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1 September 30, 2015  
 2 (9:18 a.m.)  
 3 CHAIRMAN:  
 4 Q. Before we get to Mr. Raphals, I believe there  
 5 are some preliminary matters that we must deal  
 6 with.  
 7 MS. GLYNN:  
 8 Q. Just some housekeeping matters, Mr. Chair. We  
 9 have distributed a corrected version of Figure  
 10 2 from Mr. Raphals Report, and there have been  
 11 some undertakings filed which Ms. Pennell will  
 12 speak to.  
 13 MS. PENNELL:  
 14 Q. Good morning, Mr. Chair. We have Undertakings  
 15 number 24, 26, 36, and 38 filed this morning.  
 16 CHAIRMAN:  
 17 Q. Okay. Now I think Mr. Luk, you're ready to go  
 18 to - and we have to affirm you once again,  
 19 sir.  
 20 MR. PHILIP RAPHALS (AFFIRMED) RE-EXAMINATION BY MR.  
 21 SENWUNG LUK:  
 22 MR. LUK:  
 23 Q. Ms. Gray, could I ask you to pull up  
 24 yesterday's transcript, Page 95, please. Mr.  
 25 Raphals, Mr. Brockman, the witness for  
 26 Newfoundland Power yesterday gave this as an

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1 answer, and I'll just quote, "With respect to  
 2 the early years", yes - to the question, "Do  
 3 you have any comment on that particular  
 4 chart", and that chart refers to the chart on  
 5 Page 9 of your pre-filed evidence.  
 6 MR. RAPHALS:  
 7 A. Yes.  
 8 MR. LUK:  
 9 Q. And he was asked, "Do you have any comment on  
 10 that particular chart", and Mr. Brockman said,  
 11 "With respect to the early years, yes, I do.  
 12 I had trouble sort of trying to figure out how  
 13 he got those first year numbers in there  
 14 because I thought - if you look at my RFI  
 15 response to PUB-NP-005, we went back and tried  
 16 to sort of figure out what he did there in  
 17 those early years between '93 and 2001. We  
 18 went back to a '95 cost of service study which  
 19 has a table, it has a schedule in it. I think  
 20 it's 1.2.1 in almost all of the ones that I've  
 21 looked at, there's a schedule in it that shows  
 22 you how they calculated the deficit  
 23 allocation, and we pulled the numbers out of  
 24 that and I put those in PUB-NP-005, and if I  
 25 look at the results on page 4 of 4 for '95,  
 26 anyway, I get for Newfoundland Power an

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1 average subsidy that is subsidy per customer,  
 2 I guess, \$115.00, and for Labrador  
 3 interconnected, \$433.00. So it was 3 to 1  
 4 even then. It's nothing new, so I don't know  
 5 why my numbers and Mr. Raphals numbers don't  
 6 agree. I suspect there's something wrong with  
 7 this graph, but haven't been able to figure  
 8 out what it is". Mr. Raphals, Mr. Brockman  
 9 had referred to PUB-NP-005, and Ms. Gray, can  
 10 you pull that up, please, and if you could  
 11 scroll down to Table 1. I believe this is  
 12 part of the numbers that Mr. Brockman was  
 13 referring to, and we've been given to  
 14 understand that the source for these  
 15 documents, which is referred to in footnote 1  
 16 is, in fact, a confidential source, is that  
 17 your understanding as well, Mr. Raphals?  
 18 MR. RAPHALS:  
 19 A. Yes, it is.  
 20 MR. LUK:  
 21 Q. And have you had a chance to review the source  
 22 for these numbers?  
 23 MR. RAPHALS:  
 24 A. Not directly.  
 25 MR. LUK:  
 26 Q. I'm sorry, could you -

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1 MR. RAPHALS:  
 2 A. Not directly. No, I have not.  
 3 MR. LUK:  
 4 Q. Thank you. So the answer that you will give  
 5 now to this set of question is not based on a  
 6 review of the source of the numbers that do  
 7 not agree with your numbers?  
 8 MR. RAPHALS:  
 9 A. That is correct.  
 10 MR. LUK:  
 11 Q. Okay. So Ms. Gray, could you scroll back to  
 12 the transcript, please. You've seen Mr.  
 13 Brockman's comments on your chart. Are there  
 14 any comments you would like to make in  
 15 response?  
 16 MR. RAPHALS:  
 17 A. Yes, I would. Good morning, Mr. Chairman,  
 18 Commissioners. If we could just go back to  
 19 page 9 of the transcript, the same day, just  
 20 to re-establish the context. This is - Mr.  
 21 Brockman's comments were in response to my  
 22 statement that we - just one moment. The  
 23 paragraph on page 9 starting around line 8,  
 24 that, "The figure shows that in 1993, the  
 25 rural deficit per customer in Labrador was  
 26 only 50 percent more than on the island", and

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1 my point was that at the time of the  
 2 Commission's Report in 1993, what they saw in  
 3 the present and in the foreseeable future was  
 4 on the order - on that order of magnitude, and  
 5 that they probably were not anticipating a  
 6 quadrupling of this gap. So that's why Mr.  
 7 Brockman's difference of opinion is important  
 8 because he's saying it was already 3 to 1. So  
 9 I went back to try to understand where this  
 10 conflict of numbers comes from. First of all,  
 11 I'd just like to be clear about where the  
 12 numbers that I used come from. Could we see  
 13 LWHN-NLH-055, Attachment 1. These are Hydro's  
 14 figures and the last two lines in this table  
 15 show Newfoundland Power rural deficit per  
 16 customer, and Labrador interconnected rural  
 17 deficit per customer, and these are precisely  
 18 the numbers that I entered into my Excel Sheet  
 19 to produce the graph that you have as Figure  
 20 2. So as you see in 1993, it's \$100.00 per  
 21 customer for Newfoundland Power, and \$147.00  
 22 for Labrador interconnected. Now the figures  
 23 that Mr. Brockman presented were for 1995, and  
 24 here - we can't see two things at once on the  
 25 screen, but the figures that are in PUB-NP-  
 26 005, there's only one number that differs

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1 substantially from this exhibit, which is the  
 2 number for Labrador interconnected. The  
 3 numbers for Newfoundland Power and the others  
 4 are approximately the same, but for Labrador  
 5 interconnected, Mr. Brockman's documents shows  
 6 3.4 million, whereas if we can go back now to  
 7 the other document, for 1995, it's now the  
 8 second line, the rural deficit allocated to  
 9 ALS is 1.17 million, and that's a very  
 10 substantial difference and that, in fact, is  
 11 the difference that accounts for the 50  
 12 percent differential that I saw, and the three  
 13 times differential that Mr. Brockman saw. So  
 14 really the question is which of these numbers  
 15 should we rely on. Obviously, neither of them  
 16 are mine, so I'm not really the right witness  
 17 to explain this, but we had some discussions  
 18 and I believe that Hydro's witnesses will  
 19 confirm this understanding next week, that  
 20 there were no test years between 1993 and 2001  
 21 or 2002, and so any numbers that may have been  
 22 produced during those years, it's not clear  
 23 exactly what sort of documents were produced,  
 24 but my understanding is that they were not  
 25 necessarily to be relied on in the same way as  
 26 test year documents which are presented to the

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1 Board. So we will no doubt learn more about  
 2 this next week, but what I retained from this  
 3 is that if we go back to my Figure 2, and you  
 4 now have the corrected version, the figures in  
 5 1993 are certainly solid because those are  
 6 figures that were presented to the Board. Can  
 7 we see the amended version that was presented  
 8 this morning.  
 9 MS. GRAY:  
 10 Q. I don't have that on electronic copy.  
 11 MR. RAPHALS:  
 12 A. Oh, okay I guess, we'll live with the other  
 13 one, but you have it in front of you, the page  
 14 that was - so the 1993, as we see, the  
 15 difference is small on the order of 50  
 16 percent, and in 2001, it's also around 50  
 17 percent. So my understanding at this point is  
 18 that what happened in between, those numbers  
 19 may be more or less solid, but in any case  
 20 they are bookends from '93 and 2001 that do  
 21 essentially show this same situation prior to  
 22 the dramatic change in 2002. So unless we  
 23 learn dramatically different things next week  
 24 about those cost of your test studies - sorry,  
 25 the cost of service studies in the non-test  
 26 years, my understanding remains that the big

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1 picture shown by this figure is correct, which  
 2 is that from 1993 looking forward, the  
 3 differential was on the order of 50 percent,  
 4 and it's only starting in 2002/2003 that it  
 5 became very much greater.  
 6 MR. LUK:  
 7 Q. Mr. Raphals, can you comment on what does that  
 8 mean for what the Board foresaw in 1993?  
 9 MR. RAPHALS:  
 10 A. Well, of course, I wasn't in their heads, but  
 11 it seems to me it would be surprising if in  
 12 1993 they imagined a situation where the  
 13 differential between Labrador and Newfoundland  
 14 Power rose to a factor of 3 or 4, as we're  
 15 seeing today.  
 16 MR. LUK:  
 17 Q. Thank you, that concludes our re-examination.  
 18 CHAIRMAN:  
 19 Q. Does anybody -  
 20 MR. YOUNG:  
 21 Q. No, that does clarify things from our  
 22 perspective, Mr. Chair, and as Mr. Raphals  
 23 said, if there are further questions on that,  
 24 we can probably deal with it in our  
 25 examination of Mr. Fagan, from our point of  
 26 view. We have no further questions at this

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1 point, thank you.  
 2 MR. O'BRIEN:  
 3 Q. I just have a couple questions.  
 4 MR. PHILIP RAPHALS - CROSS-EXAMINATION BY MR. LIAM  
 5 O'BRIEN:  
 6 MR. O'BRIEN:  
 7 Q. Mr. Raphals, basically, we're looking at two  
 8 potential sources of information that yourself  
 9 and Mr. Brockman were relying on, and really  
 10 the main issue here for us to look at is what  
 11 the Board had in their mind in '92, '93, when  
 12 they wrote that order, which we can see from  
 13 their comments, and certainly in 2001 and  
 14 2002, we see a big jump, so in terms of what  
 15 happened in between, we don't have any  
 16 information in terms of filings from Hydro on  
 17 cost of service studies or rates to really  
 18 rely on, is that right?  
 19 MR. RAPHALS:  
 20 A. That's right.  
 21 MR. O'BRIEN:  
 22 Q. I don't have any further questions.  
 23 CHAIRMAN:  
 24 Q. Okay, Mr. Johnson, no?  
 25 JOHNSON, Q.C.:  
 26 Q. No.

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1 CHAIRMAN:  
 2 Q. Mr. Coxworthy?  
 3 MR. COXWORTHY:  
 4 Q. No, thank you, Mr. Chair.  
 5 O'REILLY, Q.C.:  
 6 Q. No, Mr. Chairman.  
 7 CHAIRMAN:  
 8 Q. Do we?  
 9 GREENE, Q.C.:  
 10 Q. No, Mr. Chair.  
 11 CHAIRMAN:  
 12 Q. All right, so I guess we're finished with this  
 13 witness, and we're now going to -  
 14 MS. GLYNN:  
 15 Q. We're going to break for, like, three minutes.  
 16 CHAIRMAN:  
 17 Q. Three minutes.  
 18 (9:30 a.m.)  
 19 (RECESS)  
 20 (9:36 a.m.)  
 21 CHAIRMAN:  
 22 Q. Mr. Bowman, I understand, sir, that you wish  
 23 to be affirmed, is that correct, or are you  
 24 taking the Bible?  
 25 MR. DOUGLAS BOWMAN:  
 26 Q. I'll take the Bible.

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1 MR. DOUGLAS BOWMAN (SWORN) EXAMINATION-IN-CHIEF BY  
 2 JOHNSON, Q.C.:  
 3 JOHNSON, Q.C.:  
 4 Q. Mr. Bowman, I think momentarily - okay, it's  
 5 there now, your CV will be up on the screen,  
 6 okay. Mr. Bowman, and for the record, Douglas  
 7 Bowman, you have filed pre-filed evidence both  
 8 on Hydro's amended general rate application  
 9 and the initial filing on a number of issues.  
 10 Do you adopt the pre-filed evidence, Mr.  
 11 Bowman?  
 12 MR. DOUGLAS BOWMAN:  
 13 A. I do.  
 14 JOHNSON, Q.C.:  
 15 Q. There have also been requests for information  
 16 responded to as well on your evidence, do you  
 17 adopt these responses as well?  
 18 MR. DOUGLAS BOWMAN:  
 19 A. I do.  
 20 JOHNSON, Q.C.:  
 21 Q. Mr. Bowman, could you please provide the Board  
 22 with a brief outline of your experience in  
 23 relation to the matters addressed in your  
 24 evidence?  
 25 MR. DOUGLAS BOWMAN:  
 26 A. Yes. Just a little bit of background, I

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1 started out working for Ontario Hydro, which  
 2 is a vertically integrated - at the time was a  
 3 vertically integrated utility, much the same  
 4 as Newfoundland and Labrador Hydro. We were  
 5 primarily a generation and transmission  
 6 company, but also had some distribution much  
 7 the same as Hydro again. We had - I think the  
 8 main difference was the size of the system,  
 9 and then we had something in the order of 325  
 10 distribution companies as opposed to the one  
 11 primary distribution company here in  
 12 Newfoundland Power. While I was at Ontario  
 13 Hydro, I worked in transmission planning,  
 14 generation planning, transmission generation  
 15 operations, industrial customer service, and  
 16 rate design. While I was in rate design, I  
 17 developed a number of rate schedules for the  
 18 industrial customers in the province. Now we  
 19 had about 105 direct industrial customers and  
 20 they were defined as anyone served from the  
 21 transmission system who had loads over 5  
 22 megawatts. We also had over 100 large  
 23 industrial customers who were served by the  
 24 municipal utilities. Now the rates I designed  
 25 were - I implemented an interruptible rate  
 26 that had three different levels of

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1 interruptibility in it, and then we had a real  
 2 time pricing rate which, in effect, we set the  
 3 rates on a day ahead basis. So we determined  
 4 what our marginal costs were on that day, we  
 5 would send those rates to the industrial  
 6 customers who were participating in the rate,  
 7 and they would have the opportunity respond to  
 8 those rates in the next day. We also had a  
 9 surplus power rate which was much the same  
 10 thing. It was based on the marginal cost  
 11 predicted a day in advance, but what we did  
 12 was we bid their power into the market. So  
 13 what I did, I bit their power. I said, we'll  
 14 take marginal cost plus 0.5 cents per kilowatt  
 15 hours markup on that. Now if somebody else  
 16 came along, for example, a utility in New York  
 17 or Michigan, and bid a higher price, for  
 18 example, marginal cost plus 1 cent per  
 19 kilowatt hour, we would sell the power to them  
 20 instead. So our customers would be  
 21 interrupted. So this is a highly  
 22 interruptible rate, but it also helped to keep  
 23 those customers in service. They probably  
 24 would have closed down operations and moved  
 25 across the border to New York State, for  
 26 example. So those rates were put in place

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1 primarily for customer retention, but at the  
 2 same time to guarantee that we reduced the  
 3 revenue requirement we needed from other  
 4 customers on the system. Now once I left  
 5 Ontario Hydro, I worked for a number of  
 6 different consulting firms, and then, I think,  
 7 about nine years ago, I went out on my own. I  
 8 used a lot of contacts I established while I  
 9 was working for these different consulting  
 10 companies. Now since I've been a consultant,  
 11 I've appeared before this Board on a number of  
 12 occasions. Those occasions began in 1996,  
 13 which was an application by Newfoundland Power  
 14 at the time, and I've been involved in all of  
 15 the Hydro applications since that time. I  
 16 think the first one was 2001 that I was  
 17 involved in with Hydro. I've also appeared  
 18 before the Nova Scotia Utility and Review  
 19 Board. Other aspects of my consulting, I've  
 20 been very much involved in the move to  
 21 competitive electricity markets and that's on  
 22 this continent, in Europe, in Asia, and also  
 23 in Australia. The goal there was to set up  
 24 greater competition. Greater competition is  
 25 supposed to remove a lot of subsidies, for  
 26 example, the rural rate subsidy. It's also

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1 supposed to try and price power better, like,  
 2 move away from the monopoly pricing and move  
 3 into more of a marginal cost based pricing.  
 4 Having said that, that applies to energy only.  
 5 The transmission, distribution components  
 6 remain monopoly elements. I've also helped to  
 7 set up a number of regulatory boards.  
 8 Mongolia and Egypt come to mind. Then also  
 9 advised regulatory boards on regulatory  
 10 process in these various countries that are  
 11 starting to set up regulators. I think that  
 12 covers my background.  
 13 JOHNSON, Q.C.:  
 14 Q. Mr. Bowman, by way of education, I understand  
 15 that you a Bachelor of Science in Electrical  
 16 Engineering from State University of New York,  
 17 and a Masters of Science in Electrical  
 18 Engineering from the same university?  
 19 MR. DOUGLAS BOWMAN:  
 20 A. I do.  
 21 JOHNSON, Q.C.:  
 22 Q. Mr. Bowman, there have been, as you're aware,  
 23 certain issues settled since you filed your  
 24 evidence. However, there are still a number of  
 25 issues addressed in your evidence that remain  
 26 to be determined. Out of those remaining

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1 issues, I would ask you to provide a brief  
 2 summary on two of them at this point; namely,  
 3 load forecast and the rural deficit?  
 4 (9:45 a.m.)  
 5 MR. DOUGLAS BOWMAN:  
 6 A. I'll start with the rural deficit. There's  
 7 two elements of the rural deficit. The first  
 8 is the magnitude of the deficit. Back in 1992  
 9 when the Board did its cost of service study,  
 10 the magnitude of the deficit at that time was  
 11 of the order of 30 million dollars. In 2003,  
 12 when Hydro submitted a report on the rural  
 13 deficit as part of its GRA, the deficit had  
 14 climbed to about 40 million at that time. Now  
 15 it's forecast to be about 64 million for the  
 16 2015 test year. The deficit is clearly out of  
 17 control, it's rising to alarmingly high  
 18 levels. As Hydro's Report pointed out back in  
 19 2003, it's not uncommon for jurisdictions to  
 20 have subsidized rural rates or isolated rates,  
 21 but in cases they studied, they showed that  
 22 the largest subsidy amounted to about 1  
 23 percent of the utility's revenues, and that's  
 24 where it differs here in this jurisdiction  
 25 because the deficit at 64 million is starting  
 26 to approach 10 percent of the utility's

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1 revenues. So that's reached alarmingly high  
 2 levels. It's applied only to the two customer  
 3 groups, the Newfoundland Power customers plus  
 4 the Labrador interconnected. It amounts to  
 5 about a 13 percent increase over and above  
 6 cost to those two customer classes, if you  
 7 average it out over the customers on both  
 8 systems. Originally, it was funded by the  
 9 government. It's no longer funded by the  
 10 government. It's got to be a difficult -  
 11 certainly a very difficult burden for these  
 12 customer classes to pay, and as a result of  
 13 that, I urge the Board to follow all avenues  
 14 available that it has at its disposal to try  
 15 and transfer this money back to the  
 16 government. In my evidence, I noted where the  
 17 Board in the past has made a statement that at  
 18 the time they weren't inclined to take that  
 19 money out of Hydro's return, Hydro having the  
 20 government as its major shareholder. They  
 21 weren't inclined to do so because Hydro wasn't  
 22 receiving much of a rate of return at that  
 23 time, but now the rate of return is guaranteed  
 24 at 8.8 percent. That may give the Board more  
 25 wiggle room, and again I don't know if the  
 26 Board has this authority, and I don't know if

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1 this is the best time to do it when Hydro has  
 2 some significant financing costs on the  
 3 horizon, but I pose that as one thing that the  
 4 Board might want to consider. Now the second  
 5 part of the rural deficit, and I'll try and  
 6 summarize what's happened over the course of  
 7 the last couple of days. That deficit is  
 8 allocated. Now all cost in cost of service  
 9 study are allocated. You look for cost  
 10 causality and then once you've determined that  
 11 cost causality, you pick an allocator to  
 12 allocate those costs to the customers. Now  
 13 cost causality, I'll give you an example,  
 14 like, meters, cost of meters, what causes that  
 15 is the number of customers you have. So you  
 16 typically allocate meters on the basis of the  
 17 number of customers. In the rural deficit,  
 18 you don't have an allocator, there's no cost  
 19 causality because those customers didn't  
 20 impose those costs in the system. Someone  
 21 else did, and these customers are being  
 22 required to pay for those costs, and that's  
 23 something all the experts have agreed on,  
 24 including Mr. Brockman. There's no cost  
 25 causality associated with it. There's been a  
 26 statement that Mr. O'Brien has attributed to

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1 the Board at that time, the Board said - it  
 2 was a cost of service study and the Board  
 3 said, "Determine what drives the cost,  
 4 determine cost causality, pick an allocator  
 5 for that, deal with the impacts in rate  
 6 design", and that's an accurate statement when  
 7 you're looking at cost of service, but in this  
 8 case it's not an accurate statement because  
 9 those costs, there's no cost causality  
 10 associated with it. So you have to turn to  
 11 something different, and at the time the Board  
 12 turned to this unit cost method that Mr.  
 13 Brockman attempted to explain yesterday. It's  
 14 what Mr. Baker, the Board's consultant,  
 15 described as a mini cost of service. It's not  
 16 an easy thing to follow through. I know Mr.  
 17 Raphals had some problems with the way they  
 18 were determining how many customers were  
 19 associated with each system, and as Mr.  
 20 Brockman explained, that's in part because  
 21 Newfoundland Power is a retailer, they aren't  
 22 a retail customer. I believe that Hydro is  
 23 calculating that number correctly. It's very  
 24 difficult to follow through, so I don't think  
 25 I could do that without a model myself. I  
 26 think we all agree that there's no cost

