(9:30 a.m.) 1

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MR. NOSEWORTHY, CHAIRMAN: Thank you and good morning. Just a couple of things before we begin this morning. I did circulate a copy of, well actually circulated two letters. One is given ... I was addressing ... I'll address both rather than ask counsel to address the other. One is simply a request from a David A. Hood on behalf of Serca (phonetic) Facilities Management to make an oral presentation in Goose Bay and I trust the corporate, Board secretary will look after that. The second letter is a letter which I became aware of yesterday from Wally Anderson, the MHA for Torngat Mountains District, to the Nain Town Council, suggesting that the Public Utilities Board is willing to pay for travel and accommodation for representatives from the district to attend the hearing in Goose Bay. Indeed that is not the case. We have been in contact with ... the Board secretary has been in contact with Mr. Anderson to correct that and certainly it's never our intention, and indeed we aren't in a position to provide expenses up front for that type of travel. Mr. Anderson has been made aware of that and really acknowledged the fact that the letter was in error and he was aware of the fact that the Board cannot pay for such items. I would ask either Hydro or the Consumer Advocate if there's any additional information they could shed on this at all at this point in time.

MR. BROWNE, Q.C.: I have some information. I've spoken again with Mr. Curtis Richard or Richards at the Town of St. Anthony. He's the Town Clerk. He tells me in St. Anthony the Town itself will be making a presentation to the Board. He's also circulated a letter to businesses, to the fish plant and made it aware, made the time of the hearing aware to citizens generally, but he tells me as of this morning the only ones for certain who will be presenting will be the Town itself. I'm continuing on that. We haven't heard back from Roddickton yet and Trevor Taylor is still working on it as well. I expect that you'll be hearing from him during the hearing, so I'll continue to work on that and see if we can firm it up at least before the close of business tomorrow, given the proximity of the time.

MR. NOSEWORTHY, CHAIRMAN: Yes, please.

MR. BROWNE, Q.C.: I've also spoken to Wally Anderson's assistant, Pat Ford, and I've spoken to the Town Clerk in Nain and indeed clarified, after I had a conversation with my colleague, Maureen Greene, that Hydro will pay for travel directly but will want to be invoiced for hotel and meals and I advised them that they would use the Government per diem rate for meals, so ... and that seems acceptable, at least to the person in Nain I was speaking with. In the meantime this Board is continuing to determine who will be attending the hearings in Goose Bay along the coast and Yvonne Jones tells me she'll get back to me later today. That's where we are with

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Browne. Ms. Greene, do you have any comments?

MS. GREENE, Q.C.: With respect to the administrative arrangements, as the Consumer Advocate has pointed out, we have been working with him to try to arrange the logistics for the travel and we have agreed that it probably would be best if, for the individual that, if they made their own arrangements but through a travel agent of Hydro so 62 that we will pay for the ticket so that the individual wouldn't have to be out of pocket for that particular expense for the air travel. The difficult part is we don't know who's attending or what communities they're attending from and the time is late in terms of availability of flights for next Wednesday, so I had asked the Consumer Advocate as soon as we have some determination of that it would be helpful to get moving with that as quickly as possible, but, yes, to facilitate the process we've agreed to do that for the air transportation and hopefully that will facilitate the travel of the representatives coming into Goose Bay.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much for that information.

77 MR. BROWNE, Q.C.: There's just one other point I should mention. There seemed to be confusion, at least in Nain, as to exactly what Hydro was looking for by way of an increase for Nain, and I don't know if Hydro put an insert in the bills at some point advising exactly what the increase would be for the coastal communities, and maybe Ms. Greene can speak to that or someone.

MS. GREENE, Q.C.: Actually Mr. Wells spoke to that as well in response to questions from Commissioner Saunders, and I spoke to it as well later in response to a question from Board counsel. Hydro did not send direct mail-outs to the rural customers with respect to the impact on the rural customers of this application. There were media releases and media briefings at the time and it was in the paper that the percentage ... what Hydro is proposing is that the same increase would be ... the same policy continue which means that for isolated communities the same percentage increase would be applied to the lifeline block as is applied to Newfoundland Power's customers, so that has been communicated through the media, not through a direct mailout. And as we also mentioned, if you recall, that there had been meetings with certain towns where there was a significant policy change such as the Labrador interconnected system customers and also with the Industrial Customers. So I guess the short answer to Mr. Browne, is, no, we did not do a direct mail-out. We did do press releases and met with the editorial board of Robinson

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Blackmore for the isolated areas to ensure they understood the application.

