing  
7 great opportunities, how do I -- how am -- I take care  
8 of the home front? How am I -- how am I supplying my  
9 load at the, you know, reasonable level of capital  
10 investment? When do I need to build something and  
11 what's going to make the most sense to build absent all  
12 of these great opportunities? Like, what is my -- what  
13 is my core requirements?

14                   And -- and certainly in other places  
15 where I've worked that would be your IFF. That would  
16 be your -- your core presentation. Then you can move  
17 on to say, But given that's my future, absent chasing  
18 opportunities, now I'm going to talk about the  
19 opportunities. And that may change things relatively  
20 dramatically. And it may lead to higher rates and it  
21 may lead to lower rates and it may lead to a bunch of  
22 borrowing. But you could -- if you want to be dealing  
23 with rates, you can sort of pull that page out and say,  
24 I want to understand that, but I'm -- I need to -- I  
25 need to understand the baseline.

1                   We're -- we're going to get to that  
2 eventually, but I don't want to be -- I don't want this  
3 to turn into doing an NFAAT on Hydro every two (2)  
4 years. And -- and without the information and without  
5 the -- the contracts and without the -- the capital  
6 cost estimates because they keep going up. And without  
7 an opportunity to talk to the engineers who are  
8 designing the thing, or how you're going to contract  
9 it.

10                   Like, there's so much information that  
11 is unavailable to us here today. And -- and probably,  
12 in fairness, not even fully available to Hydro yet, to  
13 be able to make all of those decisions. And -- and the  
14 -- the unfortunate part for today is -- is despite the  
15 speculative nature, and I -- and I don't mean  
16 speculative as gambling. I mean -- I mean that -- just  
17 an inherent uncertainty associated with it, and  
18 inherent questions. It's the only IFF you have  
19 available to you.

20                   And -- and I think that's -- that's  
21 unfortunate. And -- and I think it's a -- challenge  
22 for all of us. And it's one (1) of the reasons why  
23 you'll see in PUB-11, we -- we focus on five (5) years.  
24 Because it -- I -- I have no particular insight beyond  
25 the information filed here about -- about how the years

1 beyond that will -- will unfold and there's nowhere  
2 near enough information here to -- to really assess  
3 that.

4

5

(BRIEF PAUSE)

6

7 THE CHAIRPERSON: I think that's all  
8 the questions the panel has for this particular  
9 witness. So thank you very much, Mr. Bowman. And we -  
10 - I don't think we have any additional matters, or do  
11 we? No.

12

We are going to be recessed -- I'm  
13 sorry, we're going to be adjourning tonight, and  
14 resuming our activities tomorrow morning at 9:30. So  
15 we'll see you tomorrow morning. Thank you everyone.

16

17

(WITNESS RETIRES)

18

19 --- Upon adjourning at 5:11 p.m.

20

21 Certified Correct,

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24 Cheryl Lavigne, Ms.

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