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1 causality associated with this. The  
 2 allocation approach, the methodology is  
 3 totally arbitrary. Now they chose an  
 4 arbitrary method that has some basis in cost  
 5 of service, but again it's not clear to me why  
 6 you would choose such a complicated  
 7 methodology that's very difficult to follow,  
 8 certainly not simple, when it's arbitrary.  
 9 It's the result that matters here, as Mr.  
 10 Raphals said yesterday, and so you turn to the  
 11 results; well, there's a 27.6 percent rate  
 12 increase on the Labrador customers and  
 13 something much smaller on the Newfoundland  
 14 Power customers, I think 2 or 3 percent. That  
 15 is a significant difference, and Mr. Brockman  
 16 is saying, yeah, you have to deal with that  
 17 and you can deal with it through rate design,  
 18 you can do it through a step process. The  
 19 other part of that, though, and the part that  
 20 got my attention is that the Labrador  
 21 interconnected customers are required to pay a  
 22 premium of 42 percent above their cost of  
 23 supply, Newfoundland Power customers are  
 24 required to pay a premium of 12 percent, and  
 25 that's where the difference lies here. The  
 26 difference isn't in the allocation

|  |   |
|--|---|
| Page 21  | Page 23   |
| <p>1 methodology, we all agree it's arbitrary, the<br/>                 2 difference isn't that there's a cost causality<br/>                 3 association with this, the difference is the<br/>                 4 customer impact. I think all of the experts,<br/>                 5 with the exception of Mr. Brockman, believe<br/>                 6 that that 42 percent premium versus a 12<br/>                 7 percent premium for Newfoundland Power<br/>                 8 customers is extreme and should be addressed.<br/>                 9 Mr. Brockman believes that that's an<br/>                 10 acceptable result, and I think he bases that<br/>                 11 on the assumption that Labrador rates start at<br/>                 12 a low level. I don't accept that because<br/>                 13 Labrador rates are based on the cost of<br/>                 14 service. The costs come out of that cost of<br/>                 15 service study, that cost of service study has<br/>                 16 been approved by the Board. If there's<br/>                 17 something wrong with it, then correct the cost<br/>                 18 of service study, and nobody has suggested<br/>                 19 that that needs to be done. So that's what I<br/>                 20 see as the primary difference at this point.<br/>                 21 The Board will have to decide whether that 42<br/>                 22 percent premium for the Labrador<br/>                 23 interconnected customers versus the 12 percent<br/>                 24 premium for the Newfoundland Power customers<br/>                 25 is an acceptable result. The second issue<br/>                 26 relates to the 2015 loads included the cost of</p>           | <p>1 the abnormal 2013 IC peak demand for rate<br/>                 2 making purposes. Hydro's response to IC-NLH-<br/>                 3 140 is a fair and equitable way to normalize<br/>                 4 the allocation of the demand expenses". I<br/>                 5 also agree with that statement. Now where we<br/>                 6 differ, I believe we differ, is that there's a<br/>                 7 suggestion that that period of instability has<br/>                 8 ended; it has not. The forecast for 2016 for<br/>                 9 the industrial customer load, increases by 25<br/>                 10 percent over 2015 loads. In comparison,<br/>                 11 Newfoundland Power's load increases by about 2<br/>                 12 percent. In 2017, the industrial customer load<br/>                 13 increases by 40 percent over 2015 levels, and<br/>                 14 Newfoundland Power's load increases by<br/>                 15 something like 2.2 percent. That's a<br/>                 16 significant difference. I would expect there<br/>                 17 to be a significant change in cost allocation.<br/>                 18 All we're asking is that Hydro undertake a<br/>                 19 study to determine if that does indeed result<br/>                 20 in a significant change in cost allocation. I<br/>                 21 don't know what it results in because Hydro<br/>                 22 hasn't given us that information. I don't know<br/>                 23 what it requires, if they have to rerun their<br/>                 24 cost of service study, I don't believe they<br/>                 25 do, I think they can adjust the allocators. I<br/>                 26 think that's what they did when they</p> |
| Page 22  | Page 24   |
| <p>1 service study. I'll read a couple of quotes<br/>                 2 from some of the testimony. This is from Mr.<br/>                 3 Brockman in his April 2014 evidence, "A<br/>                 4 significant increase in load is expected at<br/>                 5 the Vale facility and the period rates will be<br/>                 6 in effect. The Board should consider whether<br/>                 7 the 2013 test year should be adjusted to<br/>                 8 incorporate this significant change in load on<br/>                 9 the island interconnected system". I agree<br/>                 10 with that statement. Now Mr. Patrick Bowman,<br/>                 11 his pre-filed testimony dated April 28, 2014,<br/>                 12 he says, "One of the underlying principles<br/>                 13 behind cost of service analysis is that it is<br/>                 14 never a precise tool for cost allocation.<br/>                 15 However, the analysis should reflect fair and<br/>                 16 reasonable estimation of the cost<br/>                 17 responsibility between customer classes for<br/>                 18 the periods in which the study is being<br/>                 19 applied". I also agree with that statement.<br/>                 20 Mr. Dean has said the PUB is being asked to<br/>                 21 set rates, and this was in his April 25, 2014,<br/>                 22 report, "The PUB is being asked to set rates<br/>                 23 based on a test year that is characterized by<br/>                 24 an unstable period in demand". He goes on to<br/>                 25 say that, "A preferred approach would be to<br/>                 26 keep the methodology the same, but normalize</p> | <p>1 normalized the load for the response to IC-<br/>                 2 NLH-140. I also don't know if it's<br/>                 3 insignificant, as suggested by Mr. Greneman.<br/>                 4 The numbers I did see were quite a bit higher<br/>                 5 than what I would consider insignificant, but<br/>                 6 again Hydro hasn't submitted any formal<br/>                 7 numbers on the record. Once we see those, we<br/>                 8 can make the decision. If it is<br/>                 9 insignificant, and if we had known that during<br/>                 10 the negotiations, that's something we would<br/>                 11 have put on the list of settled issues, but we<br/>                 12 did not have that information. So I'm just<br/>                 13 requesting that the Consumer Advocate be given<br/>                 14 the same latitude that the industrial<br/>                 15 customers were given in response to IC-NLH-<br/>                 16 140.<br/>                 17 JOHNSON, Q.C.:<br/>                 18 Q. Does that conclude your opening remarks, Mr.<br/>                 19 Bowman?<br/>                 20 MR. DOUGLAS BOWMAN:<br/>                 21 A. Yes.<br/>                 22 JOHNSON, Q.C.:<br/>                 23 Q. Thank you.<br/>                 24 CHAIRMAN:<br/>                 25 Q. Over to -<br/>                 26 MR. YOUNG:</p>  |

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| <p>1 Q. Thank you, Mr. Chair. Ms. Pennell just<br/>2 mentioned to me that there was an undertaking<br/>3 that had been requested. I don't know if it's<br/>4 required, it's certainly not required for my<br/>5 cross-examination, but she's getting close to<br/>6 having it finished. Perhaps by the break we<br/>7 can have that ready.</p> <p>8 MS. PENNELL:<br/>9 Q. Uh-hm.</p> <p>10 MR. DOUGLAS BOWMAN - CROSS-EXAMINATION BY MR. GEOFFREY<br/>11 YOUNG:<br/>12 MR. YOUNG:<br/>13 Q. Good morning, Mr. Bowman, welcome back, good<br/>14 to see you.</p> <p>15 MR. DOUGLAS BOWMAN:<br/>16 A. Good morning.</p> <p>17 MR. YOUNG:<br/>18 Q. Two areas of examination this morning<br/>19 principally. The first is the deferral<br/>20 accounts. I wonder if I can take you to your<br/>21 pre-filed testimony dated June 1, 2015. I'm<br/>22 not sure which line it is. Could you scroll<br/>23 down, please, to page 5. Thank you. It says,<br/>24 "I recommend that the Board deny Hydro's<br/>25 proposal to establish new supply cost variance<br/>26 accounts referred to as the isolated system</p>   | <p>1 Board with respect to establishing or<br/>2 preventing the establishment of deferral<br/>3 accounts?</p> <p>4 MR. DOUGLAS BOWMAN:<br/>5 A. I'm not aware of any, no.</p> <p>6 MR. YOUNG:<br/>7 Q. I'd like to, if I could, put this in some<br/>8 better context, refer to the transcript of<br/>9 September 24th, page 103. At the bottom of<br/>10 the page there, Mr. Johnson was examining Mr.<br/>11 Henderson, and the question is, "So along with<br/>12 you increasing your return on equity<br/>13 dramatically, you're asking to be relieved of<br/>14 this risk. I say it's a business risk, but you<br/>15 can call it what you will, of the risk and for<br/>16 it to be placed on consumers". Mr.<br/>17 Henderson's answer is, "It's an uncontrollable<br/>18 cost that Hydro is incurring because of the<br/>19 manner in which Hydro operates, is to provide<br/>20 the most efficient use of the electricity<br/>21 system, and in doing that we're driving costs<br/>22 on Hydro that Hydro, in essence, can't control<br/>23 other than to do things that are not the most<br/>24 effective way to operate the power system".<br/>25 That's the circumstance Hydro finds itself in,<br/>26 according to Mr. Henderson. I put it to you,</p> |
| <p>1 supply cost variance deferral account", and<br/>2 you listed a few others, and you say, "There<br/>3 is no justification for transferring these<br/>4 risks to consumers when Hydro has been assured<br/>5 a much higher and uncontested return on equity<br/>6 fixed by government directive OC2009-063". I<br/>7 wonder, Ms. Gray, if we can turn to page 16 of<br/>8 Mr. Brockman's evidence. At line 16, "There's<br/>9 no justification for transferring these risks<br/>10 to consumers when Hydro has been assured a<br/>11 higher uncontested return on equity fixed by<br/>12 government directive, OC2009-063. In fact,<br/>13 just the opposite is true, with a higher<br/>14 return on equity, Hydro should take on more<br/>15 risk". I'd like to probe the relationship, if<br/>16 I could, between deferral accounts and return<br/>17 on equity. First just to clarify this, I<br/>18 assume you would agree with me that, to your<br/>19 knowledge, there is no directives to the Board<br/>20 regarding Hydro's deferral accounts,<br/>21 establishing them or preventing the Board from<br/>22 establishing new ones, is that correct?</p> <p>23 MR. DOUGLAS BOWMAN:<br/>24 A. Are you asking me if there is -</p> <p>25 MR. YOUNG:<br/>26 Q. Yes, are you aware of any directives to the</p> | <p>1 though, for your comment, that deferral<br/>2 account mechanisms are a normal fact of life<br/>3 for regulated utilities with supply risks,<br/>4 would you agree with that generally?</p> <p>5 MR. DOUGLAS BOWMAN:<br/>6 A. They're certainly common in this jurisdiction.</p> <p>7 MR. YOUNG:<br/>8 Q. Well, and inherent in Mr. Johnson's question,<br/>9 I'm not asking you to read his mind, but it<br/>10 appears to be a premise that if a utility has<br/>11 deferral accounts, the regulator would<br/>12 normally give a lower return on equity. Is<br/>13 that relationship one that you hold?</p> <p>14 MR. DOUGLAS BOWMAN:<br/>15 A. I think that's true, yes.</p> <p>16 MR. YOUNG:<br/>17 Q. I suppose, the converse is true, if you had a<br/>18 high return on equity, the utility should not<br/>19 have deferral accounts? I think that's your<br/>20 proposition, is that correct?</p> <p>21 MR. DOUGLAS BOWMAN:<br/>22 A. Yes.</p> <p>23 MR. YOUNG:<br/>24 Q. Ms. Gray, I wonder if we could turn to PUB-<br/>25 NLH-388. Thank you. Mr. Bowman, this is an<br/>26 answer to an RFI, whereby a number of</p>  |

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| <p>1 utilities with deferral mechanisms, supply<br/>2 cost deferral mechanisms, are listed, and on<br/>3 the next page, we don't really need to go<br/>4 there in detail, but on the next page there's<br/>5 greater description about those. I think, you<br/>6 said it's common in this jurisdiction. I<br/>7 don't disagree with you, but I think from this<br/>8 RFI, we can indicate to the Board, and I'll<br/>9 ask you to do that, in fact, it's common<br/>10 elsewhere, it happens from place to place<br/>11 fairly often?</p> <p>12 MR. DOUGLAS BOWMAN:<br/>13 A. I've seen deferral accounts elsewhere, yes.<br/>14 MR. YOUNG:<br/>15 Q. I wonder if we could look to page 3.35 of<br/>16 Hydro's amended evidence. There's a chart<br/>17 there, Chart 3.4. I apologize for those<br/>18 looking on the screen, it's a busy chart and<br/>19 there's a lot going on there. This chart<br/>20 provides data of ROE targets amongst Canadian<br/>21 regulated utilities, and we know Newfoundland<br/>22 Power is there and we know that it avails of<br/>23 deferral accounts, and we can get into that in<br/>24 a moment, but you're aware that Newfoundland<br/>25 Power has deferral accounts because of Board<br/>26 orders, correct?</p> | <p>1 that is that of those that I just listed,<br/>2 they're all above average, actually, and<br/>3 they're all considerably above or at least<br/>4 materially above Newfoundland Power's ROE,<br/>5 which is going to be the benchmark to be used<br/>6 in this jurisdiction for Hydro also?</p> <p>7 MR. DOUGLAS BOWMAN:<br/>8 A. It looks like the average is 9 percent.<br/>9 MR. YOUNG:<br/>10 Q. Right, and those I just mentioned are just<br/>11 uphill of that or several of them are at<br/>12 least?</p> <p>13 MR. DOUGLAS BOWMAN:<br/>14 A. Some are, yes.<br/>15 (10:00 a.m.)<br/>16 MR. YOUNG:<br/>17 Q. Some are, correct. The ones I just mentioned,<br/>18 I think they all are, but some of them are<br/>19 very close at 10. I wonder if we could turn<br/>20 to page PUB-NLH-098. We were talking a few<br/>21 minutes ago about this Board and this<br/>22 jurisdiction and deferral accounts, and listed<br/>23 on page 1 at the bottom is Hydro's deferral<br/>24 accounts, and on page 2 are the Newfoundland<br/>25 Power deferral accounts. I'm just wondering,<br/>26 and you've been testifying here for a number</p> |
| <p>1 MR. DOUGLAS BOWMAN:<br/>2 A. I'm aware of that.<br/>3 MR. YOUNG:<br/>4 Q. This is subject to check, and I don't want you<br/>5 to painstakingly, unless you feel it's<br/>6 necessary and useful, to go through the other<br/>7 RFI we just talked about, but if we were to<br/>8 look at that chart and, in particular, the<br/>9 utilities listed on the right hand side -<br/>10 well, first of all, you'll see fourth from the<br/>11 left is Newfoundland Power, and going across<br/>12 the screen you get a number of others that are<br/>13 in the last RFI that I mentioned, I don't<br/>14 think we need to go there, but it's Nova<br/>15 Scotia Power, OPG, Maritime Electric, Fortis<br/>16 BC, Manitoba Hydro, BC Hydro, and if I was to<br/>17 suggest to you that all of those utilities are<br/>18 on the list with deferral accounts, would that<br/>19 surprise you, or would that be within what<br/>20 you'd expect?</p> <p>21 MR. DOUGLAS BOWMAN:<br/>22 A. I wouldn't expect it, but I wouldn't be<br/>23 surprised either.<br/>24 MR. YOUNG:<br/>25 Q. I wonder if we can turn to - before we leave<br/>26 this one, you know, what I find striking about</p>  | <p>1 of years, as you've mentioned, would you agree<br/>2 that both utilities have a number of deferral<br/>3 accounts, a couple of business risks in this<br/>4 jurisdiction, and that that is the way things<br/>5 have been done here for quite some time?</p> <p>6 MR. DOUGLAS BOWMAN:<br/>7 A. As I said earlier, there's a lot of deferral<br/>8 accounts in this jurisdiction.<br/>9 MR. YOUNG:<br/>10 Q. I wonder if we could turn to NLH-NP-007,<br/>11 please, and again I won't go through this, Mr.<br/>12 Brockman (sic.), unless you feel the need to<br/>13 look at this more closely, but just to give<br/>14 you a sense -</p> <p>15 MR. DOUGLAS BOWMAN:<br/>16 A. That would be Mr. Bowman.<br/>17 MR. YOUNG:<br/>18 Q. Sorry, that's an error I shouldn't have made.<br/>19 MR. DOUGLAS BOWMAN:<br/>20 A. Mr. Doug Bowman.<br/>21 MR. YOUNG:<br/>22 Q. Yes, indeed, there's enough Bowman's. I<br/>23 should have gotten - my chances of getting it<br/>24 right were higher, but I apologize for that.<br/>25 Have you looked at this RFI, are you familiar<br/>26 with these other supply cost recovery</p>                   |

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| <p>1 mechanisms of other utilities?</p> <p>2 MR. DOUGLAS BOWMAN:</p> <p>3 A. Yes.</p> <p>4 MR. YOUNG:</p> <p>5 Q. And do you have any reason to believe that the</p> <p>6 approach taken in the other jurisdictions</p> <p>7 would not be applicable to the present one?</p> <p>8 MR. DOUGLAS BOWMAN:</p> <p>9 A. The deferral accounts I normally see are,</p> <p>10 like, fuel adjustment clauses, and we've</p> <p>11 discussed this at length over the years and my</p> <p>12 objection to the RSP is that it should look</p> <p>13 more like one of those, and I think if you had</p> <p>14 something like that, you'd be able to collapse</p> <p>15 a number of these deferral accounts into one,</p> <p>16 and my objection to the deferral accounts is</p> <p>17 you're going to review these again next year,</p> <p>18 anyway, you're coming in for a rate</p> <p>19 application in a year and a half or so, it</p> <p>20 seems to me you can take on that risk for this</p> <p>21 short period of time until we've actually had</p> <p>22 a chance to review these new deferral</p> <p>23 mechanisms.</p> <p>24 MR. YOUNG:</p> <p>25 Q. You say take on the risks. Are you talking</p> <p>26 about forecast risks?</p>                             | <p>1 but predictability is not one of them.</p> <p>2 MR. DOUGLAS BOWMAN:</p> <p>3 A. I agree.</p> <p>4 MR. YOUNG:</p> <p>5 Q. So forecasting these things is, to say the</p> <p>6 least, a challenge. Next area of examination</p> <p>7 has to do with -- well, similarly about some</p> <p>8 comments you made about Hydro's return on</p> <p>9 equity, but it's got to do with a point you</p> <p>10 raised a few minutes ago in your direct</p> <p>11 testimony about the rural deficit and the</p> <p>12 connection between that. And I don't need to</p> <p>13 bring you back to your direct evidence because</p> <p>14 you just reiterated it as to your suggestion</p> <p>15 to the Board that it consider ways of making</p> <p>16 some finding or directive or recommendation, I</p> <p>17 suppose, I'm not sure which it would be</p> <p>18 considering the legal issues, and you've</p> <p>19 referred to those obliquely at least that</p> <p>20 there might be one. But I'm just wondering if</p> <p>21 we can consider the basis for it a little.</p> <p>22 Mr. Raphals has provided evidence that in</p> <p>23 some jurisdictions they look at low population</p> <p>24 densities and those sorts of factors and they</p> <p>25 might be higher cost regions and they look at</p> <p>26 those separately from higher density</p> |
| <p>1 MR. DOUGLAS BOWMAN:</p> <p>2 A. Forecast risk and the risks -- like when you</p> <p>3 have a deferral account, like the Holyrood</p> <p>4 fuel conversion factor, for example, it takes</p> <p>5 away your incentive to do a better job on the</p> <p>6 fuel conversion efficiency. You're just going</p> <p>7 to pass the costs through anyway.</p> <p>8 MR. YOUNG:</p> <p>9 Q. Are you familiar with the testimony Mr.</p> <p>10 Henderson gave about the way the fuel</p> <p>11 conversion factor can be influenced by the way</p> <p>12 that Hydro ought to deal with that asset in</p> <p>13 providing support for the system from time to</p> <p>14 time?</p> <p>15 MR. DOUGLAS BOWMAN:</p> <p>16 A. I understand that, yes.</p> <p>17 MR. YOUNG:</p> <p>18 Q. I wonder if we can go to Chart 3.9 on page 347</p> <p>19 of Hydro's pre-filed evidence? Thank you.</p> <p>20 Zoom in on the chart a little bit please.</p> <p>21 Thanks. Bringing this up, Mr. Bowman, for</p> <p>22 your comment because we're talking about</p> <p>23 forecast risk, this is diesel fuel price</p> <p>24 variability. This is in Hydro's pre-filed</p> <p>25 evidence. I would suggest to you there's a</p> <p>26 lot of things you can say about this graph,</p> | <p>1 population areas which have lower costs, and I</p> <p>2 think there was some discussion also yesterday</p> <p>3 with Mr. Brockman that that can result in</p> <p>4 inherent unavoidable subsidies. Do you agree</p> <p>5 with that?</p> <p>6 MR. DOUGLAS BOWMAN:</p> <p>7 A. Yes.</p> <p>8 MR. YOUNG:</p> <p>9 Q. Sometimes, and I guess it's a matter of degree</p> <p>10 and that's a point you've raised, but I think</p> <p>11 it's inevitable at some level. I know, Mr.</p> <p>12 Bowman, that you're familiar with the Province</p> <p>13 generally for personal reasons.</p> <p>14 MR. DOUGLAS BOWMAN:</p> <p>15 A. Yes.</p> <p>16 MR. YOUNG:</p> <p>17 Q. And that, you know, you know the distribution</p> <p>18 of people in the Province is what it is. It's</p> <p>19 -- there's a few larger towns, there's a few</p> <p>20 cities and there's a lot of sparse areas. And</p> <p>21 I'll ask you whether you would agree that</p> <p>22 that's also true for Newfoundland Power's</p> <p>23 service area to some degree? They have areas</p> <p>24 like the Burin Peninsula, for example, that</p> <p>25 are generally geographically distant from a</p> <p>26 large centre and a lot of spread out</p>  |

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1 customers.  
 2 MR. DOUGLAS BOWMAN:  
 3 A. Yes.  
 4 MR. YOUNG:  
 5 Q. I'm just wondering if we were to do -- and I'm  
 6 not suggesting this, by the way, but if we  
 7 were to do a cost of service study or have  
 8 Newfoundland Power do one that looked at the  
 9 cost structures and actually what the costs  
 10 are of different regions of their service  
 11 territory, would you anticipate that there  
 12 would be higher costs in rural, sparsely  
 13 populated areas and lower costs to urban ones?  
 14 MR. DOUGLAS BOWMAN:  
 15 A. Generally speaking, yeah.  
 16 MR. YOUNG:  
 17 Q. And would you anticipate that someone in -- if  
 18 you were to do that and show those numbers,  
 19 would you anticipate that there might be some  
 20 disagreement potentially at least -- put that  
 21 information on the bills, as we heard  
 22 yesterday -- from people in the higher density  
 23 and lower cost areas?  
 24 MR. DOUGLAS BOWMAN:  
 25 A. Disagreement on costs?  
 26 MR. YOUNG:

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1 Q. Yeah. Do you think somebody might say that  
 2 that's a subsidy I shouldn't pay, for example?  
 3 MR. DOUGLAS BOWMAN:  
 4 A. Oh, I think -- yeah, I think if the customers  
 5 were aware. Like for example, St. John's  
 6 customers are aware that they're paying  
 7 probably more than their true cost of supply,  
 8 I think they might object, yes.  
 9 MR. YOUNG:  
 10 Q. And do you think it likely at all that they  
 11 would say it should come from the shareholders  
 12 of Newfoundland Power? Or do you think that  
 13 they would look to some other regulatory  
 14 process?  
 15 MR. DOUGLAS BOWMAN:  
 16 A. I don't know what they'd do.  
 17 MR. YOUNG:  
 18 Q. No, I don't either. My last question is just  
 19 a matter of clarification unrelated to the  
 20 other two, and it relates to Hydro has an  
 21 application before the Board, as you realize,  
 22 for the 2014 and 2015 revenue deficiency and  
 23 we've made a proposal, and just curious about  
 24 your views about this, that the easiest way --  
 25 I spoke to Mr. Brockman about this -- is that  
 26 it could be taken from the RSP as a fairly

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1 straight forward and useful way to deal with  
 2 that. Would you have any problem if the  
 3 deficiency were approved to be collected that  
 4 it would come from that source?  
 5 MR. DOUGLAS BOWMAN:  
 6 A. I think the balances that have built up in the  
 7 RSP should be used to smooth customer rate  
 8 impacts and if the Board were to decide that  
 9 those 2014 costs were to be recovered, that  
 10 would be one thing to look at.  
 11 MR. YOUNG:  
 12 Q. Thank you. Those are all my questions for Mr.  
 13 Bowman.  
 14 CHAIRMAN:  
 15 Q. Mr. O'Brien.  
 16 MR. DOUGLAS BOWMAN, CROSS-EXAMINATION BY MR. LIAM O'BRIEN  
 17 MR. O'BRIEN:  
 18 Q. Thank you, Mr. Chair. Good morning, Mr.  
 19 Bowman.  
 20 MR. DOUGLAS BOWMAN:  
 21 A. Good morning.  
 22 MR. O'BRIEN:  
 23 Q. I only have a few areas, I guess, to cover  
 24 with you, a couple of areas. The rural  
 25 deficit, I guess, is the main area for me.  
 26 And I've listened to your direct evidence here

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1 today. So you've sat through and listened to  
 2 the testimony of a number of the experts on  
 3 this and I take it from what you've heard and  
 4 what you've said this morning, you agree  
 5 obviously this allocation is sort of an  
 6 arbitrary exercise. Is that right?  
 7 MR. DOUGLAS BOWMAN:  
 8 A. I do.  
 9 MR. O'BRIEN:  
 10 Q. And I take it you would agree with me that  
 11 while we're talking fairness, we're really  
 12 trying to decide which is the least unfair way  
 13 to do this.  
 14 MR. DOUGLAS BOWMAN:  
 15 A. That's true.  
 16 MR. O'BRIEN:  
 17 Q. Because ultimately, there's no cost causality  
 18 and these two groups are -- it wouldn't be --  
 19 it's not necessarily fair in general for  
 20 someone to pay more than their cost of  
 21 service?  
 22 MR. DOUGLAS BOWMAN:  
 23 A. That's true.  
 24 MR. O'BRIEN:  
 25 Q. Okay. And I take it you would have no qualms  
 26 with agreeing that really we're all experts on