MR. BROWNE, Q.C.: There seems to be a lack of 3 awareness there. I don't know if that can be remedied in the 4 short by Hydro perhaps faxing to the town clerks along the 5 coastal area exactly what the increase they are seeking for 6 each community so the councils know they ... I was 7 surprised yesterday when the Town Clerk for Nain, Vicky 8 Williams, could not indicate to me exactly what the increase 9 was and knew little of it, so there's a problem there. 10

MR. NOSEWORTHY, CHAIRMAN: Any further comment,

Ms. Greene?

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MS. GREENE, Q.C.: The Board has also had notices in the paper. There's been media attention. Yes, we can certainly undertake to ...

MR. NOSEWORTHY, CHAIRMAN: We have ... yes. And certainly I can only ... we've heard the Consumer Advocate's comments and I guess as far as the Board is concerned, (inaudible) to sort that out. With a view to the arrangements, it goes without saying, I guess, Mr. Browne, that we'd like to certainly facilitate, as you would, as I'm sure, as quickly as possible what the arrangements might be and who would be presenting oral presentations before the Board in St. Anthony. The matter in Labrador, at least from the Public Utilities Board, I think it's been clarified with Mr. Anderson and I'm pleased to hear that there has been a facilitation made and hopefully that can come together to ensure that people, persons and organizations from the north coast of Labrador have the ability to appear before the Board in Goose Bay. So thank you very much.

Moving along, are there any other preliminary matters, counsel?

MR. KENNEDY: Chair, I believe that the parties, the topic of discussion, if you will, that was raised late yesterday is, as far as I'm aware, the only matter that needs to be addressed before we return to the cross-examination.

MR. NOSEWORTHY, CHAIRMAN: Okay. When we did leave yesterday, I guess, Ms. Greene indicated by way of notice that she had put forward an objection to the Consumer Advocate indicating that there would be two individuals questioning Mr. Henderson. I think it's probably appropriate to deal with that at this point in time as opposed to completing at least Mr. Browne's cross-examination and then doing it then. I'd like to address it now if that's okay with everybody, so I'll entertain in the first instance comments from Ms. Greene on the matter and then I'll move to Newfoundland Power, the Consumer Advocate and counsel and back to Mr. Browne.

(9:45 a.m.)

MS. GREENE, Q.C.: Thank you, Mr. Chair. Hydro does have concerns with respect to the proposed process for cross-examination of witnesses. In fact I was surprised at the end of the day yesterday with Mr. Browne's statement that he and then Mr. Fitzgerald plan to cross-examine Mr. Henderson, and I'd like to tell you why I was surprised.

First it is the normal practice before courts and tribunals for one lawyer for a party to a proceeding to cross-examine a witness. That's the normal, wellcourts understood, consistent practice for administrative tribunals. That has been the practice at Hydro's hearings before the Public Utilities Board and those in which we have participated for others, such as the recent hearing on Newfoundland Power's application for approval of the purchase of poles from Aliant. So I was surprised because it's not the normal accepted practice before courts or other tribunals, nor is it our practice before the Board. I was also surprised because Mr. Browne had not previously indicated his intention to proceed in the proposed manner.

I recognize that the Board can set its own rules of procedure and I recognize that the Board has allowed this method of cross-examination previously at a Newfoundland Power general rate hearing, but I don't believe at that time there was a consideration or debate as to the appropriateness of the process and how it should be undertaken.

Hydro has serious concerns about the proposed process and I believe it's fundamental to how the process should be carried out before the Board. I want to tell you why I'm concerned and to give you an understanding of how I think it will affect the process.

There's four types of concerns that I have, and I have these concerns because I believe there is a potential for abuse of the process and to unnecessarily delay the hearing. The first concern that I have is on the limit on the number of lawyers for one party who may cross-examine a witness. Mr. Browne is proposing that two lawyers for one party, the Consumer Advocate, be allowed to crossexamine a witness. If two is okay, what about three? The Industrial Customers have had three lawyers here for most of the hearing. If they decide to divide up topics for a witness, will they be allowed to cross-examine using three lawyers for the one witness? And why stop at three? If Newfoundland Power decides to do it for a witness, Ms. Butler could bring associates from her firm and we could have four or more lawyers cross-examining the one witness for the same party. So the question is, if it's going to be entertained, is there a limit on the number, and there is the potential for there to be more than two lawyers crossexamining for the party at this hearing. So my first concern is where do you draw the line?

Right now we have, up to the present time, four parties cross-examining, so that's four lawyers cross-examining a witness. If you accede to this type of request, we're up to seven lawyers per witness, two for each party other than the Board. I think that by increasing the number of lawyers who may cross-examine a witness there is a potential to add time to the hearing. I suggest it is inherently unfair to the witness and is not helpful to the process before the Board, which is to reduce the evidence before the Board on all matters. So my first concern concerns the number, where do we draw the line, two, three, four, five? The second concern, and if you do permit it, we are increasing the potential for seven lawyers instead of four to cross-examine the witness, at least seven.

The third concern is how will it be done? Will we have a tag-team approach, as I call it? First we'll have Mr. Browne, then we'll have Mr. Fitzgerald, then back to Mr. Browne, back to Mr. Fitzgerald and so on. I call this the bad cop/good cop routine, which again is very unfair to the witness. It's very disconcerting to the witness if that is going to be allowed to happen and I really don't think it's helpful to the process and would not be done before another administrative board or tribunal in that manner. It's quite daunting to the witness as it is to sit there and to be cross-examined by a lawyer for each of the parties, let alone the concept of it being done in that manner. So again I think that creates, if that is allowed, it creates the element of unfairness to the witness and it is not helpful to the process.

The fourth concern that I have is the potential for duplication. Can the same topics be covered by both lawyers participating in cross-examination, getting two kicks, so to speak, at the same topic using two different lawyers for the same party? Again that is duplication, waste of time and unfair to the witness and to the process. So I do have four basic concerns with respect to the process that I think need to be addressed by the Board.

I understand Mr. Browne's dilemma, I really do. We have all been in that position. How do you plan and carry out as counsel in a complex hearing where there are many witnesses and many issues even when you have the support of another lawyer and consultant, as Mr. Browne does, to assist him in preparation for the hearing? A normal way would be to assign a witness to a lawyer, that Mr. Browne would do so many and Mr. Fitzgerald would do so many, but not to divide up topics per witness.

In summary then, I recognize that the Board has the right to set the rules of procedure and to allow more than one lawyer per party to cross-examine a witness, but if you do that for this hearing, I want the rules to be understood by the parties. I want the concerns that I have outlined addressed because I think it is fair to the process,

it's fair to all of the parties to know what the rules of the game are in advance, and I believe by the Board setting the limits or the conditions around which this type of cross-examination will be permitted will be helpful to all of the parties, not only for this hearing but for the future. So my concern is not personally with respect to Mr. Browne; it is with respect to this process and how it is to be done and how it is to be helpful to the Board and to all of the parties.

So in summary, again I recognize the Board has a right to permit this type of cross-examination, that in certain circumstances that it might be appropriate, and the conditions that I suggest to the Board that the Board should consider in allowing the type of cross-examination are the following. First I believe the Board should adopt the rule that the normal practice will be cross-examination by one lawyer per party. That is the normal rule. The exception is to permit two lawyers to cross-examine for a party, one witness. I believe, secondly, that the party who wishes to do it should advise the Board and parties in advance.

So the first rule is, exception not the rule if it is to be done. The second condition would be advance notice. The third condition is to limit the number of the lawyers who are permitted to do this to two per party.

The fourth condition would be that it would be done in a way that one lawyer will conduct his cross, followed by the second, that we will not have what I'm calling the tag-team approach, is a simple way to describe it, and the fourth (*sic*) condition would be that there cannot be duplication by both of them, that both lawyers cannot cover the same topic in their cross.

So to summarize Hydro's position is that if the Board is to permit this type of cross-examination, and I do acknowledge that in certain exceptional circumstances that it might be appropriate, that the Board set out the conditions around which this will be permitted so that all of the parties to the hearing may understand the process and to ensure that the process is as fair to all of the parties as possible and that it is conducive to ensuring that the appropriate evidence is before the Board. Thank you.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. Greene. Just one point of clarification. When you mentioned no tag-team approach, are you advocating that indeed one lawyer per witness and then another lawyer for the next witness?