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| <p>1 general fairness. There's nobody in the room</p> <p>2 really an expert in that regard. Would you</p> <p>3 agree?</p> <p>4 MR. DOUGLAS BOWMAN:</p> <p>5 A. I agree everybody has an opinion.</p> <p>6 MR. O'BRIEN:</p> <p>7 Q. Yeah, and really there's no perfect way to</p> <p>8 deal with this allocation, is there?</p> <p>9 MR. DOUGLAS BOWMAN:</p> <p>10 A. I'd be hard pressed to come up with a perfect</p> <p>11 way of dealing with it, yes.</p> <p>12 MR. O'BRIEN:</p> <p>13 Q. And I think that tends to be the general</p> <p>14 consensus. Wondering in terms of your pre-</p> <p>15 filed evidence, you focused on the -- it</p> <p>16 appeared to me you were focusing on the</p> <p>17 revenue requirement method. Is that your</p> <p>18 preferred method for this allocation?</p> <p>19 MR. DOUGLAS BOWMAN:</p> <p>20 A. The revenue method, I think it's referred to,</p> <p>21 yeah.</p> <p>22 MR. O'BRIEN:</p> <p>23 Q. And you've read the Board's 1992-93 Order from</p> <p>24 the generic cost of service?</p> <p>25 MR. DOUGLAS BOWMAN:</p> <p>26 A. I have.</p> | <p>1 customers are being required to pay 12 percent</p> <p>2 more. I don't see where it matters how much -</p> <p>3 - what the magnitude of that number is. Like</p> <p>4 when you get into the magnitude of the number,</p> <p>5 how much -- like I don't know how you decide</p> <p>6 when enough is enough. Like this is 42</p> <p>7 percent versus 12, why 42 percent and not say</p> <p>8 30 percent and 12 and a half or something? I</p> <p>9 don't know how you'd make that distinction.</p> <p>10 MR. O'BRIEN:</p> <p>11 Q. Well, let's put aside the magnitude of it, I</p> <p>12 guess, in terms of that and just look at the</p> <p>13 concept itself. Do you agree or do you have a</p> <p>14 concern with the fact that on the basis of the</p> <p>15 revenue requirement method, someone who is</p> <p>16 paying a higher cost of service is being asked</p> <p>17 to take on a higher portion of this</p> <p>18 allocation, just because they have a higher</p> <p>19 cost of service? That's what the revenue</p> <p>20 requirement method results in, doesn't it?</p> <p>21 MR. DOUGLAS BOWMAN:</p> <p>22 A. It does that in terms of the magnitude.</p> <p>23 MR. O'BRIEN:</p> <p>24 Q. Yeah.</p> <p>25 MR. DOUGLAS BOWMAN:</p> <p>26 A. And like I said, I think this comes down to</p> |
| <p>1 MR. O'BRIEN:</p> <p>2 Q. And noted, I'm assuming, that the Board at</p> <p>3 that time rejected that method?</p> <p>4 MR. DOUGLAS BOWMAN:</p> <p>5 A. I do, yeah.</p> <p>6 MR. O'BRIEN:</p> <p>7 Q. And one of the reasons I believe they</p> <p>8 indicated they didn't like the method was is</p> <p>9 that it sort of looked like someone who was</p> <p>10 paying a higher cost of service was being</p> <p>11 asked to pay more because they're paying more.</p> <p>12 Is that right?</p> <p>13 MR. DOUGLAS BOWMAN:</p> <p>14 A. I think that was alluded to.</p> <p>15 MR. O'BRIEN:</p> <p>16 Q. Yeah. And do you have any comment or opinion</p> <p>17 on that? Does that bother you in terms of</p> <p>18 that method?</p> <p>19 MR. DOUGLAS BOWMAN:</p> <p>20 A. No.</p> <p>21 MR. O'BRIEN:</p> <p>22 Q. And why is that?</p> <p>23 MR. DOUGLAS BOWMAN:</p> <p>24 A. To me, the cost of service is what it is and</p> <p>25 they're being asked to pay 42 percent more</p> <p>26 than their costs and Newfoundland Power</p>   | <p>1 the Board deciding whether a customer paying</p> <p>2 42 percent more than its cost of service and</p> <p>3 another one paying 12 percent more, I think</p> <p>4 that is a key issue here, and the Board has to</p> <p>5 decide if that's reasonable and if it is, how</p> <p>6 do you integrate that the one customer group</p> <p>7 is being allocated more of that subsidy, and I</p> <p>8 don't -- I guess I don't see that same issue</p> <p>9 that Mr. Brockman's talking about.</p> <p>10 MR. O'BRIEN:</p> <p>11 Q. When you say 42 percent more, you're talking</p> <p>12 about the table that we saw, Table 4.2 in the</p> <p>13 evidence? Is that right? The revenue to cost</p> <p>14 ratios that we saw, 1.42 and 1.12?</p> <p>15 MR. DOUGLAS BOWMAN:</p> <p>16 A. Yes.</p> <p>17 MR. O'BRIEN:</p> <p>18 Q. Okay. And so, and that's what you mention</p> <p>19 when you say the 42 percent premium and the 12</p> <p>20 percent premium in your direct?</p> <p>21 MR. DOUGLAS BOWMAN:</p> <p>22 A. That's right.</p> <p>23 MR. O'BRIEN:</p> <p>24 Q. And those revenue to cost ratios, is that</p> <p>25 generally how you would measure fairness in</p> <p>26 this type of a context?</p>  |

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|--|--|
| <p>1 MR. DOUGLAS BOWMAN:<br/> 2 A. It's an indicator of fairness to me, yes. We<br/> 3 always look at the -- that number, the<br/> 4 denominator is the cost that come out of the<br/> 5 cost of service study.<br/> 6 MR. O'BRIEN:<br/> 7 Q. Yeah.<br/> 8 MR. DOUGLAS BOWMAN:<br/> 9 A. The numerator is the revenues that you're<br/> 10 collecting from that customer class. So it<br/> 11 does reflect the premium that they're paying<br/> 12 over the cost of supply.<br/> 13 MR. O'BRIEN:<br/> 14 Q. And because one is higher than the other,<br/> 15 that's your -- is that your definition of<br/> 16 fairness, the two should be the same?<br/> 17 MR. DOUGLAS BOWMAN:<br/> 18 A. I think they should be a lot closer than 42<br/> 19 and 12.<br/> 20 (10:15 a.m.)<br/> 21 MR. O'BRIEN:<br/> 22 Q. And you heard Mr. Brockman's testimony, just<br/> 23 sort of on the revenue to cost ratios in<br/> 24 general, on how they're used? You generally<br/> 25 put all the costs into revenue and all the<br/> 26 costs in the numerator and all the costs in</p> | <p>1 Q. And if company B had ten dollars revenue and<br/> 2 ten dollars cost, what would the revenue to<br/> 3 cost ratio be?<br/> 4 MR. DOUGLAS BOWMAN:<br/> 5 A. One.<br/> 6 MR. O'BRIEN:<br/> 7 Q. And let's suppose we decided to allocate five<br/> 8 dollars to each one of these, as if it's a<br/> 9 subsidy to each company. So we take company<br/> 10 one which got revenue of five, cost of five,<br/> 11 and has one. We gave them five in the<br/> 12 revenue, we'd have ten over five, wouldn't we?<br/> 13 MR. DOUGLAS BOWMAN:<br/> 14 A. Yes.<br/> 15 MR. O'BRIEN:<br/> 16 Q. And what's the revenue to cost ratio there?<br/> 17 MR. DOUGLAS BOWMAN:<br/> 18 A. That would be two.<br/> 19 MR. O'BRIEN:<br/> 20 Q. That'd be two. If you gave five to company B,<br/> 21 you have ten over ten, you gave them five in<br/> 22 the revenue and now you have 15 over ten.<br/> 23 What's the revenue to cost ratio?<br/> 24 MR. DOUGLAS BOWMAN:<br/> 25 A. 1.5.<br/> 26 MR. O'BRIEN:</p>                           |
| <p>1 the denominator, don't you?<br/> 2 MR. DOUGLAS BOWMAN:<br/> 3 A. Well, you generally put all the costs derived<br/> 4 in the cost of service in the denominator.<br/> 5 MR. O'BRIEN:<br/> 6 Q. Okay.<br/> 7 MR. DOUGLAS BOWMAN:<br/> 8 A. I don't know that you put subsidies in the<br/> 9 numerator. I don't agree with his statement<br/> 10 on that. Like if you put those costs in,<br/> 11 you'd get one every time.<br/> 12 MR. O'BRIEN:<br/> 13 Q. You'd get one every time, wouldn't you?<br/> 14 MR. DOUGLAS BOWMAN:<br/> 15 A. Yeah. I don't understand how that provides<br/> 16 any useful information.<br/> 17 MR. O'BRIEN:<br/> 18 Q. Well, let me just see if I can walk through<br/> 19 with you just a simple example. Let's suppose<br/> 20 we had two companies, A and B, and company A<br/> 21 had a -- paid five dollars a year in revenue<br/> 22 and five dollars cost. What would their<br/> 23 revenue to cost ratio be?<br/> 24 MR. DOUGLAS BOWMAN:<br/> 25 A. One.<br/> 26 MR. O'BRIEN:</p>   | <p>1 Q. Are they the same?<br/> 2 MR. DOUGLAS BOWMAN:<br/> 3 A. No, those would be different. 1.5 is<br/> 4 different from two.<br/> 5 MR. O'BRIEN:<br/> 6 Q. Yeah, a fair bit different, isn't it?<br/> 7 MR. DOUGLAS BOWMAN:<br/> 8 A. Yes, certainly.<br/> 9 MR. O'BRIEN:<br/> 10 Q. Okay. And you've given them both the same in<br/> 11 terms of the allocation.<br/> 12 MR. DOUGLAS BOWMAN:<br/> 13 A. Yes.<br/> 14 MR. O'BRIEN:<br/> 15 Q. Okay. So does that revenue to cost ratio in<br/> 16 that example indicate anything about fairness?<br/> 17 MR. DOUGLAS BOWMAN:<br/> 18 A. Like I said, I think this is what the Board<br/> 19 has to wrestle with, this point. Like I<br/> 20 understand you're talking about transferring<br/> 21 more of the money to one customer group just<br/> 22 because it has a higher cost of service. I<br/> 23 understand the concept. I just think that you<br/> 24 still -- I think still that 42 percent more<br/> 25 versus 12 percent more is extreme.<br/> 26 MR. O'BRIEN:</p> |

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1 Q. Now we have 50 percent more in these ones, but  
 2 both got the same in terms of the revenue  
 3 allocation, which is what the other -- the  
 4 shared cost, customer cost is reporting.  
 5 MR. DOUGLAS BOWMAN:  
 6 A. Yeah, I agree with your math. I didn't agree  
 7 with your analogy. I don't agree with the  
 8 result.  
 9 MR. O'BRIEN:  
 10 Q. Okay. And you talked about impact in your  
 11 direct and we did -- and I've gone through  
 12 with a couple of the witnesses and I think you  
 13 had heard as well and sort of attributed a  
 14 comment to me as well in your direct about the  
 15 impact. You're talking about magnitude as  
 16 being different now than it was back then. Is  
 17 that your concern for the Board? In 1992-93,  
 18 we were -- the Board was looking at a 50  
 19 percent increase or a difference between the  
 20 two groups. Is that right?  
 21 MR. DOUGLAS BOWMAN:  
 22 A. Actually, I don't think I referred to that in  
 23 my evidence.  
 24 MR. O'BRIEN:  
 25 Q. Okay. And maybe I misunderstood you. I think  
 26 you had attributed a comment to me about

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1 impact.  
 2 MR. DOUGLAS BOWMAN:  
 3 A. No, I think the comment I attributed to you  
 4 was about the -- you determined in a typical  
 5 cost of service study, the first thing you  
 6 look at is you get a cost, you determine  
 7 causality.  
 8 MR. O'BRIEN:  
 9 Q. Yeah, okay.  
 10 MR. DOUGLAS BOWMAN:  
 11 A. What caused you to incur that cost. And then  
 12 you select an allocator to fairly allocate  
 13 that cost to the customer groups.  
 14 MR. O'BRIEN:  
 15 Q. Okay.  
 16 MR. DOUGLAS BOWMAN:  
 17 A. And then if it has an adverse customer impact,  
 18 then you address that in rate design, and I  
 19 think that's the quote you're making. I put  
 20 that in layman's terms, but I think that's the  
 21 analogy you were making and I was saying that  
 22 that is a correct analogy for a cost of  
 23 service.  
 24 MR. O'BRIEN:  
 25 Q. Okay.  
 26 MR. DOUGLAS BOWMAN:

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1 A. It's not the correct analogy for the rural  
 2 rate deficit which has no cost causality.  
 3 MR. O'BRIEN:  
 4 Q. It did seem to be the analysis the Board took  
 5 in '93 though? Is that right? They looked  
 6 at, well, we should separate how we look at  
 7 the fairness of the allocation from the fact  
 8 that one has -- the result ultimately is the  
 9 Labrador Interconnected customers would end up  
 10 paying twice what the Newfoundland Power  
 11 customers would be paying?  
 12 MR. DOUGLAS BOWMAN:  
 13 A. I think the Board looked at the result, yes.  
 14 MR. O'BRIEN:  
 15 Q. Okay. And they were satisfied at that point  
 16 they could deal with that difference in the  
 17 context of a rate design or a phasing?  
 18 MR. DOUGLAS BOWMAN:  
 19 A. I don't know what the Board's thinking was on  
 20 that. I don't remember them -- I don't  
 21 remember the Board specifically stating that.  
 22 MR. O'BRIEN:  
 23 Q. Okay. Maybe I can point you to the comment,  
 24 just to be -- could we bring up PUB-NLH-113,  
 25 Attachment 1, page 62 of the attachment? I'm  
 26 just going to find my reference for you. If

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1 we look at -- can we go up just a little bit  
 2 there? Okay, that's 59. Sorry, page 65. I  
 3 apologize. Yeah, okay.  
 4 When we come down here, "the result of  
 5 this approach is to increase unit cost equally  
 6 to two interconnected systems." So that's  
 7 what the unit cost approach that was proposed  
 8 by Mr. Baker would do, according to the Board.  
 9 "However, Mr. Baker points out that this  
 10 method attempts to equalize the subsidy  
 11 between the Island and Labrador. Since  
 12 Labrador has not paid the subsidy in the past  
 13 and has not been adjusted in costs for the  
 14 purpose of this allocation only, Labrador's  
 15 increase in cost is twice as large as for the  
 16 Island." So at that time, the Board was  
 17 cognizant that that would be twice as much for  
 18 Labrador customers as the Island. And  
 19 "matters relating to the possible rate shock  
 20 are best addressed in the context of a rate  
 21 hearing. This report has been restricted to  
 22 methodology only."  
 23 MR. DOUGLAS BOWMAN:  
 24 A. Okay.  
 25 MR. O'BRIEN:  
 26 Q. So you agree with me that the Board looked at

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1 the allocation methodology separate from sort  
 2 of the amount and how to deal with that?  
 3 MR. DOUGLAS BOWMAN:  
 4 A. I think they did, yes.  
 5 MR. O'BRIEN:  
 6 Q. And now, I take it your opinion now is that  
 7 the Board should take another review of this  
 8 on the basis that the magnitudes are much  
 9 different now than they were back then?  
 10 MR. DOUGLAS BOWMAN:  
 11 A. Yes.  
 12 MR. O'BRIEN:  
 13 Q. Okay. One of the other things I wanted to  
 14 talk to you about, Mr. Bowman, was in your  
 15 evidence you talked about a concern about  
 16 price signals and Mr. Brockman gave some  
 17 evidence on that yesterday. I believe you had  
 18 indicated that you were concerned that having  
 19 so much of the rural rate subsidy go to  
 20 Labrador Island interconnected customers would  
 21 distort the price signal. Can you talk me  
 22 through that?  
 23 MR. DOUGLAS BOWMAN:  
 24 A. Well, it distorts the embedded price signal.  
 25 These customers are paying 42 percent more  
 26 than 100 percent of the costs. So that sends

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1 a conservation signal to them that's probably  
 2 quite a bit more than what it should be. Mr.  
 3 Brockman talked about the marginal price  
 4 signal. I agree with his concept on that. I  
 5 don't know that I agree with the marginal  
 6 costs that are attributed to Labrador. It's a  
 7 hydro based system. I'm not sure the marginal  
 8 costs aren't closer to zero.  
 9 MR. O'BRIEN:  
 10 Q. Okay. And to be honest, I think -- I believe  
 11 I understood that might be what you were going  
 12 to say. You accept what Mr. Brockman said in  
 13 terms of when you talk about efficiency, you  
 14 look at the marginal costs. But I'm not sure  
 15 you accept Hydro's numbers in terms of the  
 16 marginal costs for this.  
 17 MR. DOUGLAS BOWMAN:  
 18 A. I'm not sure I accept that, plus I always  
 19 believe the first order of efficiency is to  
 20 have rates that reflect costs, and that's --  
 21 in this jurisdiction, that's based on embedded  
 22 costs. Second order of efficiency is to  
 23 reflect the marginal price signal in the  
 24 rates, and if you were to use Mr. Brockman's  
 25 analogy of the marginal price signal, that  
 26 applies equally as well to Newfoundland Power.

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1 Newfoundland Power's marginal cost on the  
 2 island are considerably higher than they are  
 3 in Labrador. So you could also increase the  
 4 rates considerably in Newfoundland Power and  
 5 still be well under the marginal price signal.  
 6 MR. O'BRIEN:  
 7 Q. So in terms of we can -- I can take you to an  
 8 RFI, but I understand that Hydro's position is  
 9 with the interconnection, the marginal cost of  
 10 Newfoundland Power's customers and Hydro's --  
 11 and the Labrador Interconnected customers  
 12 would be similar. Do you accept that?  
 13 MR. DOUGLAS BOWMAN:  
 14 A. No.  
 15 MR. O'BRIEN:  
 16 Q. You don't?  
 17 MR. DOUGLAS BOWMAN:  
 18 A. I will wait to see the results of the marginal  
 19 cost study before I accept that.  
 20 MR. O'BRIEN:  
 21 Q. Okay. So, if they are similar and they're  
 22 higher than what the unit -- what the cost the  
 23 Labrador Interconnected customers are paying  
 24 right now, would we be sending a different  
 25 signal by having them pay less right now?  
 26 MR. DOUGLAS BOWMAN:

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1 A. Can you repeat that?  
 2 MR. O'BRIEN:  
 3 Q. Okay. Well, let's suppose they are, and we  
 4 get the understanding from the RFI we looked  
 5 at yesterday, and maybe I can take you to  
 6 that, that the marginal cost in 2018 would be  
 7 around, I guess, five cents a kilowatt hour.  
 8 \$50 a megawatt hour, I think is what the RFI  
 9 said.  
 10 MR. DOUGLAS BOWMAN:  
 11 A. Can you take us to that?  
 12 MR. O'BRIEN:  
 13 Q. Yeah. Let's have a look at the RFI just to be  
 14 sure. I think it's CA-NLH-033, Revision 1,  
 15 and if we scroll through to the next page,  
 16 okay. So this is the Labrador  
 17 interconnection. After interconnection we see  
 18 the Island, and I don't believe isolated is  
 19 intended to be there. I understand the Island  
 20 Interconnected system, the marginal cost would  
 21 be \$50 a megawatt hour.  
 22 And we see from another RFI, which I can  
 23 take you to, NP-NLH-402, read through the  
 24 question there, "the Labrador Interconnected  
 25 system is expected to be linked to the Island  
 26 Interconnected system in the foreseeable

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|--|---|
| <p>1 future. Please explain whether Hydro<br/>2 considers that following interconnection, the<br/>3 marginal cost of power on both systems would<br/>4 be similar." And if you look at line 10 to<br/>5 12, Hydro would consider the marginal cost of<br/>6 power on both systems to be similar after<br/>7 consideration of losses following<br/>8 interconnection.</p> <p>9 MR. DOUGLAS BOWMAN:<br/>10 A. I saw that, yes.</p> <p>11 MR. O'BRIEN:<br/>12 Q. Yeah, okay. So if what we understand now,<br/>13 that Labrador costs in the -- as proposed<br/>14 would be three cents a kilowatt hour, 3.4<br/>15 cents a kilowatt hour, and we're expecting an<br/>16 interconnection marginal cost to be around<br/>17 five cents a kilowatt hour, would we not want<br/>18 to send costs up a little bit closer to<br/>19 marginal cost as opposed to keeping them down<br/>20 to send the right signal?</p> <p>21 MR. DOUGLAS BOWMAN:<br/>22 A. If you do, you can do that in the rate design.</p> <p>23 MR. O'BRIEN:<br/>24 Q. Okay. So if that's the way to do it -- you'd<br/>25 mentioned in terms of marginal cost, you're<br/>26 not really certain that the marginal costs are</p> | <p>1 more information you can put in front of the<br/>2 Board to make the decision.</p> <p>3 MR. O'BRIEN:<br/>4 Q. And what if things change as a result of that<br/>5 and then you have to go back to have a look at<br/>6 it again?</p> <p>7 MR. DOUGLAS BOWMAN:<br/>8 A. I don't know what would change. You've got a<br/>9 rural deficit. I suppose if the deficit -- if<br/>10 it disappeared, that would change things.</p> <p>11 MR. O'BRIEN:<br/>12 Q. I think we're probably in agreement that might<br/>13 not happen, but you see no reason to consider<br/>14 this down the road?</p> <p>15 MR. DOUGLAS BOWMAN:<br/>16 A. I don't see any reason to wait, no.</p> <p>17 MR. O'BRIEN:<br/>18 Q. I don't have any further questions for Mr.<br/>19 Bowman.</p> <p>20 CHAIRMAN:<br/>21 Q. Mr. Coxworthy.</p> <p>22 MR. DOUGLAS BOWMAN, CROSS-EXAMINATION BY MR. PAUL<br/>23 COXWORTHY<br/>24 MR. COXWORTHY:<br/>25 Q. Yes, thank you, Mr. Chair. Mr. Chair, there<br/>26 are a couple of areas that I anticipate cross-</p>  |
| <p>1 going to be what Hydro has indicated here.</p> <p>2 MR. DOUGLAS BOWMAN:<br/>3 A. I don't think anybody is, as marginal cost<br/>4 setting that way.</p> <p>5 MR. O'BRIEN:<br/>6 Q. Okay. And we know there's a marginal cost<br/>7 study that's going to be done in the next -- I<br/>8 believe it's a year and a half, I think, by<br/>9 the end of 2016. Is that what Hydro has<br/>10 indicated?</p> <p>11 MR. DOUGLAS BOWMAN:<br/>12 A. I thought it was the end of this year.</p> <p>13 MR. O'BRIEN:<br/>14 Q. Okay, end of this year. So, I'm wondering<br/>15 whether or not it would be more appropriate to<br/>16 look at marginal cost and another cost of<br/>17 service study before we consider making any<br/>18 changes to the system we have right now, in<br/>19 terms of allocation. What's your thoughts on<br/>20 that?</p> <p>21 MR. DOUGLAS BOWMAN:<br/>22 A. I don't think you need to wait.</p> <p>23 MR. O'BRIEN:<br/>24 Q. No? Why not?</p> <p>25 MR. DOUGLAS BOWMAN:<br/>26 A. It's a fairness issue. I don't know how much</p>  | <p>1 examining Mr. Bowman on. One of which he's<br/>2 adverted to some information that the Consumer<br/>3 Advocate has previously requested for by way<br/>4 of an undertaking, but I'm certainly prepared<br/>5 to start on the other area, but once we get to<br/>6 that area, I may be asking if we could break<br/>7 in anticipation that that further information<br/>8 may be available during the break.</p> <p>9 Good morning, Mr. Bowman.</p> <p>10 MR. DOUGLAS BOWMAN:<br/>11 A. Good morning.</p> <p>12 MR. COXWORTHY:<br/>13 Q. Mr. Bowman, I'd like to turn to page 13-14 of<br/>14 your pre-filed evidence, and that's your<br/>15 evidence with respect to the treatment of the<br/>16 Industrial Customer load variation component<br/>17 of the RSP that's accumulated from September<br/>18 1, 2013 to December 31st, 2014.</p> <p>19 MR. DOUGLAS BOWMAN:<br/>20 A. Yes.<br/>21 (10:30 a.m.)<br/>22 MR. COXWORTHY:<br/>23 Q. Is that still your position as expressed<br/>24 there, that there should be a transfer of that<br/>25 accumulated load variation component to the<br/>26 Newfoundland Power account, RSP account?</p> |