98 MS. GREENE, Q.C.: No. What I meant was if you permit 99 two lawyers, for example, to do the cross-examination, and 100 I'll use the example, what we're talking, the real example, 101 what we're talking about, that Mr. Browne would go first, 102 then Mr. Fitzgerald, so that you wouldn't allow them to go 103 back and forth between each as they do their cross.

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- 1 MR. NOSEWORTHY, CHAIRMAN: Okay. Real tag team.
- 2 MS. GREENE, Q.C.: Yeah.
- 3 MR. NOSEWORTHY, CHAIRMAN: Thank you.
- 4 MR. BROWNE, Q.C.: We can't slap hands. (laughter)
- 5 MR. NOSEWORTHY, CHAIRMAN: Newfoundland Power,
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- 7 MR. ALTEEN: I'll take care of this, Mr. Chairman, for
- 8 Newfoundland Power. (laughter)
- 9 MR. HUTCHINGS: Sounds rather final.

MR. ALTEEN: Ms. Greene's request for the rules is 10 11 reasonable enough. We support it. The rules she's requesting are fair and I think the Board in considering her 12 request should be mindful of two things that we might be 13 able to add. One is, in the past, two witnesses (sic) 14 examining a single company witness has been allowed by 15 the Board and it has been allowed in cases involving 16 Newfoundland Power and it has been involved in cases 17 with the Consumer Advocate. We have not objected to it 18 because typically it has fallen more or less within the rules 19 that Ms. Greene has suggested, and that occurred in 1996 20 with respect to a number of executive witnesses of 21 Newfoundland Power. I don't expect any more detail is 22 necessary in terms of your past practice, but I think what 23 should guide the Board in adopting the rules and enforcing 24 the rules and implementing the rules is some sense of 25 respect and fairness for company witnesses, and Ms. 26 Greene's rules bespeak that, we support them, and beyond 27 that there's nothing useful for us to add. 28

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Alteen. Mr. Hutchings?

MR. HUTCHINGS: Thank you, Mr. Chair. Certainly Ms. Greene is correct in that the normal practice in courts and tribunals is for a single counsel to cross-examine witnesses, however, it is not unknown that more than one counsel would cross-examine a particular witness in almost any situation where you're dealing with a particularly complex matter and there are a large number of issues. I think it is not inappropriate to permit that in this sort of hearing, given the complexity of issues that we have and the huge number of issues, and certainly the witnesses obviously are dealing with a great number of topics and it is oftentimes therefore convenient for more than one counsel to be involved in the cross-examination of a given witness.

It is obviously, however, the Board's hearing and the Board is in control of its procedure. We have to bear in mind that any rule of procedure can be abused and there can be abuse of process and delay and duplication and unnecessary questioning even when one counsel is crossexamining a witness, and that is for the Board to control and to intervene and take control when necessary to prevent that from happening and to ensure that the matter progresses in an orderly way.

I would see no difficulty at all with any party announcing at the beginning of its cross-examination that it intends to split its examination between, cross-examination between two counsel. Normally, I think, you would indicate what topics each counsel would be dealing with, although that would not, to my mind, necessarily be a rule. I don't think that we're likely to get into any situation which would involve more than two people per party. I can foresee situations in certain hearings where you might not want to be bound by that rule, but I don't think it's going to be an issue here.

Ms. Greene's comments about the so-called tagteam approach I think are well taken. It is certainly not necessary that questions be interspersed between counsel as cross-examination proceeds. One counsel can finish the topics that they're dealing with and then the other counsel can begin and conclude the witness, and obviously there should be left no room for duplication in the sense of two kicks at the cat as one might say.

So in terms of where we are, obviously we, I think, have the same interest as everyone else in seeing the hearing progress in the most expeditious possible fashion. I don't think that, as a matter of principle, having two counsel participate in the cross-examination for a given party necessarily creates a problem but it does need some controls and we can, I think, leave it in the hands of the Board to make sure that the process is not abused by allowing that practice to be used. Those would be our comments, Mr. Chair.