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1 MR. DOUGLAS BOWMAN:  
 2 A. I don't know if that requires a transfer or  
 3 not. It's just an account that's sitting  
 4 there. So they have to decide how to disburse  
 5 it.  
 6 MR. COXWORTHY:  
 7 Q. What you say, and this is at page 14 of your  
 8 evidence, is you are proposing to the Board  
 9 that "an order transferring this balance from  
 10 the Island Industrial RSP account to  
 11 Newfoundland Power's account, although  
 12 symbolic, would at least allow the Board to  
 13 recognize the violation of cost of service."  
 14 So are you proposing to the Board that they  
 15 should make such an order?  
 16 MR. DOUGLAS BOWMAN:  
 17 A. I think the Board should consider doing that,  
 18 yes.  
 19 MR. COXWORTHY:  
 20 Q. The 1.85 million dollar figure that you refer  
 21 to, and you refer to it in reference to CA-  
 22 NLH-311, and perhaps we could bring that up,  
 23 please, Ms. Gray? And if we could turn to  
 24 page one of one. And the 1.85 figure --  
 25 million dollar figure that you refer to in  
 26 your evidence, Mr. Bowman, can you confirm is

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1 that -- are you adding in column I, the  
 2 451,000 odd dollars at the end of 2013 with  
 3 the 1.4 million at the end of 2014 to derive  
 4 at that number?  
 5 MR. DOUGLAS BOWMAN:  
 6 A. I can't see the end column.  
 7 MR. COXWORTHY:  
 8 Q. It is difficult because when you scroll down,  
 9 you start to lose the plot a little bit. So  
 10 it is Column I, the load variation for the  
 11 Industrial Customers. Just if you could  
 12 advise us what the -- how you derived at 1.85  
 13 million?  
 14 MR. DOUGLAS BOWMAN:  
 15 A. Oh, okay. Yeah, I think I just added those  
 16 two numbers together.  
 17 MR. COXWORTHY:  
 18 Q. And in terms of ordering that transfer, with  
 19 the Board ordering the transfer of that  
 20 balance, you characterize that as "although  
 21 symbolic". Can you expand on why you consider  
 22 it to be symbolic?  
 23 MR. DOUGLAS BOWMAN:  
 24 A. Well, as Hydro pointed out in one of its RFIs,  
 25 because the Industrial Customers were paying -  
 26 - because their rates were frozen and they're

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1 paying much less than the cost of service, it  
 2 amounted to a subsidy of 37.6 million dollars  
 3 transferred from Newfoundland Power customers  
 4 to the Industrial Customers.  
 5 MR. COXWORTHY:  
 6 Q. So what would be served by transferring the  
 7 1.85 million dollars if, as you characterize  
 8 it, the Order in Council has had this effect  
 9 as has been answered by Hydro in RFI? What's  
 10 the purpose of transferring if it's simply a  
 11 symbolic gesture?  
 12 MR. DOUGLAS BOWMAN:  
 13 A. I think the 1.85 million would be happily  
 14 received by Newfoundland Power customers.  
 15 MR. COXWORTHY:  
 16 Q. How much do you think that would work out per  
 17 customer?  
 18 MR. DOUGLAS BOWMAN:  
 19 A. It would be small. It's not nearly as large  
 20 as the 37.6 million dollars. As I say, it's  
 21 symbolic.  
 22 MR. COXWORTHY:  
 23 Q. And how would you think that would end up back  
 24 in the hands of the Newfoundland Power  
 25 customers? Are you proposing that this should  
 26 be added on to the rebate that's provided for

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1 in the Order in Council?  
 2 MR. DOUGLAS BOWMAN:  
 3 A. The way I see it, there's a number of  
 4 accounts, RSP accounts out there with balances  
 5 in them and I would just see the Board  
 6 allocating those balances in some form that  
 7 smooths out rate increases.  
 8 MR. COXWORTHY:  
 9 Q. You've suggested in this evidence that this  
 10 would be a means of the Board recognizing,  
 11 acknowledging you say in another place, the  
 12 violation of cost of service and rate design  
 13 principles that arose as a result of the Order  
 14 in Council. Are you suggesting to the Board  
 15 that they should disregard the spirit and  
 16 intent of the Order in Council?  
 17 MR. DOUGLAS BOWMAN:  
 18 A. No, I think they're legally bound by it.  
 19 MR. COXWORTHY:  
 20 Q. Have you considered whether what you're  
 21 proposing, transferring that balance, might be  
 22 a violation of the Order in Council?  
 23 MR. DOUGLAS BOWMAN:  
 24 A. I don't know if it is or not. I guess you  
 25 lawyers will decide that.  
 26 MR. COXWORTHY:

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|---|--|
| <p>1 Q. That's right, that is a matter for legal<br/>2 submission, isn't it?<br/>3 MR. DOUGLAS BOWMAN:<br/>4 A. Yes.<br/>5 MR. COXWORTHY:<br/>6 Q. Thank you, Mr. Bowman. Mr. Bowman, during the<br/>7 cross -- sorry, during your direct evidence,<br/>8 you referred to agreeing to the evidence of<br/>9 Mr. Brockman from April 2014 with respect to<br/>10 normalization of the 2013 test year?<br/>11 MR. DOUGLAS BOWMAN:<br/>12 A. Yes.<br/>13 MR. COXWORTHY:<br/>14 Q. And you referred to agreeing to the evidence<br/>15 of Mr. Patrick Bowman, his 2014 evidence with<br/>16 respect to normalization of the 2013 test<br/>17 year?<br/>18 MR. DOUGLAS BOWMAN:<br/>19 A. Yes.<br/>20 MR. COXWORTHY:<br/>21 Q. And you also referred to agreeing to Mr.<br/>22 Dean's 2014 evidence with respect to<br/>23 normalization of the 2013 test year?<br/>24 MR. DOUGLAS BOWMAN:<br/>25 A. Yes.<br/>26 MR. COXWORTHY:</p>   | <p>1 MR. COXWORTHY:<br/>2 Q. Well, let's turn to the original one. So when<br/>3 you were referring, Mr. Bowman, to IC-NLH-140<br/>4 and you have the -- that is the one that was<br/>5 filed in the original general rate filing in<br/>6 2013.<br/>7 MR. DOUGLAS BOWMAN:<br/>8 A. Yes.<br/>9 MR. COXWORTHY:<br/>10 Q. When you were referring in your evidence to<br/>11 IC-NLH-140, were you referring to this<br/>12 response or to the Revision 1?<br/>13 MR. DOUGLAS BOWMAN:<br/>14 A. I believe it's this one, but I don't have the<br/>15 revised one in front of me.<br/>16 MR. COXWORTHY:<br/>17 Q. Sure. Well, let's bring up -- in fairness,<br/>18 let's now bring up the Revision 1, so I'll<br/>19 give you the chance.<br/>20 MR. DOUGLAS BOWMAN:<br/>21 A. Yeah. Yeah, I was referring to the first one.<br/>22 MR. COXWORTHY:<br/>23 Q. And so Hydro has revised and do you not agree<br/>24 with Hydro's response, Revision 1?<br/>25 MR. DOUGLAS BOWMAN:<br/>26 A. I agree the load factor is higher now. Our</p>  |
| <p>Page 66</p> <p>1 Q. Would you agree that their evidence was with<br/>2 respect to addressing instability within a<br/>3 single test year, within 2013?<br/>4 MR. DOUGLAS BOWMAN:<br/>5 A. They were applying that to the 2013 test year.<br/>6 MR. COXWORTHY:<br/>7 Q. So they weren't looking at instability or<br/>8 concerns about load changes in 2014 or 2015?<br/>9 MR. DOUGLAS BOWMAN:<br/>10 A. No. They were, yes, because Mr. Patrick<br/>11 Bowman said "analysis should reflect fair and<br/>12 reasonable estimation of cost responsibility<br/>13 between customer classes for the periods in<br/>14 which the study is being applied".<br/>15 MR. COXWORTHY:<br/>16 Q. If we could turn to IC-NLH-140, not the<br/>17 Revision 1, but the original one? Because I<br/>18 believe in your evidence, you did refer to IC-<br/>19 NLH-140?<br/>20 MR. DOUGLAS BOWMAN:<br/>21 A. I did.<br/>22 MR. COXWORTHY:<br/>23 Q. And I don't think you were referring to the<br/>24 revision.<br/>25 MR. DOUGLAS BOWMAN:<br/>26 A. I don't know.</p> | <p>Page 68</p> <p>1 differences lie in the fact that it's still a<br/>2 transition period.<br/>3 MR. COXWORTHY:<br/>4 Q. If we could turn, Mr. Bowman, to -- Ms. Gray,<br/>5 if we could turn to the evidence of Mr.<br/>6 Greneman from September 28th, page 66, and if<br/>7 we could go to line 22? So this was a<br/>8 response that Mr. Greneman gave in a response<br/>9 to some questions that were posed by Mr.<br/>10 Johnson, and Mr. Greneman, at line 22, states<br/>11 "the projected loads for Vale and Praxair" --<br/>12 and he's talking about 2016-2017 -- "I would<br/>13 suggest are not known with any certainty and<br/>14 there's perhaps some speculation in that.<br/>15 What I am suggesting is that if one were to<br/>16 redo the cost of service study to reflect the<br/>17 loads that you suggest for Vale and Praxair,<br/>18 that it would not be a simple matter to do<br/>19 such. It wouldn't be a simple matter to do a<br/>20 shortcut method." Are you in disagreement<br/>21 with Mr. Greneman, both in terms of what he<br/>22 says about the speculative nature of the<br/>23 forecast and also what he says about it<br/>24 wouldn't be a simple matter to do a shortcut<br/>25 method to adjust for that?<br/>26 MR. DOUGLAS BOWMAN:</p> |

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1 A. As far as the speculation goes, it's no more  
 2 speculative than what was done in IC-NLH-140.  
 3 Actually, that was more speculative because  
 4 you're assuming -  
 5 MR. COXWORTHY:  
 6 Q. And you're not talking about Revision 1? Are  
 7 you talking about the original IC-NLH -  
 8 MR. DOUGLAS BOWMAN:  
 9 A. The original, the original one.  
 10 MR. COXWORTHY:  
 11 Q. Thank you.  
 12 MR. DOUGLAS BOWMAN:  
 13 A. That was more speculative because you're  
 14 speculating on what the load factor might be.  
 15 In this case, I don't know -- like the fact  
 16 is, the load forecast is what it is. Like  
 17 you're using a test year with a load forecast.  
 18 You have to use the best information possible.  
 19 MR. COXWORTHY:  
 20 Q. Mr. Greneman had a concern about looking into  
 21 future years, that you're entering into a  
 22 greater realm of speculation than within one  
 23 year. Is that fair?  
 24 MR. DOUGLAS BOWMAN:  
 25 A. I think it's -- I think that's fair, yes.  
 26 MR. COXWORTHY:

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1 Q. And you said that there was also a speculative  
 2 aspect to IC-NLH-140, the original one, but  
 3 again, that's speculation confined to a single  
 4 year.  
 5 MR. DOUGLAS BOWMAN:  
 6 A. Well, a single year, but a customer load that  
 7 didn't exist.  
 8 MR. COXWORTHY:  
 9 Q. So with respect to the second aspect of Mr.  
 10 Greneman's answer, that if we were to do a --  
 11 if Hydro was to redo a cost of service study,  
 12 that there's no shortcut to doing that to  
 13 address the 2016-2017 load forecast.  
 14 MR. DOUGLAS BOWMAN:  
 15 A. Oh, I think there is.  
 16 MR. COXWORTHY:  
 17 Q. Do you agree?  
 18 MR. DOUGLAS BOWMAN:  
 19 A. No, I think there is a shortcut. I think you  
 20 change the allocators. But I'll be interested  
 21 to see what Hydro comes up with.  
 22 MR. COXWORTHY:  
 23 Q. And in fairness, so would we. So perhaps, you  
 24 know, at some point, I will want to ask for a  
 25 break so we can look at that information,  
 26 because I agree it would be helpful for all of

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1 us to have that information before us before  
 2 we get into discussing allocators and what  
 3 allocators they are.  
 4 MR. DOUGLAS BOWMAN:  
 5 A. It would also be helpful to see what they did  
 6 with IC-NLH-140 because they attached a full  
 7 cost of service study to that and I'm not sure  
 8 what they did there, if they just changed the  
 9 allocators or they actually did run a full  
 10 cost of service study.  
 11 MR. COXWORTHY:  
 12 Q. Once we have the undertaking response, perhaps  
 13 -- maybe not all will be made clear, but maybe  
 14 we'll have some answers. I would like though  
 15 while we're talking about the speculative  
 16 nature of looking at future load forecasts, to  
 17 turn to your response to -- I understand it  
 18 would have been your response, NP-CA-009. And  
 19 Mr. Bowman, you were asked this question in  
 20 the context of what has now been settled, that  
 21 there will not be changes made to the RSP  
 22 methodology in this proceeding. And you  
 23 certainly had -- the first part of your answer  
 24 talked about the history, your history in  
 25 terms of the testimony or evidence you've  
 26 given in previous proceedings in this

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1 proceedings about the RSP design?  
 2 MR. DOUGLAS BOWMAN:  
 3 A. Yes.  
 4 MR. COXWORTHY:  
 5 Q. But I want to turn then to line 13 that you  
 6 make -- "he makes this recommendation in part  
 7 because he believes the RSP will be terminated  
 8 following commissioning of the Labrador Island  
 9 interconnection, but primarily because there  
 10 will be substantial increases in the Island  
 11 Industrial customer load in the coming years  
 12 and Hydro has limited ability to forecast how  
 13 quickly this new load will materialize."  
 14 Doesn't that apply to the 2016-2017 years, the  
 15 forecast for Vale and Praxair?  
 16 MR. DOUGLAS BOWMAN:  
 17 A. It does, but it's still the best information  
 18 available.  
 19 MR. COXWORTHY:  
 20 Q. Aren't you saying here that though is  
 21 something that can be addressed by leaving the  
 22 RSP -- but perhaps not perfectly, but can be  
 23 addressed by leaving the RSP methodology as it  
 24 is? You're saying that that's the primary  
 25 reason why you're accepting that that's a  
 26 reasonable thing to do?

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|---|---|
| <p>1 MR. DOUGLAS BOWMAN:</p> <p>2 A. I'm not accepting that as a reasonable thing</p> <p>3 to do on the -- as far as the IC load goes.</p> <p>4 The IC load will affect the capacity component</p> <p>5 as well. You may argue that the RSP will</p> <p>6 address changes in energy and I don't think</p> <p>7 that's an accurate assessment either, but it's</p> <p>8 certainly not an accurate assessment of the</p> <p>9 demand.</p> <p>10 MR. COXWORTHY:</p> <p>11 Q. Mr. Chair, at this point, I will ask for the</p> <p>12 Chair's indulgence for a break because we</p> <p>13 would, if this undertaking response is</p> <p>14 available, I think we'd be entering into an</p> <p>15 area now where it would be helpful for both</p> <p>16 Mr. Bowman and everyone else to have that in</p> <p>17 front of them.</p> <p>18 COMMISSIONER WHALEN:</p> <p>19 Q. Is it available?</p> <p>20 MR. YOUNG:</p> <p>21 Q. It can be available in a very short period of</p> <p>22 time. I'm just wondering about -- you know,</p> <p>23 I'm not sure if Mr. Coxworthy is suggesting we</p> <p>24 just break early and -</p> <p>25 MR. COXWORTHY:</p> <p>26 Q. Yes, absolutely, yeah.</p> | <p>1 Q. Mr. Coxworthy.</p> <p>2 MR. COXWORTHY:</p> <p>3 Q. Thank you, Mr. Chair. Mr. Bowman, so do you</p> <p>4 have Undertaking 41 there before you?</p> <p>5 MR. DOUGLAS BOWMAN:</p> <p>6 A. I do.</p> <p>7 MR. COXWORTHY:</p> <p>8 Q. And have you had an opportunity to review it?</p> <p>9 MR. DOUGLAS BOWMAN:</p> <p>10 A. A quick look.</p> <p>11 MR. COXWORTHY:</p> <p>12 Q. Yes. It's a lot of information there. In</p> <p>13 terms of the Table 1 and Table 2 summaries of</p> <p>14 calculations, and there are some basis support</p> <p>15 provided for that in the attachments,</p> <p>16 Attachment 1 and Attachment 2, do you accept</p> <p>17 the information in Table 1 and Table 2 as</p> <p>18 being accurate, correct, or have you not had</p> <p>19 sufficient time to -</p> <p>20 MR. DOUGLAS BOWMAN:</p> <p>21 A. We'd have to talk to Hydro first before I</p> <p>22 could say anything on that.</p> <p>23 MR. COXWORTHY:</p> <p>24 Q. So you would need more time to review it to be</p> <p>25 able to say whether you do or you don't?</p> <p>26 MR. DOUGLAS BOWMAN:</p>  |
| <p>Page 74</p> <p>1 CHAIRMAN:</p> <p>2 Q. Want to take our half-hour break now, is that</p> <p>3 what you're suggesting?</p> <p>4 MR. COXWORTHY:</p> <p>5 Q. I think, Mr. Chair, I'm in your hands, but</p> <p>6 yes, I think that would be appropriate.</p> <p>7 CHAIRMAN:</p> <p>8 Q. Okay.</p> <p>9 (BREAK - 10:44 a.m.)</p> <p>10 (RESUME - 11:22 a.m.)</p> <p>11 CHAIRMAN:</p> <p>12 Q. Now, sir, I think we're back to you.</p> <p>13 MS. GLYNN:</p> <p>14 Q. We have to enter the undertaking first.</p> <p>15 CHAIRMAN:</p> <p>16 Q. Oh, okay, sorry.</p> <p>17 MS. GLYNN:</p> <p>18 Q. That's okay.</p> <p>19 MS. PENNELL:</p> <p>20 Q. Mr. Chair, we have Undertaking No. 41, which</p> <p>21 Mr. Coxworthy was so patiently waiting for.</p> <p>22 CHAIRMAN:</p> <p>23 Q. Okay.</p> <p>24 MR. COXWORTHY:</p> <p>25 Q. Thank you.</p> <p>26 CHAIRMAN:</p>   | <p>Page 76</p> <p>1 A. Well, what I see here is in 2015 test year,</p> <p>2 under Table 1, the IC allocated demand revenue</p> <p>3 requirement is 8.9 million. I see when you</p> <p>4 take the average for 2015 through 2017, I see</p> <p>5 an allocated revenue requirement of 10.2</p> <p>6 million. That difference is about 1.3 million</p> <p>7 dollars. That says to me that the</p> <p>8 Newfoundland Power and the Island Rural</p> <p>9 customers will have 1.3 million dollars less</p> <p>10 allocated to them. That tells me there is an</p> <p>11 impact on allocations. And when I look at the</p> <p>12 energy table, Table 2 -</p> <p>13 MR. COXWORTHY:</p> <p>14 Q. Yes.</p> <p>15 MR. DOUGLAS BOWMAN:</p> <p>16 A. 2015 test year, 32 million assigned to the</p> <p>17 Industrial Customers. The average is just</p> <p>18 about 38 million. That's a difference of six</p> <p>19 million and I would see -- based on what I see</p> <p>20 here, I would assume that that amount less is</p> <p>21 allocated to Newfoundland Power and the Island</p> <p>22 Rural customers. Again, I don't -- I can't</p> <p>23 verify these numbers.</p> <p>24 MR. COXWORTHY:</p> <p>25 Q. Okay. And I'm not suggesting you should</p> <p>26 accept them on face value if you feel you need</p> |

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1 to discuss further with Hydro, but you don't.

2 You need to have further discussions with

3 Hydro before you'd accept these numbers?

4 MR. DOUGLAS BOWMAN:

5 A. That's right.

6 MR. COXWORTHY:

7 Q. Okay. Thank you. All right. Assuming after

8 that review that the numbers as presented in

9 Table 1 and Table 2 are numbers that you can

10 accept, after you've had the opportunity to

11 review, looking at page two of Undertaking No.

12 41 in the first narrative paragraph there, the

13 statement appears that there is a -- "there's

14 minimal change in the unit energy costs as a

15 result of the higher energy billing units used

16 to compute the cost." Would you agree that if

17 the information in Table 1 and Table 2 is

18 correct, accurate, that that statement is

19 correct?

20 MR. DOUGLAS BOWMAN:

21 A. Well, I guess it depends on your definition of

22 minimal. I see -- like again, IC, this amount

23 of money also would be changed for

24 Newfoundland Power and the Island Rural

25 customers and I would need to see those as

26 well before I could really comment on that.

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1 MR. COXWORTHY:

2 Q. Aren't those numbers in the attachments?

3 MR. DOUGLAS BOWMAN:

4 A. They could be.

5 MR. COXWORTHY:

6 Q. Okay. You haven't had a chance to -

7 MR. DOUGLAS BOWMAN:

8 A. No.

9 MR. COXWORTHY:

10 Q. And fair enough. We've all only had this for

11 less than half an hour. I understand more

12 time may need to be spent with it.

13 MR. DOUGLAS BOWMAN:

14 A. I think we need Mr. Fagan to explain what was

15 done here and I need to see what was done in

16 IC-NLH-140 as well to see the parallels there.

17 MR. COXWORTHY:

18 Q. But if you'd allow me just perhaps one more

19 question on Undertaking 41 before we punt it

20 over to Mr. Fagan, in the next paragraph, I

21 think this goes to the minimal change and does

22 it matter, does it not matter, in terms of

23 using a 2015 test year as proposed by Hydro.

24 The comment is made in the second paragraph on

25 page two that "the additional fuel costs

26 incurred at Holyrood to serve the increased

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1 industrial load beyond the 2015 test year will

2 be shared between Newfoundland Power and the

3 Industrial Customers through the load

4 variation component of the RCMP which all

5 parties have agreed will be based on the

6 percentage of annual energy use."

7 So as I read that or as I understand it,

8 Hydro is saying whatever change, minimal

9 change that's referred to in the previous

10 paragraph, will be addressed by way of the

11 continuation of the RSP methodology, in terms

12 of capturing the change in fuel consumption at

13 Holyrood.

14 MR. DOUGLAS BOWMAN:

15 A. I think he's saying that with regards to the

16 energy part, not with regards to the demand

17 part. Also, I -- has that been accepted? I

18 thought Mr. Patrick Bowman's evidence

19 suggested that they would be eliminating the

20 load variation component.

21 MR. COXWORTHY:

22 Q. Certainly that's the long term position of the

23 Industrial Customers, but I believe that for

24 purposes of the settlement, it's been agreed

25 to leave things where they stand.

26 MR. DOUGLAS BOWMAN:

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1 A. Oh, has it?

2 MR. COXWORTHY:

3 Q. Sorry?

4 MR. DOUGLAS BOWMAN:

5 A. Has it? Is that correct? Your client doesn't

6 look like -

7 MR. COXWORTHY:

8 Q. Well, I'm not giving testimony here. That's

9 my understanding, that that's been -- that

10 issue has been settled.

11 MR. DOUGLAS BOWMAN:

12 A. Oh. Maybe we should look at his presentation

13 and see what he says.

14 MR. COXWORTHY:

15 Q. I'm sorry, excuse me for a moment, Mr. Bowman.

16 I mean, you've -- with your indulgence, Mr.

17 Chair, if I may speak to our expert for a

18 moment?

19 CHAIRMAN:

20 Q. Sure.

21 MR. COXWORTHY:

22 Q. Mr. Bowman is correct when he said if there's

23 a load variation component included in the

24 RSP, it is to be done on this basis. So

25 you're absolutely right.

26 MR. DOUGLAS BOWMAN:

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1 A. Thank you.  
 2 MR. COXWORTHY:  
 3 Q. It hasn't been settled in the manner I was  
 4 suggesting. Thank you. If it is settled on  
 5 that basis or if it's resolved, I should say,  
 6 by this hearing on that basis.  
 7 MR. DOUGLAS BOWMAN:  
 8 A. If it is, I don't necessarily accept that. I  
 9 would need to see proof of that.  
 10 MR. COXWORTHY:  
 11 Q. Thank you. Mr. Bowman, I don't have any  
 12 further questions for you. Thank you.  
 13 MR. DOUGLAS BOWMAN:  
 14 A. Thank you.  
 15 CHAIRMAN:  
 16 Q. I think we're over to you, Mr. O'Reilly.  
 17 O'REILLY, Q.C.:  
 18 Q. We have no questions of this witness, Mr.  
 19 Chair.  
 20 CHAIRMAN:  
 21 Q. Mr. Luk?  
 22 MR. DOUGLAS BOWMAN, CROSS-EXAMINATION BY MR. SENWUNG LUK  
 23 MR. LUK:  
 24 Q. Thank you, Mr. Chair. Just a brief question,  
 25 Mr. Bowman. My name is Senwung Luk. I'm  
 26 counsel for Innu Nation.

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1 MR. DOUGLAS BOWMAN:  
 2 A. Yes.  
 3 MR. LUK:  
 4 Q. Ms. Gray, could you please pull up the  
 5 application, page 4.10? So, Mr. Bowman, I  
 6 believe in your pre-filed evidence, you had  
 7 recommended between these three methods that  
 8 are laid out in the table, the existing  
 9 method, the revenue requirement method and the  
 10 number of customers method, you had suggested  
 11 that the Board adopt the revenue requirement  
 12 method.  
 13 MR. DOUGLAS BOWMAN:  
 14 A. Yes, I did in my most recent testimony. I  
 15 think I left it -- I think I said both were  
 16 acceptable in my first testimony, although I  
 17 can't confirm that without checking it.  
 18 (11:30 a.m.)  
 19 MR. LUK:  
 20 Q. And I believe that the two criteria that you  
 21 applied for choosing between these methods  
 22 were fairness and minimization of the impact  
 23 on the price signal? Is that -  
 24 MR. DOUGLAS BOWMAN:  
 25 A. Yes, I think those are -- that's a fair  
 26 statement.

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1 MR. LUK:  
 2 Q. Can you comment on the application of those  
 3 criteria to the number of customers method?  
 4 MR. DOUGLAS BOWMAN:  
 5 A. I don't see the -- I see the amounts. I think  
 6 the number of customer method would work fine  
 7 if that's -- I think it would address those  
 8 issues.  
 9 MR. LUK:  
 10 Q. Okay. It would not have a significant  
 11 difference as between -- there would not be a  
 12 significant difference between the number of  
 13 customers method and the revenue requirement  
 14 method as -  
 15 MR. DOUGLAS BOWMAN:  
 16 A. Not in terms of impacts, no.  
 17 MR. LUK:  
 18 Q. And so in your view, both would be good  
 19 options?  
 20 MR. DOUGLAS BOWMAN:  
 21 A. Yes.  
 22 MR. LUK:  
 23 Q. Insofar as there are good options in this  
 24 debate.  
 25 MR. DOUGLAS BOWMAN:  
 26 A. Yes.

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1 MR. LUK:  
 2 Q. Okay. Thanks very much, Mr. Bowman.  
 3 CHAIRMAN:  
 4 Q. I think we're over to Board counsel.  
 5 MR. DOUGLAS BOWMAN, CROSS-EXAMINATION BY MAUREEN GREENE,  
 6 Q.C.  
 7 GREENE, Q.C.:  
 8 Q. Thank you, Mr. Chair. Good morning, Mr.  
 9 Bowman.  
 10 MR. DOUGLAS BOWMAN:  
 11 A. Good morning.  
 12 GREENE, Q.C.:  
 13 Q. I do have some questions for you. The first  
 14 area concerns your recommendation -- first  
 15 rather, your concern with respect to whether  
 16 the test year should be adjusted to reflect  
 17 the fact that Vale and Praxair's load is  
 18 increasing. Is that correct?  
 19 MR. DOUGLAS BOWMAN:  
 20 A. That's correct.  
 21 GREENE, Q.C.:  
 22 Q. And your concern arises from the fact you  
 23 believe that the load is increasing and  
 24 therefore the test -- the 2015 test year is  
 25 not representative of the period over which  
 26 the rates will be in effect? Is that -

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1 MR. DOUGLAS BOWMAN:  
 2 A. I'm sure the forecast load is increasing and I  
 3 believe that the test year, without  
 4 normalizing those loads and taking that into  
 5 account, may result in unjust and unreasonable  
 6 rates.  
 7 GREENE, Q.C.:  
 8 Q. And from your perspective, what should be  
 9 adjusted to reflect the increased forecast  
 10 load for 2016 and 2017?  
 11 MR. DOUGLAS BOWMAN:  
 12 A. I think again, I can't comment on this  
 13 undertaking until we've actually discussed it  
 14 with Mr. Fagan, but obviously this didn't take  
 15 a great deal of time to put together like Mr.  
 16 Greneman had suggested and like was suggested  
 17 in response to one of our RFIs. It's a  
 18 normalization. What was changed, I believe,  
 19 was the allocators only. The revenue  
 20 requirement stayed the same. You just changed  
 21 the allocation of that revenue requirement  
 22 amongst the customer classes on the Island  
 23 Interconnected system.  
 24 GREENE, Q.C.:  
 25 Q. Mr. Greneman had also mentioned that in his  
 26 view other factors would have to be adjusted

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1 as well if the load were adjusted. He  
 2 mentioned the concern of possibly the Holyrood  
 3 fuel conversion factor, the volumes of fuel,  
 4 and I wanted to know what is your opinion as  
 5 to the impact of changing the load on any  
 6 other input into the 2015 cost of service?  
 7 MR. DOUGLAS BOWMAN:  
 8 A. If you change the load in the cost of service  
 9 study, you have to do that. That's not what  
 10 I'm saying though. I'm saying changing the  
 11 allocators in the cost of service study. The  
 12 revenue requirement portion of the cost of  
 13 service study would remain the same. The cost  
 14 of service study does two things. It  
 15 determines the revenue requirement and then it  
 16 allocates that revenue requirement amongst the  
 17 different customer classes. What I'm  
 18 suggesting is you change those allocators for  
 19 the second step.  
 20 GREENE, Q.C.:  
 21 Q. And I guess what I'm having trouble or  
 22 difficulty in understanding is why you would  
 23 look at an allocator and say that that's  
 24 necessary to change but not some other inputs  
 25 into the cost of service which may also be  
 26 relevant to load.

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1 MR. DOUGLAS BOWMAN:  
 2 A. Well, if you had picked the appropriate test  
 3 year to begin with, you wouldn't have to do  
 4 that. In this case, like all of the experts  
 5 have said, there's a ramping up of operations  
 6 at Vale and Praxair that wasn't taken into  
 7 account. If that had been taken into account,  
 8 then we wouldn't have to look for this  
 9 normalization adjustment that the Industrial  
 10 Customers asked for, that Mr. Brockman asked  
 11 for, and what I'm asking for now.  
 12 GREENE, Q.C.:  
 13 Q. With respect to other changes from the 2015  
 14 test year, for example there might be a change  
 15 in what the forecast rate base was or a change  
 16 with respect to certain material costs, what  
 17 is your view as to whether the test year  
 18 should be normalized for those types of  
 19 things?  
 20 MR. DOUGLAS BOWMAN:  
 21 A. I wouldn't make changes for that. I said I  
 22 would change the allocators because they're  
 23 not fair.  
 24 GREENE, Q.C.:  
 25 Q. Do you have any concerns with respect to  
 26 whether the 2015 test year put forward by

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1 Hydro is representative of the cost to be  
 2 incurred in the forecast period?  
 3 MR. DOUGLAS BOWMAN:  
 4 A. I think that's what this hearing is supposed  
 5 to decide, isn't it?  
 6 GREENE, Q.C.:  
 7 Q. But from the fact of where we are with respect  
 8 to the forecast and actuals, are you familiar  
 9 with the information with respect to that?  
 10 MR. DOUGLAS BOWMAN:  
 11 A. I am familiar with the information, but I'm  
 12 not suggesting that Hydro has carried out  
 13 their cost of service study correctly. I'm  
 14 not going to verify that their costs in that  
 15 cost of service study are correct.  
 16 GREENE, Q.C.:  
 17 Q. So do I take from your answer you would accept  
 18 that there might need to be normalization of  
 19 certain other factors or costs as well, in  
 20 addition to the load?  
 21 MR. DOUGLAS BOWMAN:  
 22 A. All I'm advocating is that those allocators,  
 23 they take another look at those allocators and  
 24 revise them to reflect the increasing loads at  
 25 Vale and Praxair.  
 26 GREENE, Q.C.:

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1 Q. And in your opinion, there is no disconnect  
 2 between adjusting the allocator, as you  
 3 explained it, to reflect the forecast  
 4 increased load but not adjusting any other  
 5 factor?  
 6 MR. DOUGLAS BOWMAN:  
 7 A. I don't see any disconnect at all, and it's  
 8 like Mr. Greneman on cross-examination said on  
 9 Monday, they've already made a number of  
 10 adjustments in this way. The Holyrood  
 11 capacity factor comes to mind. We're  
 12 allocating on the basis of Holyrood capacity  
 13 factor that I believe is 24 percent. But in  
 14 the cost of service study, it's capacity  
 15 factor is something on the order of 39  
 16 percent. If you didn't do that, you would  
 17 never have enough energy to supply the load  
 18 and your costs would be incorrect. So again,  
 19 in the second step of the cost of service  
 20 study, they're adjusting the allocators and  
 21 this isn't the only place they do that. They  
 22 do that in a number of places.  
 23 GREENE, Q.C.:  
 24 Q. Besides the Holyrood capacity factor, could  
 25 you use another one to illustrate your point?  
 26 MR. DOUGLAS BOWMAN:

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1 A. No, but we can get Mr. Fagan up here, I think,  
 2 and he'll verify what others are using.  
 3 GREENE, Q.C.:  
 4 Q. And perhaps we'll take that up then with Mr.  
 5 Fagan.  
 6 MR. DOUGLAS BOWMAN:  
 7 A. Yeah.  
 8 GREENE, Q.C.:  
 9 Q. The other issue is with respect to the RSP and  
 10 I just wanted to confirm your position for the  
 11 record. In your direct examination, you  
 12 stated that you've never agreed with the  
 13 current design of the rate stabilization plan.  
 14 Is that correct?  
 15 MR. DOUGLAS BOWMAN:  
 16 A. That's correct.  
 17 GREENE, Q.C.:  
 18 Q. Okay. I understood your position to date to  
 19 be that you were not recommending that the RSP  
 20 be reviewed or looked at in this hearing, but  
 21 that you are satisfied with the current RSP at  
 22 this point in time for this particular GRA.  
 23 Is that correct?  
 24 MR. DOUGLAS BOWMAN:  
 25 A. I'm accepting it on condition that it's looked  
 26 at next year. I think it's important to

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1 remember here that the RSP was supposed to be  
 2 looked at following the last GRA and there was  
 3 a study that was initiated on that. It was  
 4 never completed. One of the big problems I  
 5 have with the RSP is the load variation  
 6 component. I've advocated in the past that  
 7 that be eliminated and my hope was that that  
 8 would force Hydro to better design the Island  
 9 Industrial customer rates, have a two-block  
 10 rate with the second block reflecting marginal  
 11 costs. If they had that rate, then they  
 12 wouldn't need the load variation component.  
 13 That hasn't been a problem in Newfoundland  
 14 Power's rate, which does have a second block  
 15 that reflects the marginal cost of energy.  
 16 GREENE, Q.C.:  
 17 Q. And you're saying that this -- your position  
 18 is live with it for now provided that there is  
 19 a cost of service study that will include this  
 20 review?  
 21 MR. DOUGLAS BOWMAN:  
 22 A. Yeah, I think, you know, that that's as  
 23 accurate as anything. Again, we've been  
 24 living with it since 2007 when we were  
 25 certainly hopeful that it would have been  
 26 corrected at that time and because nothing was

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1 done with it, the Industrial customer rates  
 2 were frozen and that's why we're in this  
 3 situation we're in now with in the original  
 4 filing, the Industrial customers had a revenue  
 5 to cost ratio of 65 percent and Newfoundland  
 6 Power's was in excess of 98 percent. That  
 7 shows you the level of cost subsidization that  
 8 was going on as a result of the RSP.  
 9 GREENE, Q.C.:  
 10 Q. Can you explain why -- as I understood the  
 11 presentation that was filed this morning by  
 12 Mr. Patrick Bowman, he is still recommending  
 13 that the load component of the RSP be  
 14 eliminated and he's still taking that  
 15 position, at least in his presentation. Do  
 16 you believe it's appropriate for that to be  
 17 considered now or that it be deferred?  
 18 MR. DOUGLAS BOWMAN:  
 19 A. Well, first off, I thought that was something  
 20 that was agreed upon and I think the IC's  
 21 counsel also thought it was something that was  
 22 agreed upon. So, if it's something that's  
 23 agreed upon, then I don't think we should be  
 24 looking at it. If it's not something that's  
 25 agreed upon, I would say leave it and look at  
 26 it again next year in the cost of service

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1 study while the study is supposed to look at  
 2 all of these adjustment clauses.  
 3 GREENE, Q.C.:  
 4 Q. Thank you, Mr. Bowman. That's all my  
 5 questions, Mr. Chair.  
 6 COMMISSIONER WHALEN:  
 7 Q. I have no questions. Thank you, Mr. Bowman.  
 8 COMMISSIONER NEWMAN:  
 9 Q. No questions.  
 10 CHAIRMAN:  
 11 Q. Do you have any?  
 12 COMMISSIONER OXFORD:  
 13 Q. No, Mr. Chairman.  
 14 CHAIRMAN:  
 15 Q. Okay. I think we're finished, sir.  
 16 MR. DOUGLAS BOWMAN:  
 17 A. Thank you.  
 18 MS. GLYNN:  
 19 Q. So we'll take a quick break while we change  
 20 witness.  
 21 CHAIRMAN:  
 22 Q. Set up for the next Mr. Bowman.  
 23 MS. GLYNN:  
 24 Q. Exactly. Three minutes again.  
 25 CHAIRMAN:  
 26 Q. Okay.

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1 (BREAK - 11:41 a.m.)  
 2 (RESUME - 11:48 a.m.)  
 3 CHAIRMAN:  
 4 Q. So Mr. Bowman, I presume. I have been advised  
 5 you wish to use the Bible. Is that correct?  
 6 MR. PATRICK BOWMAN:  
 7 A. Yes, sir.  
 8 CHAIRMAN:  
 9 Q. You are now sworn in, sir.  
 10 MS. GLYNN:  
 11 Q. Mr. Chair, before we move to direct, we do  
 12 have to enter the PowerPoint presentation of  
 13 Mr. Bowman and we'll enter that onto the  
 14 record as Exhibit No. 2. The parties have  
 15 also consented to the RSP report of August  
 16 2015 being entered as Consent No. 3.  
 17 CHAIRMAN:  
 18 Q. Okay. So I guess, Mr. Coxworthy, it looks  
 19 like you're on.  
 20 MR. PATRICK BOWMAN, SWORN, EXAMINATION-IN-CHIEF BY MR.  
 21 PAUL COXWORTHY  
 22 MR. COXWORTHY:  
 23 Q. That's correct. Thank you, Mr. Chair. Mr.  
 24 Bowman, you have filed, together with your  
 25 colleague, Mr. Najmidinov, some pre-filed  
 26 testimony and updated pre-filed testimony in

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1 respect to these proceedings. Do you adopt  
 2 that evidence as your evidence?  
 3 MR. PATRICK BOWMAN:  
 4 A. Yes.  
 5 MR. COXWORTHY:  
 6 Q. And you've also responded to requests for  
 7 information that were directed to you in  
 8 relation to your pre-filed testimony and  
 9 updated pre-filed testimony by the parties,  
 10 and responded to those. Do you adopt that as  
 11 part of your testimony?  
 12 MR. PATRICK BOWMAN:  
 13 A. Yes.  
 14 MR. COXWORTHY:  
 15 Q. Mr. Bowman, could you provide a summary to the  
 16 Board of your qualifications that you're  
 17 presenting to the Board in terms of your  
 18 experience and education to speak to the  
 19 issues that you speak to in your pre-filed  
 20 testimony?  
 21 MR. PATRICK BOWMAN:  
 22 A. Yes. Good morning, Mr. Chairman and members  
 23 of the Board. I possess a Masters degree in  
 24 Natural Resources Management from the  
 25 University of Manitoba, primarily in the field  
 26 of economics, and I've been working in the

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1 field of rate regulation and energy project  
 2 development for about 17 years. I've  
 3 testified about 18 times across Canada,  
 4 approximately six different provinces and  
 5 territories where I submitted evidence,  
 6 including both rate regulators as well as  
 7 development regulators, such as Northwest  
 8 Territories Water Board. I've been present in  
 9 Newfoundland for Newfoundland Hydro hearings  
 10 starting in 2001 GRA. I submitted evidence  
 11 and testified in the 2003 GRA. I submitted  
 12 evidence in 2006 GRA, although that was  
 13 settled so we couldn't testify to that. And  
 14 then submitted evidence in the 2009 Industrial  
 15 RSP hearing which never had a hearing  
 16 associated with that.  
 17 My work with rate regulation is  
 18 approximately equally divided between  
 19 customers and utilities. I do a considerable  
 20 amount of work with utilities on these same  
 21 matters, as well as some retail customers, in  
 22 Manitoba and British Columbia with industrial  
 23 customers, up north with a number of the  
 24 utilities there, as well as some municipal  
 25 governments, municipal utilities and  
 26 government.

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1 MR. COXWORTHY:  
 2 Q. And the issues in your pre-filed testimony to  
 3 which you're speaking, Mr. Bowman, are issues  
 4 of revenue requirement, issues of cost of  
 5 service and rate design and are you presenting  
 6 yourself as a person who can give expert  
 7 evidence to the Board on all three of those  
 8 areas?  
 9 MR. PATRICK BOWMAN:  
 10 A. Yes.  
 11 MR. COXWORTHY:  
 12 Q. The evidence that's been filed has been  
 13 identified as being pre-filed testimony of  
 14 yourself and Mr. Najmidinov. Can you please  
 15 provide some information as to what Mr.  
 16 Najmidinov's role was in the preparation of  
 17 that testimony?  
 18 MR. PATRICK BOWMAN:  
 19 A. Yes. Mr. Najmidinov has worked with me for  
 20 about six years and he would be involved in  
 21 some of the detail of running some of the  
 22 scenario analysis on the cost of service  
 23 scenarios that we have worked through and  
 24 (unintelligible) some of the modelling for  
 25 some of the topics. I had overall  
 26 responsibility for the preparation of the evidence.

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1 MR. COXWORTHY:  
 2 Q. And I would note, Mr. Chair, that Mr.  
 3 Najmidinov is there in St. John's and  
 4 available should there be an issue with  
 5 respect to that underlying information.  
 6 Mr. Bowman, you've prepared a  
 7 presentation in relation to your direct  
 8 evidence that's been entered as Exhibit 2.  
 9 Perhaps we could turn to that and I'd ask you  
 10 to take us through that presentation.  
 11 MR. PATRICK BOWMAN:  
 12 A. Yes, thank you. Mr. Chairman, when we went  
 13 through the two negotiated settlements and  
 14 compared them to the pre-filed testimony, it  
 15 was apparent that much of it has been  
 16 addressed by settlement agreements, and so we  
 17 decided to pare back somewhat so that we could  
 18 at least focus on what's remaining, rather  
 19 than having to pick through and highlight this  
 20 is in, this is out. So the purpose of this  
 21 was primarily just to highlight those matters  
 22 that are still on the table and to pull this  
 23 to a simpler level.  
 24 The review that we undertook is  
 25 summarized in the pre-filed testimony in  
 26 Section 2 in regards to the assignment.

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1 You'll note that our work did not focus to a  
 2 great extent on revenue requirement. The  
 3 Industrial Customers that we're working with  
 4 in this hearing represent the entire  
 5 industrial class, between five and eight  
 6 percent of the load, depending on the measure  
 7 you use, so the revenue requirement items, we  
 8 were asked to focus on some highlights, but  
 9 otherwise not to get into the detail of those.  
 10 Primarily we dealt with matters relating to  
 11 cost of service and rate design and now that  
 12 those are settled, you'll see there's about  
 13 six topics that remain, two of which are  
 14 revenue requirement.  
 15 So, working through this, if we could go  
 16 to the second slide, just to summarize the  
 17 recommendations. The first is in regards to  
 18 the Holyrood efficiency and after working  
 19 through the data provided, it was our  
 20 conclusion that the Holyrood gross efficiency  
 21 Hydro proposes of 650 kilowatt hours per  
 22 barrel, that's the total output of the units,  
 23 is reasonable and should be accepted. Our  
 24 concern was that when you move to the revenue  
 25 requirement, the focus becomes on then the net  
 26 efficiency, so net of what power is used by

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1 the organization itself. That estimate is 43  
 2 kilowatt hours per barrel and that to us was  
 3 high and I'll walk through why that is, but  
 4 our recommendation would be to reduce that 43  
 5 to 28 kilowatt hours per barrel, and I'll go  
 6 through that.  
 7 Second topic here we raise in regard to  
 8 Hydro's cost of capital. The cost of capital  
 9 includes some components that are -- were  
 10 expected to be paid out before now, but  
 11 nonetheless are expected to be paid out any  
 12 time now, as I understand it, and they will  
 13 significantly reduce the cost of capital of  
 14 financing the rate base, and that adjustment  
 15 would be on the order of five million dollars  
 16 in overall revenue requirement for that  
 17 matter, and I've got a few notes on that.  
 18 The third item listed there is one that  
 19 we've had in for a long time and I just did  
 20 review the negotiated settlements and if this  
 21 need not be here, that's fine, but our review  
 22 of the negotiated settlement a moment ago  
 23 confirms it. It says that if the load  
 24 variation provision is to be kept in the RSP  
 25 that it should be allocated on a particular  
 26 basis. My understanding is that left the

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1 question of whether there would be a load  
 2 variation provision in the RSP at all to this  
 3 hearing and so our recommendation is similar  
 4 to what you would see going back all the way  
 5 to the 2001 hearing I participated in, is that  
 6 you shouldn't have one. There might be a  
 7 question as to the timing as to when one gets  
 8 rid of it.

9 The fourth item to address is in regards  
 10 to the deferral accounts proposed for bulk  
 11 power supplies from IPP and Exploits. The  
 12 evidence recommends that those -- that  
 13 stabilizing the volumes of those supplies is  
 14 reasonable. Stabilizing the prices does not  
 15 seem advisable at this time. And that, in  
 16 doing that, it would be better done through  
 17 the RSP rather than a separate account, as  
 18 I've understood the proposal of Hydro.

19 The fifth item relates to the  
 20 specifically assigned charge and our review  
 21 focused on the specifically assigned charge to  
 22 Corner Brook Pulp and Paper for the frequency  
 23 converter and the focus being on the O&M  
 24 component, which is the only component that I  
 25 believe is still in the scope for this  
 26 hearing, and our review was that the evidence

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1 didn't justify increasing this charge by the  
 2 extent proposed. If anything, the evidence  
 3 would raise questions as to why it be raised  
 4 at all, other than perhaps to modernize it  
 5 from the 2007 level.