- 82 MR. NOSEWORTHY, CHAIRMAN: Thank you very much, 83 Mr. Hutchings. Board counsel, do you have any 84 comments?
- 85 MR. KENNEDY: I believe the ...
- 86 MR. NOSEWORTHY, CHAIRMAN: My apologies, Mr. 87 Browne.
- 88 MR. KENNEDY: ... Consumer Advocate, Chair, should ...
- MR. BROWNE, Q.C.: Mr. Chairperson and members of the Board, this is the fifth time I've appeared before this Board in a major hearing and Mr. Alteen is quite correct in stating in 1996 counsel, I think it worked for both sides, he was here with Mr. Hayes at the time, shared witnesses on occasion. I can never recall a time when there was duplication. The purpose of it is to expedite the hearing, not to enlarge it. One counsel takes a particular topic and the other counsel has taken distinct topics from that, so instead of abusing the process it assists the process, and obviously we are not attempting to, as one party, to take

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two lawyers and examine the one witness in a duplicated effort.

There's always peculiar things happen at this Board. I saw for the first time, I think in 1997, two witnesses taking the stand at the same time, which is sort of an interesting process in itself, so I guess if two witnesses take the stand at the same time, we probably shouldn't be alarmed if two counsel want to examine the one witness.

10 COMMISSIONER SAUNDERS: To even up the tag team.

11 MR. BROWNE, Q.C.: Yes, even it up. So ...

MS. GREENE, Q.C.: I'll agree to that. When we put on two witnesses together, I'll let two lawyers ... (*laughter*)

MR. BROWNE, Q.C.: We're all here, I guess, to assist the process. I concur with the comments of other counsel. In particular I associate myself with the comments of Mr. Hutchings. From the checks I did overnight, it's my understanding that it is not a norm in the Trial Division for one, for two lawyers to examine one witness, but in argument it is very much in vogue for two lawyers to address the court from the one party on different topics, as it is in the Court of Appeal. Two lawyers can address the Court of Appeal, representing the one party, on distinct issues. So there are tag teams in place, at least in argument, in the Trial Division and in the Court of Appeal.

It also gives me no comfort, as I'm sure it doesn't to counsel to the Board, who was counsel to me in three previous hearings, and now he's going to, I guess, assume, comment on these matters. We are approaching a conflict here and I'll wait and see the way he handles that, so.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Browne. Counsel?

MR. KENNEDY: Thank you, Chair. Chair, clearly it's recognized that, and Commissioners, clearly it's been recognized that allowing two counsel to cross-examine the same witness has been used on previous occasions before the Board, and I'm a personal example of that, having participated in that process, so it would be highly hypocritical of me to now indicate that that's not an appropriate process and I would imagine that this is the reference that the Consumer Advocate just made, and I believe Hydro has canvassed very well the issues involved in determining where to place limits on the right of more than one counsel to conduct a cross-examination of a witness.

In regards to limiting the number of lawyers, that's a classic floodgate argument, if you will, and I would caution the Board about making decisions in the hypothetical now about limiting the number of counsel.

The issue, specific issue before the Board is whether the Consumer Advocate is entitled to cross-examine the witness and then his counsel to then complete a crossexamination of the same witness, and I think that that's the issue that's before the Board and that's the decision that the Board needs to make, and it's not that they could, that it would be inappropriate, entirely inappropriate for the panel to make comment about limiting it to only two, but I would just caution that doing so you may find that you've unnecessarily restricted yourselves. And then notwithstanding the fact as well that the panel has allowed more than one counsel to cross-examine a single witness, I would also add that the Board is not bound by that previous practice. It is from that respect a clean slate and the Board is free to do what it wants to do for this particular hearing in that regard.

As also alluded to by the Consumer Advocate, it is practice before the Board to have two witnesses provide evidence simultaneously, if you will. That was employed by Newfoundland Power in its most recent hearing before the Board on its capital budget for 2002, so it's a clear example that the procedure is used in this administration, administrative tribunal, and I would imagine most ... it departs from the strict confines of what are allowed in a judicial process before the Supreme Court or the Provincial Court.