6 And the final topic that I'll address is  
 7 one that we recommended in our 2013 evidence,  
 8 there be an adjustment for normalizing the  
 9 load, which you've heard about this morning.  
 10 In our 2014 evidence, when we looked at the  
 11 updated loads, it didn't seem that that was  
 12 necessary. I'll cover why that is and why we  
 13 end up with somewhat of a different conclusion  
 14 than what you have heard this morning.

15 I'll note on this slide that as a result  
 16 of the settlements, my understanding is all of  
 17 the other matters addressed in our evidence,  
 18 as well as all of the RFI responses we  
 19 responded to, relate to matters which are now  
 20 settled, with the exception of a portion of  
 21 one RFI response, which was about the new  
 22 generation supply cost deferral account and  
 23 whether it's needed or whether they should  
 24 just have more frequent GRAs. So that one, I  
 25 guess, the response is still relevant. But  
 26 other than that, all of the RFIs relate to

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1 matter settled.

2 To move to the first topic, slide seven,  
 3 Ms. Gray. As I noted, Hydro's fuel efficiency  
 4 number that you will hear proposed for  
 5 Holyrood is 607 kilowatt hours per barrel.  
 6 It's important to understand that that is  
 7 actually a sum of two values, one of which is  
 8 called the gross efficiency, what the units  
 9 actually put out, and then they subtract from  
 10 that the power actually used by the station,  
 11 and those two numbers are independently  
 12 forecast by Hydro to come up with the 607  
 13 kilowatt hours per barrel, which actually  
 14 leaves the station and sent out to serve load.

15 We looked at them independently because  
 16 they're forecast independently by Hydro, and  
 17 the 650 kilowatt hours per barrel, we said it  
 18 -- we focused only on the data since 2009 when  
 19 Hydro started using this .7 percent sulphur  
 20 fuel; normalized the data points for the BTUs  
 21 in each delivery each month that they reported  
 22 in the -- this was in the response to NP-69 --  
 23 and put those onto the chart, as you'll see,  
 24 with the loading. All those dots are  
 25 individual months in the 2009 to 2014 period.  
 26 And you can see the efficiency that was

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1 achieved and the line is where the load is on  
 2 average for the 2015 year, without getting  
 3 into the monthly details, and you'll see that  
 4 the dots generally -- we didn't put a line on  
 5 this, an R squared value or something. It's a  
 6 bit of a poor data set to try to do that  
 7 analysis. But the value of 650 on the  
 8 vertical axis you'll see is not -- you know,  
 9 just eyeballing, not far off of where one  
 10 would expect when you have this type of  
 11 loading, again monthly versus annual, but when  
 12 you have this type of loading, 650 did not  
 13 seem out of line. So, we said there's a weak  
 14 relationship in the data, but you know, 650 is  
 15 credible.

16 It's when you go to the 43 kilowatt per  
 17 barrel proposed for the station's service that  
 18 we start to have an issue. And on this  
 19 measure, Hydro used a percentage, 6.61  
 20 percent, which is based on a five-year average  
 21 of what the station service levels have been.  
 22 But as you have just seen in the previous  
 23 graph, over that five-year period, most of the  
 24 dots are considerably to the left of where we  
 25 are now. They're lower -- the last five years  
 26 have had lower Holyrood loading than we're

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1 going to see in future.  
 2 (12:00 p.m.)  
 3 So, if you see the blue diamonds, if you  
 4 like, on this graph, those are the actual  
 5 annual station service loads from 2000 to  
 6 2014. They're annual values and they give you  
 7 an idea of how much was used and that's as  
 8 reported in the evidence, and you can see the  
 9 square and the diamond are the '15 and '16  
 10 numbers that Hydro is using to project the 43  
 11 kilowatt hours per barrel, the percentages  
 12 that ultimately lead to that.  
 13 Now we had two comments on this. The  
 14 first is that by simply using a percentage  
 15 focused on the average in the last five years,  
 16 which would tend to be those values over to  
 17 the left, you're going to end up with a  
 18 percentage that's quite a bit higher than  
 19 you're projecting for the usage in the test  
 20 years. So, for one, the first problem we had  
 21 was the selection of the five-year data set  
 22 didn't seem to give an efficiency percentage  
 23 that is representative of the year in  
 24 question, 2015. And the adjustment, if you  
 25 were to put these onto a -- draw a bit of a  
 26 line through them, tends to come out to about

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1 5.85 percent rather than 6.61. That number is  
 2 not on there, but it ends up being about seven  
 3 kilowatt hours per barrel. And I'll say  
 4 that's even a bit generous in the sense that  
 5 some of these dots come from much earlier  
 6 years, before Hydro has done many of their  
 7 improvements to Holyrood that it's been doing  
 8 over the years.  
 9 So if you look through each of the annual  
 10 capital budgets and programs that have been  
 11 undertaken, and there's some RFIs that refer  
 12 to this, there's been a number of projects  
 13 that have been done that should make Holyrood  
 14 more energy efficient, upgrades to lighting,  
 15 changes to duct work, changes to pumps, all  
 16 those sorts of things. So, a lot of these  
 17 dots, if anything, if they were modernized to  
 18 the current Holyrood, they should be even --  
 19 be a bit lower. But we just used that was  
 20 projected onto the line.  
 21 So that's the first type of adjustment we  
 22 suggested was needed. The second -- so that's  
 23 seven kilowatt hours a barrel.  
 24 The second one is related to capital  
 25 improvements happening today, as we speak, as  
 26 I understand or probably just recently

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1 completed. Late 2014 is my understanding.  
 2 There's one very large capital project, the  
 3 variable frequency drive units that are being  
 4 installed on the fans at Holyrood, and this  
 5 project is in evidence as paying for itself in  
 6 less than one year through the savings to the  
 7 energy used at Holyrood. These variable  
 8 frequency drive fans let the fan run at a  
 9 speed that varies, so it uses less power when  
 10 Holyrood is running at a low level, rather  
 11 than having to run it full speed all the time.  
 12 And Hydro's capital budget had said that the  
 13 project would cost 3.36 million, which is in  
 14 rate base, and that the savings would be  
 15 greater than that in one year and there's some  
 16 different numbers cited. 4.7 million a year  
 17 was one that's cited in the 2013 capital  
 18 budget. And in NP-191, as referenced there,  
 19 this was estimated at eight kilowatt hours per  
 20 barrel.  
 21 And so we said this is a project that's  
 22 supposed to occur in 2014 and we know that one  
 23 of the IRs referenced that it was being  
 24 commissioned in late 2014. So rather than  
 25 just looking backwards, this should be built  
 26 into the rates, especially because the cost of

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1 the project has been approved, the project  
 2 under way, it should be put to rate. So  
 3 that's a further eight kilowatt hours per  
 4 barrel.  
 5 The sum of the two, if we go to the next  
 6 slide, is it's a sum of 15 kilowatt hours per  
 7 barrel off of the station's service estimate  
 8 and it reduces test year fuel costs to about  
 9 63,000 barrels, and depending on whatever  
 10 price you come up with. So that was one set of  
 11 recommendations in the revenue requirement.  
 12 The second relates to the topic of cost of  
 13 capital, and this is a little bit of an  
 14 unusual topic. When you think about a  
 15 utility's revenue requirement, there is  
 16 obviously the component for operating cost,  
 17 for depreciation, and all of that, but then  
 18 there's the component which relates to the  
 19 capital that is used to finance the rate case,  
 20 finance the assets of the utility, much like  
 21 for an accountant balance sheet, the rate base  
 22 is like your balance sheet, and the idea is  
 23 that it would balance. In this case, what  
 24 Hydro ends up doing is having a rate base in  
 25 2015 that's approximately 1.78 million, it has  
 26 other assets which are a work in progress of

|  |  |
|--|--|
| <p style="text-align: right;">Page 109</p> <p>1 about - I'm sorry, of 1.8 billion, and a work<br/>                 2 in progress of about another 1.4 billion, but<br/>                 3 if you actually look to the projected capital<br/>                 4 structure, they only have 1.78 billion to<br/>                 5 finance that set of capital. It's about a 160<br/>                 6 million dollar difference, and the reason is<br/>                 7 because there's a very large RSP balance,<br/>                 8 which acts almost like a loan to Hydro. Hydro<br/>                 9 pays interests on the RSP balance. If it's<br/>                 10 owed to customers, it's like a loan from<br/>                 11 customers, and you'll see in the RSP accounts<br/>                 12 every month there's an interest paid to the<br/>                 13 RSP for the funds that Hydro is hanging on to<br/>                 14 at the weighted average overall cost of<br/>                 15 capital, and that's been in place for a long<br/>                 16 time. The net result is Hydro doesn't need to<br/>                 17 borrow this money at the current time because<br/>                 18 it's sitting on an amount owed, a payable. As<br/>                 19 soon as it pays that out, it's going to have a<br/>                 20 need to generate that cash. There's some RFIs<br/>                 21 that refer to this. I think we can probably<br/>                 22 go to the next slide now, Ms. Gray. There's<br/>                 23 some RFIs that refer to this, but as soon as<br/>                 24 it pays that out, it's going to need to<br/>                 25 finance that cash that it lays out, and<br/>                 26 currently in financing of the rate base,</p>     | <p style="text-align: right;">Page 111</p> <p>1 originally directed to be paid out already,<br/>                 2 which has a significant impact on rates. The<br/>                 3 third item goes to the RSP, and I'll move<br/>                 4 through this one quickly because I believe I<br/>                 5 understand that this relates to the settlement<br/>                 6 topic, but the load variation provision RSP<br/>                 7 has been an item of concern to the industrial<br/>                 8 customers for a long time. I agree with Mr.<br/>                 9 Doug Bowman that it is a feature of the RSP<br/>                 10 that is unusual, that you don't see with other<br/>                 11 regulated utilities, it's serves to provide<br/>                 12 Hydro with a certain type of protection that<br/>                 13 is very rare. Most utilities carry this type<br/>                 14 of risk at least until their next GRA. It's a<br/>                 15 feature that allows Hydro to avoid future GRAs<br/>                 16 because if it has changes, in this cost<br/>                 17 structure it doesn't need to come back to you<br/>                 18 and change its rates, it just automatically<br/>                 19 gets covered and to some extent it's a<br/>                 20 function of the rate design that's here today.<br/>                 21 There are ways to do different rate designs<br/>                 22 that would reduce the need for it. The<br/>                 23 comment you'll note I put there is that if the<br/>                 24 Board were to elect to retain it in the time<br/>                 25 being, there is room to talk about eliminating<br/>                 26 it as the initiation of Labrador in-feed when</p> |
| <p style="text-align: right;">Page 110</p> <p>1 you'll see around this 160 million dollars,<br/>                 2 financed at about a 6.8 percent cost. As soon<br/>                 3 as that's paid out, you'll end up going down<br/>                 4 to something more like a new long term debt<br/>                 5 costing about 3.6 percent. It's about a 5<br/>                 6 million dollar difference. That'll happen as<br/>                 7 soon as those balances are paid out, and we<br/>                 8 have some cross-references there to some<br/>                 9 forecast that Hydro provided which similarly<br/>                 10 shows its cost going down, and the result is<br/>                 11 that if there isn't some adjustment done, that<br/>                 12 is an item that would go to reduce Hydro's<br/>                 13 cost in a future year, not a test year. Rate<br/>                 14 payers wouldn't see the benefit until the next<br/>                 15 GRA if there's no adjustment done today, and<br/>                 16 we know it's going to occur. We know that<br/>                 17 that payout has to occur. You'll note that in<br/>                 18 Hydro's cost structure there are many, many<br/>                 19 items that are stabilized through an RSP or<br/>                 20 through deferral accounts, as Mr. Doug Bowman<br/>                 21 referenced. This is not one of them. This is<br/>                 22 one that if their costs go down, it goes<br/>                 23 straight to Hydro's net income, and similarly<br/>                 24 if the cost went up, it goes straight to<br/>                 25 Hydro's net income, but in this case we see a<br/>                 26 significant change on the horizon which was</p> | <p style="text-align: right;">Page 112</p> <p>1 these revenue costs no longer becomes<br/>                 2 Holyrood, because there's a provision which<br/>                 3 I'm sure people are familiar with is linked to<br/>                 4 how much does your load change, how much does<br/>                 5 your revenue change, and how much does the<br/>                 6 cost at Holyrood change, and the net change in<br/>                 7 those costs Hydro gets to recover or refund to<br/>                 8 the RSP. The fourth topic we dealt with is<br/>                 9 the energy supply cost deferral account<br/>                 10 proposals that Hydro has put in. As I read<br/>                 11 their submission, in 2013 Hydro first proposed<br/>                 12 - in the 2013 filing, there is no filing,<br/>                 13 Hydro first proposed that the RSP be expanded<br/>                 14 so that it picks up changes in not just<br/>                 15 hydraulic generation as it has now, but also<br/>                 16 IPP generation and wind generation, so that<br/>                 17 all of those amounts become stabilized. When<br/>                 18 we reviewed their proposal in 2013 and the<br/>                 19 updated version, it seemed appropriate to us<br/>                 20 that the volumes would be stabilized, and I<br/>                 21 can go into a bit more detail on that, and the<br/>                 22 reason is because if you get more power from<br/>                 23 one source at a cost that's something you<br/>                 24 can't control like the flows on the Exploits<br/>                 25 system or the wind generation, that does<br/>                 26 change your cost profile for Holyrood or</p>                    |

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1 whatever your incremental supply is, and it's  
 2 long been accepted here as well as other  
 3 places that this is an uncontrollable material  
 4 variable set by external forces, and it's  
 5 inherently unstable and if you don't find a  
 6 way to stabilize this, we're going to end up  
 7 spending a lot of time arguing them in this  
 8 room and all we're going to end up with is a  
 9 winner and a loser at the end, and we won't  
 10 know - you could pour over the detail to try  
 11 to get the right number, but somebody is going  
 12 to be wrong, it's going to be wrong, and it's  
 13 always going to be wrong, and somebody is  
 14 going to win and someone is going to lose out  
 15 of that. So the ability to put this off and  
 16 put it into something that stabilizes it and  
 17 saves us all a lot of time and fuss has some  
 18 appeal, and for the same reason that you do it  
 19 for Hydro's own hydraulic plants, you could  
 20 think about it for IPPs and wind on volumes.  
 21 So that part we said made sense. Go to the  
 22 next slide, Hydro is also proposing to do it  
 23 for the prices, and it wasn't apparent to us  
 24 that the prices for these supplies meet the  
 25 normal test that one would think about for  
 26 stabilizing deferral accounts, and that's

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1 based on the understanding we got from  
 2 reviewing the evidence that there's  
 3 effectively two types of supply arrangements  
 4 we're talking about. One is a set of IPP  
 5 contracts, such as the ones that have been in  
 6 place for a long time, since 2000 or before,  
 7 that has price escalators built into them.  
 8 They're just an inflationary type of price  
 9 increase. You wouldn't only go about finding  
 10 a way to defer off or not reflect inflationary  
 11 price increases in a utility's own account.  
 12 We don't do it with labour, we don't do it  
 13 with cost of steel, I don't know why we would  
 14 do it with cost of something that's just a  
 15 simple inflationary effect. If it's something  
 16 like Holyrood fuel, fine, but this is just a  
 17 simple inflationary effect as it's been  
 18 presented. The second set of power supply is  
 19 that this is proposed to apply to is the  
 20 Exploits purchases, and I won't say that I  
 21 have kept up on every exchange about the  
 22 Exploits contracts or timing of pricing, but  
 23 to my understanding there is a pricing regime  
 24 in place that continues to be in place at 4  
 25 cents a kilowatt hour, and it'll be in place  
 26 for some period of time, and at some point the

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1 arrangement will change. I have seen it said  
 2 that assets transfer to Hydro and become part  
 3 of rate base. I'm not sure that is written in  
 4 stone. Our concern with it is if you've got a  
 5 fixed price and the uncertainty relates to how  
 6 these assets will be transferred by government  
 7 or directed by government to be transferred,  
 8 what you're effectively doing by putting in a  
 9 deferral account is protecting Hydro, this  
 10 type of account protects Hydro from actions of  
 11 its own shareholder, and that's sort of an  
 12 unusual use of the account. If the price  
 13 changes from 4 cents to 8 cents, or if the  
 14 price becomes part of rate base, it's easy  
 15 enough for someone to say come back to this  
 16 Board and have it reviewed for reasonableness  
 17 rather than automatically have an account in  
 18 place that will take those amounts and put  
 19 them off on the side. That's all this account  
 20 is going to do, right, it's going to make it  
 21 so that these amounts automatically go to the  
 22 side rather than maybe come back before this  
 23 Board and have the transaction or the change  
 24 in price reviewed. So by the time we were  
 25 through that, we said that it didn't make  
 26 sense to us, and that on these items of price

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1 you would have the item stabilized. I'm going  
 2 to the 17th slide now. I also note that if  
 3 the intent of the Exploits, including Exploits  
 4 in the deferral account is that if it's cost  
 5 change as a result of transferring the assets  
 6 to Hydro to become part of a rate base asset,  
 7 it'll be fairly difficult, if not unworkable,  
 8 to figure out how you go from 4 set power to  
 9 whatever this new cost is, given this new cost  
 10 would actually be integrated into Hydro's  
 11 overall rate base and how it's financed by its  
 12 assets and setting up depreciation rates and  
 13 all of the like for that plant. So it's not  
 14 like just saying it went from 4 to 6, it would  
 15 be 4 to 1, this mixture of different cost  
 16 items that probably merits a review by this  
 17 Board rather than just have an automatic  
 18 deferral. The final comment on those was  
 19 there was some appeal to us that the volumes  
 20 would be stabilized as part of the RSP, which  
 21 is what Hydro originally proposed in 2013. In  
 22 the second filing, it was proposed that these  
 23 become their own deferral account, and I  
 24 couldn't see the rationale for that. I would  
 25 say the IPP volumes and the wind are not  
 26 really that different than Hydro's own

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1 hydraulic variances, and there would be room  
 2 to do that within the RSP and to have it  
 3 consistently dealt with. I raise that  
 4 particularly in light of some of the recent  
 5 transactions we see in the 2015 RSP, which has  
 6 been filed as a consent exhibit, and the  
 7 extent to which these other supply services  
 8 now like wind and IPP purchases have grown a  
 9 little bit change or undermine some of the  
 10 supply cost items in the RSP and how it works.  
 11 The premises behind the hydraulic account in  
 12 the RSP is that if you don't get the energy  
 13 from your own hydro, you're going to get it  
 14 from Holyrood, so if your hydro is down, the  
 15 RSP pays Hydro to get that energy from  
 16 Holyrood. There's a transaction that pays  
 17 them the difference. It's in the hydraulic  
 18 variance and vice versa, Hydro credits the  
 19 savings to the account. That works when you  
 20 have two supply options that one is up and one  
 21 is down, but when you have a third option  
 22 that's not in the mix, what you can end up  
 23 with is some very weird mismatches like what  
 24 shows up as this summary in the RSP where the  
 25 hydraulic generation is way down, but there's  
 26 no Holyrood being used. It's way down

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1 presumably not because of a shortage of water,  
 2 and even if there is a shortage of water, it's  
 3 not being replaced by Holyrood generation  
 4 because you can look and there's very few  
 5 barrels from Holyrood. It's being replaced by  
 6 what; by a third source that's missing from  
 7 the mix, and because you have three variables  
 8 now moving, IPPs, hydraulic, and Holyrood,  
 9 some of the basic premise on which your RSP  
 10 works starts to have a bit of internal  
 11 inconsistency. So to us, it makes more sense  
 12 to put this into the RSP so you don't end up  
 13 with this mismatch set of assumptions.  
 14 (12:15 p.m.)  
 15 The last item that we had a recommendation for  
 16 change was the specifically assigned charge,  
 17 O&M, and it's my understanding the rest of the  
 18 facts associated with the specifically  
 19 assigned charges have been negotiated or  
 20 agreed to or put off for the time being. The  
 21 question is the operating and maintenance  
 22 costs and allocation, and the mechanics behind  
 23 Hydro's cost of service study are such that  
 24 when an asset is specifically assigned to a  
 25 customer, the cost of service study does an  
 26 allocation of O&M costs, everything from

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1 direct maintenance people all the way up to  
 2 head office and administrative costs to that  
 3 asset, which is then charged to the customers  
 4 as part of their specifically assigned costs,  
 5 and that's been done for a long time. The  
 6 allocation is based on the gross plant cost of  
 7 that asset, which is something that I know  
 8 Vale will be discussing and issues with using  
 9 the gross plant value, but they're not  
 10 calculated with reference to any type of  
 11 analysis of what it actually costs to operate  
 12 and maintain the asset in question. It's just  
 13 a mathematical exercise done (unintelligible)  
 14 by saying, I'll put this big piece of cost,  
 15 I've got an extra set here, I'll put extras  
 16 into the cost to that asset. The standard  
 17 ratio is reasonable. Typically it's used in  
 18 lots of parts of the allocation of cost of  
 19 service studies, but any of these type of  
 20 allocations have to also be tested for  
 21 reasonableness, fairness on the ground, if you  
 22 like, that does it pass a smell test when  
 23 you're done or have you just simply gone  
 24 through a bunch of mathematics and the end  
 25 result doesn't make any sense. That's our  
 26 concern with Corner Brook's specifically

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1 assigned charge in this hearing. Corner  
 2 Brook's O&M component is proposed to increase  
 3 from 140,000 a year, which was the value from  
 4 2006, up to 352,000 a year which is the new  
 5 value. The reason that goes up is because  
 6 they've built some new things in Corner Brook.  
 7 They've added--rewound the unit, they've done  
 8 a few capital projects and the like. One of  
 9 the interrogatories we asked was can you show  
 10 us anything on the time sheet study or how  
 11 much time staff spend there, or anything that  
 12 sort of gives a reasonable basis, any evidence  
 13 to justify the 352,000 is reasonable other  
 14 than just some math that somebody can run on a  
 15 spreadsheet, and we didn't get any useful  
 16 response, I would say, nothing that we found  
 17 helpful. If anything, there's actually even  
 18 been one capital project undertaken which is a  
 19 remote vibration monitoring system that I put  
 20 some notes on there, which is designed to  
 21 reduce O&M, if anything. It's to reduce the  
 22 need for remote checks on the unit because -  
 23 on-site checks on the unit, sorry, because of  
 24 the remote monitoring being done on the  
 25 vibration of the unit. I copied in the record  
 26 as we understand from that project, but the

|  |   |
|--|---|
| Page 121   | Page 123  |
| <p>1 end result was to remove the labour intensive<br/>                 2 checks that were going on. In that first<br/>                 3 bullet, I see 144 and 145 were requested for<br/>                 4 substantiation and we weren't able to receive<br/>                 5 it. We can't see on the ground evidence that<br/>                 6 there's a reason for this huge increase in the<br/>                 7 charge. It's only being driven by the fact<br/>                 8 that new capital was spent, some of that<br/>                 9 capital is actually designed to reduce cost,<br/>                 10 and as a result, I don't think the evidence<br/>                 11 supports increasing that charge from 140 to<br/>                 12 352,000. Now I note that Vale has offered an<br/>                 13 alternative suggestion of how to deal with<br/>                 14 specifically assigned charge O&amp;M. Their<br/>                 15 concern is similarly spreadsheet based or<br/>                 16 mathematics based. They just say that if<br/>                 17 you're going to allocate using gross plant<br/>                 18 values, you should adjust for inflation, and<br/>                 19 it's a reasonable rationale, and it actually<br/>                 20 does approximately the same thing I'm talking<br/>                 21 about, but I don't want it to be suggested<br/>                 22 that that solves the problem without the need<br/>                 23 for considering whether the end result is<br/>                 24 reflecting what you see on the ground in terms<br/>                 25 of the effort that's required. The last item<br/>                 26 I address here is one that we said was a</p>              | <p>1 order. Normally industrial customers will say<br/>                 2 here's the maximum amount we're going to use<br/>                 3 during the year and you charge that to them<br/>                 4 all twelve months. When you're ramping up, if<br/>                 5 you're not careful, what you say to the<br/>                 6 customer is your demand in December, and we'll<br/>                 7 charge you what you expect in December all<br/>                 8 twelve months, even though in March you might<br/>                 9 not even be connected to the system yet, or<br/>                 10 you're just connected to the system, you might<br/>                 11 be still ramping up. So they each have their<br/>                 12 own special order exempting them from the type<br/>                 13 of considerations that go into a normal power<br/>                 14 on order. So in the 2013 evidence, it was<br/>                 15 clear to us that we needed to review whether<br/>                 16 these two customers were actually<br/>                 17 appropriately included in an industrial class<br/>                 18 to begin with. The premise of a class in the<br/>                 19 cost of service study is you group like<br/>                 20 customers together and if they're not like<br/>                 21 customers, they shouldn't be part of the same<br/>                 22 class. So we've considered those type of<br/>                 23 options, and also whether the effect of what's<br/>                 24 happening in the cost of service study<br/>                 25 underlines and neuters what the Board was<br/>                 26 trying to do by saying "as you ramp up, you're</p> |
| Page 122   | Page 124  |
| <p>1 problem in our 2013 test year, and we don't<br/>                 2 see the problem in 2015. I raise this, in<br/>                 3 particular, because it's obviously an item of<br/>                 4 concern and it's got a lot of background and a<br/>                 5 lot of detail associated with this, and I want<br/>                 6 to make sure that we are understanding of what<br/>                 7 we were trying to propose is clear and what I<br/>                 8 see 140 was doing is clear, the response has<br/>                 9 been referenced, and why that's different than<br/>                 10 some of the proposals that are being discussed<br/>                 11 now. So in 2013 test year, we did an analysis<br/>                 12 of the cost of service study, and saw that<br/>                 13 Vale and Praxair were not operating like<br/>                 14 industrial customers. They were ramping up.<br/>                 15 You can see their load factors; Vale was at 28<br/>                 16 percent and Praxair was at 8 percent. Those<br/>                 17 are not typical industrial customer numbers.<br/>                 18 You usually see very high load factors or<br/>                 19 something like Corner Brook, which has its own<br/>                 20 generation, of not quite as high, but still at<br/>                 21 operating company profile. These are not<br/>                 22 operating company type profiles. There was<br/>                 23 also this special background that each of<br/>                 24 those customers had its own order by this<br/>                 25 Board saying as you ramp up, you're not<br/>                 26 responsible for the normal rules for power on</p> | <p>1 not responsible for paying today for what your<br/>                 2 load is going to be later". In the 2013<br/>                 3 evidence, looking at 2014 cost of service, it<br/>                 4 was clear to us that there were effects<br/>                 5 occurring that were causing costs to be<br/>                 6 allocated as if Vale and Praxair were high<br/>                 7 load factor customers even though they<br/>                 8 weren't, exactly what the Board's two orders<br/>                 9 were intended to not cause. So we requested<br/>                 10 Hydro to run a scenario where these customers<br/>                 11 loads were - the word is "normalized". The<br/>                 12 customers loads were flattened to be more<br/>                 13 representative of an industrial customer load<br/>                 14 profile. The key to that is we used the same<br/>                 15 test year, both were based on 2014, there is<br/>                 16 no change to the forecast energy, so you're<br/>                 17 still dealing with the same load, all you're<br/>                 18 changing is the load shape, the load profile,<br/>                 19 there's no change to the revenue requirement,<br/>                 20 no change to the fuel needed because you<br/>                 21 haven't changed the energy at all, so there's<br/>                 22 no mismatches inherent in it, but the peaks<br/>                 23 were flattened to be consistent with what the<br/>                 24 Board ordered. We went through a number of<br/>                 25 options for how you could deal with this<br/>                 26 situation and this IC-140 was only one option.</p>    |

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1 One option was to normalize the load. Another  
 2 was to create another class, and we did put  
 3 the - next slide, please. We did run four  
 4 options in that submission. So one option was  
 5 to run another class, and had you run another  
 6 class, the - it's in the submission, I didn't  
 7 put it into this slide, but the industrial  
 8 customer demand rate for operating industrial  
 9 customers would go down by a dollar a  
 10 kilowatt, which is a very large change, that  
 11 the non-operating industrial customers as a  
 12 class would have a demand rate that went up by  
 13 something like 6 dollars a kilowatt, so there  
 14 would be something like \$8.15 is the numbers I  
 15 can recall, I can pull them up, because of the  
 16 issue of them ramping up, and because the cost  
 17 of service data would be trying to do through  
 18 the back door what the Board said don't do  
 19 through the front door. In other words,  
 20 assign you a full share of cost as if you  
 21 operated all year, but try to collect it back  
 22 on a limited number of units because you  
 23 didn't operate all year. That was the problem  
 24 with this cost of service study is it was  
 25 taking an \$8.00 group of customers and a  
 26 \$15.00 group of customers and averaging them

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1 together and calling it \$9.00, and the \$15.00  
 2 number was not appropriate given the fact that  
 3 they were ramping up. So our sensitivity with  
 4 that and our normalization was based on  
 5 ensuring that we were focusing on not  
 6 assigning cost to a class for which there's no  
 7 load to pay for it. In their case, there  
 8 would be no load to pay for this cost.  
 9 Because they have a smaller load, you'd have  
 10 to increase the rate. Now that we've got to  
 11 2015 and we see a high load factor among the  
 12 whole class, and that's been agreed to, I  
 13 understand, everyone understands that, there's  
 14 no need to do this similar adjustment. We're  
 15 not seeing that same type of ramp up factor in  
 16 the cost of service study, so the 2015 cost of  
 17 service study is only assigning cost to the  
 18 class for which there's a load to actually pay  
 19 for. That's why we didn't recommend any  
 20 changes. The issue - on my last page, page  
 21 22, the issue in regards to the unsettled item  
 22 is that you need to be careful in a cost of  
 23 service study you're not mixing and matching  
 24 loads and costs from different years. I don't  
 25 think I'm in a different place than Mr. Doug  
 26 Bowman about that, and if you do have a

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1 mismatch, you can run into problems. What's  
 2 being proposed is to say let's recognize that  
 3 the industrial customer is growing and so this  
 4 pie, if you like, will be cut into more  
 5 pieces, so each share will be smaller, and if  
 6 that were the case, the customers I represent  
 7 should be first in line to say absolutely,  
 8 let's do that, because our share is also going  
 9 to get cheaper, and people pay less, we'll pay  
 10 less, Vale will have this huge extra share  
 11 because they're going to get allocated as if  
 12 they were the 2016 or 2017 load, but it's  
 13 going to lead to the exact same place that we  
 14 had the problems in the first one, which is  
 15 you end up allocating to a customer costs that  
 16 unfortunately there's no load to pay for them,  
 17 and what the Board have said, I don't want to  
 18 allocate those costs until the load is there,  
 19 as part of those past orders. So if anything,  
 20 the proposal to use the future load forecast  
 21 is creating the very issue we tried to solve  
 22 with the proposal in the 2013 cost of service  
 23 that we no longer see in the 2014 cost of  
 24 service, and I think that's only emphasized by  
 25 the exhibit we saw early this morning, which  
 26 I've had a few more minutes to review than Mr.

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1 Doug Bowman did, and even then it's still in  
 2 the early stages of review, if you like, but  
 3 the end result is doing effectively what we  
 4 would have thought - I quoted some numbers,  
 5 you'll notice on the slide. They were from an  
 6 earlier version of this that was being passed  
 7 around at the time of the negotiated  
 8 settlement, but the end result is that if you  
 9 have more load on which to split the same  
 10 costs, everyone pays less. So your demand  
 11 charges will actually go down, or at least not  
 12 change materially, and that's exactly what you  
 13 see in Hydro's numbers. The problem is if you  
 14 actually do that, and pardon me, I'll go to  
 15 the exhibit Hydro just pulled out.  
 16 MR. COXWORTHY:  
 17 Q. Undertaking 41.  
 18 MR. PATRICK BOWMAN:  
 19 A. Undertaking 41. Can we pull up Undertaking  
 20 41, and I apologize for this, but I'm going to  
 21 take you to the third page which is the small  
 22 numbers. What you see in the first group,  
 23 first box, is the 2015 test year, and there's  
 24 a fair number of numbers at the top, but if  
 25 you work way down to the bottom, you'll see a  
 26 number that says, IC Demand cost, \$8.38.

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1 That's what's being proposed in this here.  
 2 You go further down, and you see an NP demand  
 3 cost, which is a cost allocation, it's not  
 4 actually the rate proposed or anything, it's a  
 5 cost obligation of \$10.18, and two rows up  
 6 from that you'll see what that means in dollar  
 7 terms. The industrial customers will get 8. 9  
 8 million dollars of costs, NP would get 153  
 9 million. Now we're going to move across the  
 10 page and what Hydro has provided is a 2016  
 11 forecast and a 2017 forecast, meaning forecast  
 12 loads, just loads, and then at the end a three  
 13 year average, and it might just be easiest to  
 14 go to the 2017 as an example.  
 15 (12:30 p.m.)  
 16 If you look at the 2017, what you see is  
 17 industrial customers go from 8.9 million in  
 18 costs up to 11.6 million, right, they got a  
 19 bigger share, the share of the pie going to  
 20 industrial customers is going up, but their  
 21 billing unit, if we have the 2017 load, would  
 22 be 1.4 million billing units, so the rate  
 23 comes out exactly the same. NP gets a smaller  
 24 share of cost, down by 1.7 million dollars  
 25 allocated to it, so it's average cost goes  
 26 down a bit. So far, if we went down this

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1 road, industrial customers hold the same rate,  
 2 NP pays less. We're going to flip to the next  
 3 page which says "Energy", so we can see the  
 4 whole picture, and energy is basically doing  
 5 the same thing, it's showing dollars with the  
 6 units and then the rates, and again in the  
 7 first piece you see 5.151, which is the energy  
 8 rate proposed for the ICs in this hearing, and  
 9 NP is at 5.16, which again is the average NP  
 10 energy cost in this hearing as proposed in the  
 11 cost of service study, and if we move over to  
 12 2017 and say what if we carved up 2015 costs  
 13 based on 2017 load, the industrial customer  
 14 rate drops from 5.1 cents to 4.9 cents, and  
 15 the NP rate drops from 5.16 to 4.91. So if  
 16 only we could do this, if only we could use  
 17 the 2017 loads, the industrial customer rate  
 18 would be lower, and NP's rate would be lower,  
 19 which sounds great, we would be the first to  
 20 line up that, except this has the problem that  
 21 if people actually paid that rate, Hydro  
 22 wouldn't reach revenue requirements because  
 23 it's trying to take its revenue requirement  
 24 for 2015 and carve it up on a load that  
 25 doesn't exist in 2015. There's no one to pay  
 26 that amount unless Vale somehow pays their

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1 bill of what they would have paid if it was  
 2 2017, this year and next year. So this  
 3 allocation is if you only focus on one piece  
 4 of it, if you only focus on Newfoundland Power  
 5 paying 1.7 million less, that sounds great,  
 6 but that's a share that some day Vale will be  
 7 on the system to pay, but they don't exist  
 8 there yet for to pay that, their load isn't at  
 9 that level, and if anything, it seems to be  
 10 longer and longer before it's going to show  
 11 up. So that's the reason why mixing and  
 12 matching the years starts to lead you into  
 13 problems and Hydro's line that this is just a  
 14 cost of service, we're going to get our money  
 15 either way, under this scenario they won't get  
 16 their money, their rates will be lower on the  
 17 same load, Hydro will actually be out a  
 18 portion of its revenue requirement, and the  
 19 reason I can't suggest our clients argue for  
 20 this is because I'm pretty sure Hydro will  
 21 come back and say we need to find a way to get  
 22 that money back and it's going to come back  
 23 around. So I'm not suggesting that we  
 24 shouldn't look at a cost of service that is  
 25 representative over the period, but the piece  
 26 you should look at as representative is

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1 whether the rate that's being put in place  
 2 today reasonably represents what the rates  
 3 would be in 2016 and 2017, given the load, and  
 4 if you see that with something like the rates  
 5 here that they're not changing dramatically,  
 6 they're going down, but they're not changing  
 7 by a huge amount, if that's the conclusion,  
 8 then you're fine. If you see them changing by  
 9 a huge amount, then it just tells you you need  
 10 a 2016 or 2017 test year, and by the time you  
 11 do that, Hydro is going to bring in new  
 12 revenue requirements and the like, but the  
 13 evidence isn't here today to do that.  
 14 MR. COXWORTHY:  
 15 Q. Thank you, Mr. Bowman. Mr. Chairman, there's  
 16 no further direct.  
 17 CHAIRMAN:  
 18 Q. I think we start with you, Mr. Young.  
 19 MR. YOUNG:  
 20 Q. Yes, Mr. Chair. Actually, I'm going to ask  
 21 for a couple of minutes, if you don't mind. I  
 22 feel like I've been drinking through a fire  
 23 hose in the last few minutes of - fair bit of  
 24 data coming at me. I'd like to take just  
 25 three or four minutes to discuss this with my  
 26 people, who will give me some advice on one or

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1 two items.  
 2 CHAIRMAN:  
 3 Q. Sure.  
 4 MR. YOUNG:  
 5 Q. Thank you.  
 6 (12:34 p.m.)  
 7 (RECESS)  
 8 (12:52 p.m.)  
 9 MR. PATRICK BOWMAN - CROSS-EXAMINATION BY MR. GEOFFREY  
 10 YOUNG:  
 11 MR. YOUNG:  
 12 Q. Good afternoon, Mr. Bowman. I'd just like to  
 13 thank the Board and the parties for giving me  
 14 that indulgence, I did need to speak to some  
 15 people. There was a strange question asked  
 16 earlier in the hearing to a witness, were they  
 17 an engineer, and the answer was "no", and then  
 18 "I'm not an engineer either, I need to speak  
 19 to one", so I think to actually have an  
 20 opportunity to have done so might make this a  
 21 little bit more efficient, the whole area of  
 22 questioning that I was going to wander  
 23 through, which I don't need to go through. I  
 24 wonder if I could start with the issue of the  
 25 deferral accounts. You mentioned at the end  
 26 of your testimony that some of these things

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1 have to be tested for reasonableness on the  
 2 ground, and some of the issues that you've  
 3 explored, it occurred to me, and we can start,  
 4 if you wish, with the Holyrood efficiency  
 5 issue, the station services and that amount  
 6 and, I think, as I understand your testimony,  
 7 you don't have the data you would like to know  
 8 exactly where that is, and, of course, we're  
 9 using five years of history to try to get an  
 10 assessment of that. Because of the potential  
 11 variability of this, and as you said, there  
 12 are circumstances changing, and I think you're  
 13 probably aware that there's testimony to the  
 14 Board that the manner in which the Holyrood  
 15 thermal plant is being used to meet system  
 16 requirements is changing a little bit, do you  
 17 think it will be a good idea if we could  
 18 insulate customers from the ups and downs of  
 19 that by putting this issue into deferral  
 20 account, or dealing with it in that manner so  
 21 that the efficiency is different than we  
 22 anticipate, and we don't know where it's going  
 23 to be, so that customers neither win nor lose?  
 24 MR. PATRICK BOWMAN:  
 25 A. Yes, I did deal with that in the pre-filed  
 26 testimony. I didn't go to it, but just to say

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1 normally, and this is in agreement with the  
 2 comments of Mr. Doug Bowman, normally fuel  
 3 efficiency is something you would like to see  
 4 the utility on the hook for, if you like, or  
 5 somehow having a financial impact, and you'll  
 6 see that in a lot of different jurisdictions,  
 7 but given the fact that Holyrood is in this  
 8 transition phase, it's a fairly limited period  
 9 where we're going to be dealing with it, we  
 10 didn't take any objection to what Hydro was  
 11 proposing on stabilizing efficiency, and  
 12 that's summarized at page 3 of our pre-filed  
 13 testimony.  
 14 MR. YOUNG:  
 15 Q. Yes, and that's where I was going to take you,  
 16 but I don't need to. Thank you. The other  
 17 point, similar in a sense, is the combustion  
 18 turbine at Holyrood, which there is testimony  
 19 preceding you with regard to the way that may  
 20 be used at different times of year for  
 21 different purposes. The amount of fuel that's  
 22 used there, do you think that's also a fuel  
 23 supply matter that should go - because it  
 24 could be larger, it could be small, it depends  
 25 largely on the circumstances. I think that's  
 26 the testimony. Do you think that's also

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1 something that we could properly deal with in  
 2 a deferral account to support that?  
 3 MR. PATRICK BOWMAN:  
 4 A. I'll say yes, with one small caveat, which is  
 5 I did see some new information coming out of  
 6 some of the earlier cross-examination now that  
 7 the combustion turbine is available, Hydro has  
 8 a new opportunity to optimize how it deals  
 9 with loading of Holyrood in certain  
 10 circumstances, such as you only need a few  
 11 hours a day of supply, keeping a unit on at  
 12 Holyrood which doesn't ramp up and down  
 13 easily, can lead to a very low efficiency at  
 14 Holyrood. So even though fuel oil, like,  
 15 number 6 oil would be cheaper on an output  
 16 basis, you're spending more to keep this unit  
 17 warm than just to turn on the turbine and turn  
 18 it off. Whenever you have that kind of trade  
 19 off available to a utility, you'd want to go  
 20 through all of the linkages to make sure that  
 21 there's not some weird incentive that if I do  
 22 it that way, you know, I win, or do it that  
 23 way, you lose, something that I get to charge  
 24 into RSP one way, and one way it hits my  
 25 books, so you end up with weird incentives,  
 26 and I can't say I've thought that all the way

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1 through, but it seems to me that if it's a  
 2 resource of that type which has a trade off  
 3 with Holyrood, probably you'd end up with the  
 4 result being they would be treated similarly.  
 5 MR. YOUNG:  
 6 Q. Yeah, I think that you answered the question  
 7 the way I expected you to, the point being if  
 8 the company is running those assets together  
 9 for the optimum way, but there is a trigger in  
 10 the way that you're awarded or penalized with  
 11 respect to something an efficiency of a unit  
 12 which you shouldn't be running very high  
 13 because of other reasons, that might give the  
 14 wrong sort of results from the point of view  
 15 of the company doing the wrong thing on that  
 16 day. So if you remove that concern, I think  
 17 this is what you're saying, and let the  
 18 company do the right thing for the system and  
 19 avoid those penalties or rewards with respect  
 20 to an efficiency factor, it might be better  
 21 and I'll say we're fairly new at this because  
 22 the CT is a relatively new asset for us.  
 23 MR. PATRICK BOWMAN:  
 24 A. Yeah, and I think you're not only new at it  
 25 because the CT is new, I think you're new at  
 26 it because Holyrood is playing a different

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1 role, which you'll see a fair bit in our  
 2 evidence, although this is a matter that's  
 3 been put off, but Holyrood was just a bulk  
 4 power of resource before. Now it's doing  
 5 reliability roles and voltage stability and  
 6 all these things as Avalon load grows and  
 7 other loads shrinks, so its role is not going  
 8 to change and this just underlines it even  
 9 more so. And I just want to be careful that  
 10 in the comments I'm not trying to suggest that  
 11 Hydro would act improperly or somehow not in  
 12 the least cost fashion, but you do have to  
 13 recognize financial incentives and, you know,  
 14 whether those incentives are acted upon or  
 15 not, it certainly makes this room a lot easier  
 16 if people aren't suspicious that they may have  
 17 been, so if you can find a way that the system  
 18 is clean, then that works better.  
 19 MR. YOUNG:  
 20 Q. Thank you. Your discussion at the end of your  
 21 testimony regarding the undertaking this  
 22 morning, undertaking 41, I'm trying to get a  
 23 better sense of what you said at the end of  
 24 that. I was trying to follow it, of course,  
 25 this was not something you had an opportunity  
 26 to provide anything pre-filed on it because

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1 this is sort of coming at you somewhat cold  
 2 this morning, but what I understood you to say  
 3 is that if you, for want of a better word,  
 4 "tinker" with some of these factors, you can  
 5 get untoward results or results which may not  
 6 be stable or robust as you go through this. I  
 7 suppose in a theoretical ideal you would have  
 8 numerous test years and would change all of  
 9 these factors correctly, but I got the  
 10 impression you were saying if you changed some  
 11 of these factors without considering the  
 12 larger picture, you can get results which are  
 13 reliable, is that correct? Was that your  
 14 message?  
 15 (1:00 p.m.)  
 16 MR. PATRICK BOWMAN:  
 17 A. Well that's the sort of truism, if you like,  
 18 before you change one thing, you at least  
 19 understand what the others are going to do and  
 20 if they're material. My comments, if it  
 21 helps, were along the lines of I think you  
 22 need to find a consistent year, a consistent  
 23 time period for which you can design a set of  
 24 rates that fully recover the revenue  
 25 requirement, recognize the loads that are  
 26 there, and then look at the time periods in

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1 which those rates would be applied. If you  
 2 had a test year every year, we wouldn't have a  
 3 problem, but we're not trying to have a test  
 4 year every year, so because we don't have a  
 5 test year every year, you'd run the 2015 rates  
 6 and see if those kind of worked over '16 and  
 7 '17 and I'm sympathetic to people saying that  
 8 it takes a lot of data to do that. I think  
 9 this is not that different than I would  
 10 approach it on the quick way, I accept Mr.  
 11 Greneman's point that you could certainly do  
 12 it in a far more detail level, but as a quick  
 13 way, this is a perfectly reasonable approach  
 14 and what it says to me, if I'm looking at it  
 15 from an industrial customer's perspective,  
 16 this suggests that the rates are, for 2015  
 17 that are proposed, are not orders of magnitude  
 18 different than what would happen if you had a  
 19 2017 test year, recognizing that this 2017  
 20 number doesn't have new 2017 costs built in,  
 21 right, as they're going to be building things,  
 22 they're going to be borrowing money and all  
 23 that sort of stuff. But they're not, you  
 24 know, some order of magnitude that would swing  
 25 things dramatically and I think the demand  
 26 charge wouldn't be different at all. And to

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1 the extent their energy rate is different,  
 2 this--it would raise questions as to whether  
 3 continuing to pay the 5.1 cent rate while the  
 4 cost level starts to drop towards the 4.9  
 5 would lead to somehow Hydro profiting from  
 6 load growth because charging 5.1 when the  
 7 costing is 4.9, but we already know through  
 8 the RFP mechanism Hydro is not able to  
 9 (inaudible) put the costs through there and  
 10 the revenues through there, so, now, as Mr.  
 11 Greneman says if you were to do a huge  
 12 spreadsheet and follow all this through, we'd  
 13 really check with the RSP data, really check  
 14 with the cost of service data, but I don't  
 15 think you'd--this doesn't, to me, suggest a  
 16 major base of concern.  
 17 MR. YOUNG:  
 18 Q. My last question has to do with the point  
 19 you've raised about the current RSP balance  
 20 and the change and the way it's going to be  
 21 treated from a borrowing methodology, once  
 22 it's paid out. I'm just wondering if you  
 23 agree with me that while that is a change that  
 24 may occur, that over the next year or so when  
 25 the rates are going to be set and put in  
 26 place, all kinds of things change, that is

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1 one, but there is inflationary changes,  
 2 there's capital changes, there's assets go in  
 3 and out of service, I mean, this is just one  
 4 of the number of variables, would you agree?  
 5 MR. PATRICK BOWMAN:  
 6 A. Yeah, I agree with that and I'd even underline  
 7 it by saying when we first went through this,  
 8 we were sitting with an OIC saying these  
 9 amounts would be paid out by Christmas, 2013,  
 10 if I have my dates correctly and this,  
 11 particularly the NP balance, which is one  
 12 major cash transaction that would be a known  
 13 event and we looked at the 2014 test year and  
 14 we came up with the recommendation saying this  
 15 was a problem and certainly in discussions  
 16 with the clients, we'd raise this the same,  
 17 this item is working, it's (unintelligible)  
 18 it's going to be there a long time and all the  
 19 time it's there, it's earning 7 percent  
 20 interest, you know, on the balances and where  
 21 is that 7 percent, it's coming out of rates,  
 22 like people are paying these amounts and maybe  
 23 people should look at transferring this to  
 24 somewhere where it's financed by a low cost  
 25 debt, rather than assuming it's this high cost  
 26 equity and long-term debt finance short-term

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1 balance. So the concern raised in that  
 2 context and the idea would be the amount we  
 3 paid out including within the test years we  
 4 are dealing with. Now that it's pushed  
 5 beyond, you know, that is an issue that, yeah,  
 6 there would be pluses, there would be minuses  
 7 and this would be one of the factors, assuming  
 8 it's not paid out in calendar 2015.  
 9 MR. YOUNG:  
 10 Q. Thank you, Mr. Bowman, those are my questions.  
 11 Thank you, Mr. Chair.  
 12 CHAIRMAN:  
 13 Q. I think Mr. O'Brien, we're over to you.  
 14 MR. PATRICK BOWMAN, CROSS-EXAMINATION BY MR. LIAM O'BRIEN  
 15 MR. O'BRIEN:  
 16 Q. Thank you, Mr. Chair. Mr. Bowman, I only have  
 17 a couple of questions for you, one of them  
 18 deals with the load variation component, the  
 19 RSP and you had indicated, I guess, that it  
 20 should be eliminated. I'm wondering and I  
 21 sort of got a feeling that you're not  
 22 necessarily head strong on that being  
 23 eliminated right now if we're going to look at  
 24 that in a Cost of Service Study in the next  
 25 couple of years, am I fair in my assessment of  
 26 that?

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1 MR. PATRICK BOWMAN:  
 2 A. That's fair.  
 3 MR. O'BRIEN:  
 4 Q. Because there may be some rate design changes  
 5 for the industrial customers that might arise  
 6 out of that Cost of Service Study and it might  
 7 be appropriate to look at all of this at one  
 8 time.  
 9 MR. PATRICK BOWMAN:  
 10 A. Well as a matter of fact, that was exactly  
 11 what was proposed out of the 2006 settlement  
 12 that there would be an industrial customer  
 13 rate design working group and a RSP working  
 14 group, and the idea was we'd head towards  
 15 somewhere where the load variation wasn't  
 16 needed and we know what, you know, industrial  
 17 customer rate design got delayed and now we  
 18 are where we are, so the two are linked.  
 19 MR. O'BRIEN:  
 20 Q. Okay, the only other question I had, just in  
 21 terms of the O&M costs you were talking about,  
 22 your comments were really associated with the  
 23 frequency converter, I think, more so than Mr.  
 24 Dean's position with respect to O&M charges,  
 25 is that fair to say?  
 26 MR. PATRICK BOWMAN:

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1 A. My comments were specifically look at the  
2 facts of the frequency converter, the comments  
3 on the principles I think would apply to  
4 either situation.

5 MR. O'BRIEN:

6 Q. Okay, to either situation, and in terms of Mr.  
7 Dean's position, and we will hear from him, I  
8 guess, as to how you would calculate or pro-  
9 rate O&M costs by looking at the Handy Witman  
10 Index and making some assumptions in terms of  
11 plant in-service dates, that sort of thing, so  
12 you account for the time, value, money. Are  
13 you aware of any other jurisdiction that would  
14 do that?

15 MR. PATRICK BOWMAN:

16 A. Not specifically, but I did do some work on  
17 this to look into the other jurisdictions  
18 we've worked in and I will tell you quite  
19 frankly I wasn't even able to identify one  
20 that I'm familiar with that charges specific  
21 O&M at all. Specifics on assets, so people  
22 pay for assets up front, but I did check with  
23 Manitoba Hydro and I've looked at our  
24 situation, we hooked up a mine in Yukon and  
25 some others and most people don't bother to  
26 try to go along and also say I'm going to do

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1 something like this and without going too far  
2 down in my conversation with people at  
3 management of Hydro, I certainly had them  
4 scratching their head about how much effort it  
5 might be and how they would do it in a  
6 defensible way. Now they are a much smaller  
7 specifically assigned asset bases, so I can't  
8 recall the numbers of how many contributed or  
9 customer paid for assets are.

10 MR. O'BRIEN:

11 Q. So in terms of the question, I guess, you're  
12 not aware of any other jurisdictions that  
13 would do it the way Mr. Dean is proposing to  
14 do it?

15 MR. PATRICK BOWMAN:

16 A. No, I'm not aware that any would need to  
17 because they don't try to go through an  
18 allocation process, so neither what's done  
19 here or what Mr. Dean's approach is consistent  
20 with any other I was able to quickly look at.

21 MR. O'BRIEN:

22 Q. Okay, all right, I have no further questions  
23 for Mr. Bowman.

24 CHAIRMAN:

25 Q. Mr. Johnson, I believe.

26 MR. PATRICK BOWMAN, CROSS-EXAMINATION BY TOM JOHNSON,

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1 Q.C.:

2 JOHNSON, Q.C.:

3 Q. If I could get some clarity on the load  
4 variation position, I guess what I'm  
5 interested in knowing, it's one thing to say  
6 well I don't feel strongly about it, I'm not  
7 head strong about changing the load variation,  
8 but can I take that as meaning, look, I'm not  
9 going to be asking the Board at the end of the  
10 day to change the load variation in this  
11 proceeding and we'll study it further? Can we  
12 get some clarity on that, Mr. Bowman?

13 MR. PATRICK BOWMAN:

14 A. Mr. Johnson, I'm just a guy retained to  
15 provide advice and write a report for the  
16 client, they're going to come up with a  
17 position they recommend at the end of the day.  
18 My review of it is the load variation  
19 provision, we recommended--people from my firm  
20 who were involved in 2001 testified here that  
21 it didn't belong in '03 and '06. Our position  
22 wouldn't have changed on that but in terms of  
23 when you do it, it's been 15 years trying to  
24 get people to talk about it and go through  
25 those permutations. I don't think it's a  
26 drop-dead position for the industrial

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1 customers as I understand it, but it is a  
2 concern about the risk distribution.

3 JOHNSON, Q.C.:

4 Q. Yes, because dropping the load variation in  
5 the absence of having, looking at the  
6 industrial customer's energy rate or trying to  
7 set it to marginal cost, that has implication  
8 for Hydro's bottom line, doesn't it?

9 MR. PATRICK BOWMAN:

10 A. Yes.

11 JOHNSON, Q.C.:

12 Q. So for instance if we see the industrial  
13 customer class load going up fairly  
14 significantly in 2016 and 2017, in the absence  
15 of the load variation and of course the  
16 settlement agreement already indicates that  
17 the IC rate is settled upon, so if we didn't  
18 have that load variation and we had IC load  
19 ramping up in 2016 and 2017, that would mean  
20 that would be a loss going to Hydro's bottom  
21 line, would it not?

22 MR. PATRICK BOWMAN:

23 A. Unless it was a 2016, 2017 test year.

24 JOHNSON, Q.C.:

25 Q. Right, and we've also agreed that that's not  
26 going to be likely happening, right?

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1 MR. PATRICK BOWMAN:  
 2 A. Yes.  
 3 JOHNSON, Q.C.:  
 4 Q. So the idea that we would entertain dropping  
 5 the load variation in this proceeding without  
 6 having the work done on the IC rate, that's  
 7 not a good idea, right?  
 8 MR. PATRICK BOWMAN:  
 9 A. I don't disagree with you.  
 10 JOHNSON, Q.C.:  
 11 Q. All right. Now, with relation to the  
 12 specifically assigned charge issue and I just  
 13 want to get you to turn to page 21 of your  
 14 slide for a moment. You indicate at the  
 15 bottom of the slide there that "Mel Dean  
 16 offers alternative solution for specifically  
 17 assigned cost O&M and you say rationale is  
 18 sound, but this approach does not eliminate  
 19 need to make sure final result is reasonable."  
 20 That looks to me to say, look, I don't think  
 21 that we should, in this proceeding, make a  
 22 change to the Board's accepted methodology.  
 23 He's opened up a potential issue, but perhaps  
 24 we should study it when we were studying the  
 25 other cost of service issues, would that be a  
 26 proper characterization of where you are on

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1 that, Mr. Bowman?  
 2 MR. PATRICK BOWMAN:  
 3 A. No, the bullet, Mr. Chairman, the bullet was  
 4 added to emphasize that I'm cautious of anyone  
 5 ever coming up with a simple, like a  
 6 spreadsheet solution to analyzing this problem  
 7 away, that somebody at a desk and Handy Witman  
 8 or do something else to make sure that they've  
 9 arrived at a fair result. They may have  
 10 arrived at an analytically correct result, but  
 11 I still think there's a need to make sure that  
 12 the end result is reasonable and if it doesn't  
 13 pass the reasonableness test, then there's a  
 14 need to find a--to do an adjustment. I've  
 15 certainly seen that in other cost of service  
 16 issues where, you know, an issue may have  
 17 evolved over many, many years and cost of  
 18 service studies get adopted every GRA and  
 19 methods change a bit and pretty soon you get  
 20 somewhere and people look at it and say, wait  
 21 a minute, that's far away from what is  
 22 reasonable at all and it's time to do a bit of  
 23 an override. So I think if anything what  
 24 Mel's suggesting, Mel Dean is suggesting is  
 25 probably an improvement if you're going to  
 26 specifically assign O&M, it is an improvement

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1 as a matter of fact, but I don't know that it  
 2 solves the entire problem. And I say that in  
 3 light of the fact that you have to recognize  
 4 and this is in evidence, there are clients in  
 5 our group that would actually pay a bit more  
 6 as a result of applying that method, they're  
 7 not just let, so it's not just a matter of  
 8 getting the rate down, but the approach is an  
 9 improvement, it doesn't end the need to do a  
 10 reasonableness check.  
 11 JOHNSON, Q.C.:  
 12 Q. So in your opinion, Mr. Bowman, is the record  
 13 that's before the Board and just to put it  
 14 this way to you now, we've heard that there's  
 15 hardly anybody else does this in any of the  
 16 other regulatory boards, right, and Mr.  
 17 Greneman from Hydro said look, you know, we  
 18 came up with this sort of model as sort of a  
 19 discussion piece type of idea, you know, I  
 20 tend to think from what I'm reading that there  
 21 might be some sympathy for some of the  
 22 arguments, but you're not suggesting that the  
 23 record in this proceeding is sufficient to  
 24 give a level of satisfaction to you that the  
 25 final result that comes out of this would be  
 26 reasonable?

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1 MR. PATRICK BOWMAN:  
 2 A. I would suggest that the record in this  
 3 proceeding and basic understanding of  
 4 economics is that what Mr. Mel Dean has  
 5 suggested it is preferable, is a preferable to  
 6 the method that Hydro has been using and that  
 7 should be applied, and on top of that, a  
 8 reasonableness check should be applied to see  
 9 if that does address the issue or not. I can  
 10 tell you that when Corner Brook looks at the  
 11 result, when one looks at the results from  
 12 Corner Brook where the O&M charges are more  
 13 than double in this rate change, in this  
 14 proposal that Hydro has provided, the  
 15 application of Mr. Dean's method would reduce  
 16 that significantly to the point where you may  
 17 look at it and say the charges, the O&M  
 18 charges have gone up but it hasn't gone up by  
 19 that much more than inflation and so we don't  
 20 need to spend a whole bunch more time  
 21 assessing Hydro's proposal and whether the  
 22 evidence supports it. The evidence that a  
 23 charge goes up by inflation is pretty, you  
 24 know, is reasonable on the face of it at  
 25 least. So I think, no, I think it's an  
 26 improvement to do what Mr. Dean is suggesting

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1 and I think that then there's a need to also  
 2 do a cross-check and I think frankly it's on  
 3 Hydro to do it to make sure that the end  
 4 result distribution.  
 5 JOHNSON, Q.C.:  
 6 Q. So have you seen evidence on the record as to,  
 7 you know, the cross check that you're  
 8 suggesting and how we would ascertain this  
 9 reasonableness here in this proceeding?  
 10 MR. PATRICK BOWMAN:  
 11 A. No, as a matter of fact I said it's not there,  
 12 so something like Corner Brook's O&M charge,  
 13 you know, \$140,000 a year is currently built  
 14 into rates was accepted and presumable Hydro  
 15 considered it was reasonable, it came out of  
 16 the 2006 negotiations, so for whatever reason,  
 17 you know, the Board has had that in place. It  
 18 seems to me that the evidence to increase that  
 19 or change that, if we were using Mr. Dean's  
 20 method and I don't have the numbers right in  
 21 front of me, but if we're using Mr. Dean's  
 22 method and it came back that the charge is up  
 23 by a certain amount, but that amount is not  
 24 that different than inflation since 2006, then  
 25 I think you've probably gone most of the way  
 26 to showing that the result is reasonable.

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1 JOHNSON, Q.C.:  
 2 Q. Well I understand and we'll get into this a  
 3 little bit more with Mr. Dean, but there in  
 4 the Vale situation there was about 11 million  
 5 dollars in capital that was put in place in  
 6 terms of transmission lines and a terminal  
 7 station, a couple of transformers, et cetera  
 8 and the specifically assigned O&M cost is  
 9 around \$400,000, so about 4 percent of that  
 10 figure, and in terms of dealing with what Vale  
 11 is seeking, do you have any knowledge that  
 12 would indicate whether it should be 100,000 or  
 13 200,000 or 300,000, I mean, in terms of doing  
 14 this reasonableness check you're talking  
 15 about?  
 16 MR. PATRICK BOWMAN:  
 17 A. Well first of all, I don't have those numbers  
 18 handy, I'll take your numbers, I don't have  
 19 any objection to them, but I think there are a  
 20 couple of ways one could look at this for a  
 21 reasonableness check. Certainly lots of  
 22 people who do planning of transmission lines  
 23 will say, you know, you're doing an economic  
 24 cost benefit, they will say that  
 25 (unintelligible) cost 10 million dollars and  
 26 there's some standard type of adders

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1 (phonetic) that people use in the industry and  
 2 say, well you know, a normal percentage of O&M  
 3 might be "X" percent, I don't know if that's 4  
 4 or not, I haven't looked at transmission lines  
 5 in a while, I certainly have looked at Hydro's  
 6 plans, but not transmission lines, so  
 7 something like that might be an industry wide  
 8 cross-check. The other thing is probably not  
 9 that different than some of what I've read and  
 10 I admit, I haven't gotten into great detail of  
 11 it, but some of what I've read in terms of  
 12 Hydro's own internal cost allocations, what  
 13 it's doing with sister companies, can you look  
 14 at a timesheet study, can you look at what  
 15 your cost of a lineman is and what's a  
 16 reasonable number of hours that they might be  
 17 spending on harbour tightening or, you know, a  
 18 clearing, how much does it cost to clear that  
 19 brush line every once in a while and come up  
 20 with some type of normal levelized cost  
 21 estimates. People do desktop studies on  
 22 transmission lines all the time that have O&M  
 23 estimates, those are not uncommon, so to just  
 24 sort of revert to it's this percent or go 4  
 25 percent and off we go, I think it isn't as  
 26 defensible as a little bit of homework would

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1 give you.  
 2 JOHNSON, Q.C.:  
 3 Q. So it sounds to me that that issue is tailor  
 4 made for the 2016 review, to get into that  
 5 sort of level of detail and justification,  
 6 would you not agree?  
 7 MR. PATRICK BOWMAN:  
 8 A. I think the refinements we're talking about  
 9 could be part of that, but as I said, the  
 10 current method, Mr. Dean's method I think on  
 11 the merits, Mr. Dean's approach is better  
 12 because it addresses one known problem with  
 13 the current method which is the date of  
 14 implementation of the costs and inflationary  
 15 pressures over that period.  
 16 JOHNSON, Q.C.:  
 17 Q. Just on the Holyrood conversion account, the  
 18 deferral account, Mr. Bowman, I think your  
 19 evidence, if we could bring it up on page 22,  
 20 line 21 on page 22, connection with the  
 21 Holyrood fuel conversation factor, you say in  
 22 the second paragraph, "In addition the current  
 23 amended 2013 GRA proposes a mechanism which is  
 24 intended to provide protection for both Hydro  
 25 and rate payers if the fuel efficiency varies  
 26 from the GRA forecast." And I guess that

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1 statement, Mr. Bowman, caught my attention  
 2 because the evidence that we've heard,  
 3 including from Hydro's executives, Mr.  
 4 Henderson, Mr. Martin, they have characterized  
 5 these deferral accounts, including this one,  
 6 as a mechanism that in fact shifts risks away  
 7 from Hydro and on to customers, okay, in the  
 8 financial sense, okay? Would you agree that  
 9 in fact this deferral account does exactly  
 10 that, it shifts risk from Hydro to customers?  
 11 MR. PATRICK BOWMAN:  
 12 A. When you're looking at it from Hydro's  
 13 perspective, it shifts risk from Hydro to  
 14 customers, yes.  
 15 JOHNSON, Q.C.:  
 16 Q. Right, so your statement that it's intended to  
 17 provide protection for both Hydro and  
 18 customers is not true in the financial sense,  
 19 is it?  
 20 MR. PATRICK BOWMAN:  
 21 A. From a financial sense Hydro will have less  
 22 risk in a sense of variability as a result of  
 23 having this mechanism, so it will shift risk  
 24 from Hydro.  
 25 JOHNSON, Q.C.:  
 26 Q. From Hydro.

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1 MR. PATRICK BOWMAN:  
 2 A. From Hydro, yes, to customers.  
 3 JOHNSON, Q.C.:  
 4 Q. Right, and presently customers are protected  
 5 from that risk, right, in the absence -  
 6 MR. PATRICK BOWMAN:  
 7 A. Well protected in the sense that they have a  
 8 rate they know they're going to pay. If you  
 9 have a, you know, risk entails both sort of  
 10 downside and upside and customers are not  
 11 exposed to that at the moment.  
 12 JOHNSON, Q.C.:  
 13 Q. Yeah, but risk in the financial sense, as I  
 14 understand it, is precisely variability up and  
 15 down, right?  
 16 MR. PATRICK BOWMAN:  
 17 A. Right.  
 18 JOHNSON, Q.C.:  
 19 Q. Right, which presently belongs completely to  
 20 Hydro.  
 21 MR. PATRICK BOWMAN:  
 22 A. Correct.  
 23 JOHNSON, Q.C.:  
 24 Q. Right, okay. Now, I just want to understand  
 25 why in the context, because you're aware that  
 26 Hydro in this proceeding is getting a return

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1 on equity pursuant to a government directive  
 2 to the Board, very much higher than what the  
 3 Board set for them in the previous two GRAS,  
 4 you're familiar with that?  
 5 MR. PATRICK BOWMAN:  
 6 A. Yes.  
 7 JOHNSON, Q.C.:  
 8 Q. Okay, now can you explain why in that  
 9 circumstance that customers should want to  
 10 sign onto yet another protective mechanism for  
 11 Hydro which actually shifts risk to  
 12 themselves?  
 13 MR. PATRICK BOWMAN:  
 14 A. Well, Mr. Johnson, the problem we have is that  
 15 there is in the future going to be a correct  
 16 number in each instance in time and it's going  
 17 to vary and we don't know what it's going to  
 18 be, just as accepting that variability has an  
 19 element of risk, I think, even in the street  
 20 we talk about, you know, locking your mortgage  
 21 also has risk, not risk in that the number is  
 22 going to change, but risk in that you locked  
 23 in at the wrong time, if you like. So part of  
 24 the role and I do have some notes that I  
 25 glossed over in the direct to save a bit of  
 26 time, but part of the role of this type of

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1 stabilization account is to say there is a  
 2 fuel price, there is a hydrology, for example,  
 3 there is an efficiency that's going to exist  
 4 that we can all spend time sort of arguing  
 5 over and trying to get right, it's going to be  
 6 different than we all assumed it was, no  
 7 matter what, and the question is who should  
 8 carry that variability? Things like hydrology  
 9 and fuel have been well accepted that Hydro  
 10 should be protected from those and customers  
 11 should pay the actual amount which is in a  
 12 sense a protection from customers from having  
 13 to guess at a hearing like this or come up  
 14 with exact right number, they'll argue to get  
 15 lower amounts or higher hydrology or lower  
 16 fuel pricing or anything like this and then be  
 17 stuck with that if it turns out to be  
 18 materially wrong. So the question is where  
 19 does hydrology better fit and is it better fit  
 20 like rainfall or is it better fit in something  
 21 that's in, you know, or at the very least it's  
 22 with Hydro rather than customers. The  
 23 advantage is if the variability sits with  
 24 customers, it makes customers pay the actual,  
 25 it makes customers not have to come into a  
 26 hearing like this and debate what the right

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1 numbers and live with it, whether they're  
 2 wrong or not and particularly in an  
 3 environment where Hydro has the advantage of  
 4 better information, the full record, all the  
 5 details or is it better that the variability  
 6 reside the other way, and normally I would  
 7 argue that efficiency is better suited to the  
 8 utility because they actually have some  
 9 ability to control it, they have some efforts  
 10 and it's a good incentive piece to put on to  
 11 the utility and they can see an ROE that gives  
 12 them compensation for bearing such a risk, and  
 13 the load variations exactly the same, if you  
 14 look down this list of characteristics, load  
 15 variations would be on the utility which is  
 16 why we say get rid of it. If your question is  
 17 how is it consistency, I'll give you a higher  
 18 ROE and take away variability from you, I  
 19 think that is somewhat inconsistent and it's a  
 20 divergence that exists at this time and that's  
 21 got to be considered.

22 JOHNSON, Q.C.:

23 Q. And having thought about it, like as you have,  
 24 and I appreciate the fact that you're  
 25 reflecting on it there, et cetera, but having  
 26 reflected on that a bit further, would you

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1 agree with me that, you know, in the light of  
 2 these circumstances that we really ought not  
 3 to be relieving Hydro of a risk that we've  
 4 been paying Hydro to manage up until now for a  
 5 far lower ROE?

6 MR. PATRICK BOWMAN:

7 A. As I said over the long term, I would say  
 8 efficiency should reside with the utility. If  
 9 efficiency was still residing with the  
 10 utility, I think you'd find that some of  
 11 comments I made in the first section of our  
 12 evidence might be stepped up a bit, like I  
 13 don't think they have the record of how  
 14 Holyrood operates in this day and age with all  
 15 the improvements done on it at the load levels  
 16 they're talking about. To me the record is,  
 17 650 is a reasonable estimate, but I think if  
 18 you really went through it, you'd probably  
 19 come up a bit higher. I think you'd see the  
 20 same thing on the station service side, you'd  
 21 come up a bit lower and if that was about  
 22 dollars in the pocket at the end of the day, I  
 23 think you'd be very careful that you didn't  
 24 set that too low and allow Hydro to profit  
 25 from upside. We would want to work hard to do  
 26 that. Because of this account, I think we can

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1 be a bit more comforted that when you go  
 2 through that, I have some recommended  
 3 suggestions but if the Board is to accept  
 4 those, it would come out to about 622 kilowatt  
 5 hours a barrel and we don't have to argue for  
 6 626 because we know that if it does come out  
 7 to 626, we're going to see the upside of it.  
 8 So I would say that the concern that I would  
 9 see is that in the type of operation Hydro is  
 10 facing, there is potentially more upside than  
 11 downside in the fuel efficiency factor and if  
 12 that were not available to customers, I think  
 13 we'd have to have a bit more debate here about  
 14 how much upside might still be there.

15 JOHNSON, Q.C.:

16 Q. No sense to ask another question now, Mr.  
 17 Chairman at this hour.

18 CHAIRMAN:

19 Q. Okay, so we shall adjourn until tomorrow  
 20 morning.

21 Upon conclusion at 1:28 p.m.

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1 CERTIFICATE

2 I, Judy Moss, hereby certify that the foregoing is a true  
 3 and correct transcript of a hearing in the matter of  
 4 Newfoundland and Labrador Hydro's General Rate  
 5 Application heard on the 30th of September, A.D., 2015  
 6 before the Commissioners of the Public Utilities Board,  
 7 St. John's, Newfoundland and Labrador and was transcribed  
 8 by me to the best of my ability by means of a sound  
 9 apparatus.

10 Dated at St. John's, Newfoundland and Labrador  
 11 this 30th day of September, A.D., 2015

12 Judy Moss  
 13



|   |   |  |   |   |
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