I think it should be also kept in mind that many, as has been alluded to I believe by Mr. Hutchings, many of these witnesses are providing highly technical evidence across a number of disciplines and that it may make sense for counsels to split the areas of expertise up among themselves so that they can do a more effective job on the cross-examination of the witness, and I think that that's something that could be kept in mind.

Clearly the overriding consideration, I would suggest, is one of fairness and what's fair to the witness, to the Applicant, and whether what's being requested of the Board could create prejudice to the Applicant's position by being unfair to the witness, and I think, I would suggest that that's the overriding principle regarding going forward on this basis. That's my only comments. Thank you, Chair.

MR. NOSEWORTHY, CHAIRMAN: Thank you, counsel. It's going to be necessary for us to ... I apologize.

93 MS. GREENE, Q.C.: Normally I would have a right of reply 94 as the Applicant.

5 MR. NOSEWORTHY, CHAIRMAN: Okay, uh hum.

96 MS. GREENE, Q.C.: And I only have two brief points in 97 reply. The first is with respect to the Consumer Advocate's 98 point that this is a common legal argument. I think ... I 99 recognize that, yes, it is, and there's quite a difference

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between legal argument before a court or a tribunal and cross-examination of a witness. I don't think that that should be used as a precedent in this type of thing.

The second is with respect to panels of witnesses. Again that's not unusual for other administrative boards or tribunals (inaudible) the National Energy Board for the last 15 years, but again, because there's a panel of witnesses, there has not been the practice of allowing cross-examination by more than one lawyer per party. So those are the only comments I wanted to make in reply.

MR. NOSEWORTHY, CHAIRMAN: Thank you very much. It'll be necessary for us to take a little bit of time on this. Hopefully it will be a very brief, short period, so we'll break now but I'm hopeful that in 10 or 15 minutes we should be back

(break)

(10:30 a.m.)

MR. NOSEWORTHY, CHAIRMAN: The panel has considered the matter before us and I guess made a decision, hopefully within a reasonable period of time. We were driven by, I guess, a number of considerations here. Certainly one of them is a fairness to the witness and that, we didn't ... the witnesses on average have been sitting here, hopefully this will be speeded up and the average can be reduced, but the witnesses on average have been sitting before us a week at a time and certainly has been subject to a fairly intensive line of cross-examination, and certainly we want to try and be fair to the witness in this process and indeed fair to the process. I think we do have complex matters before us, there's no question about that, and we would want to ensure that all the evidence and all the considerations would be put before us, and indeed if that's a matter of trying to specialize, if you will, a little bit from the point of view of cross-examination and questioning, I think that's only fair. Certainly the past practice of the Board has allowed for two or more lawyers to question witnesses, and I think, I understand in any event, although I haven't been here, that that has worked reasonably well. It has proceeded in a focused way and has facilitated the process in general. So we are prepared to allow for a rule which would indeed, or would indeed provide for more than one lawyer to cross-examine a party. We would also feel though that there should be some conditions associated with that. Certainly we feel that the party should have advance notice prior to cross-examination, and I would note that while Mr. Browne did refer, I believe it was the first day of the hearing, that Mr. Fitzgerald would be working with him and would be working closely with Dr. Kaliman (phonetic) and be dealing with evidence pertaining to Dr. Kaliman, there was no indication at that time that Mr. Fitzgerald would be engaged or involved in crossexamining other parties, and certainly we would feel that that would be appropriate to have everybody advised of that, and in particular the witness prior to the crossexamination.

We also feel there should indeed be no tag-team approach or slapping of hands or whatever you want to call it here. We feel that while allowing two lawyers to cross-examine, that indeed would complete one cross-examination and then begin the other, and there would be no back and forth or toing or froing in relation to the cross-examination or questions presented to the witness. And I think again to be fair to the witness here, we will be vigilant, the panel will, in relation to the line of questioning and we would like to see no duplication, quite frankly, between the lawyers in their cross-examination, and we will be vigilant in that matter. I understand that hasn't been a problem in the past either and certainly we look forward to it not being a problem here.

That's it, so if there are no other particular items we will proceed with Mr. Browne's cross-examination of Mr. Henderson.

73 MR. BROWNE, Q.C.: Thank you, Mr. Chairman, and good74 morning, Mr. Henderson.

75 MR. HENDERSON: Good morning.

MR. BROWNE, Q.C.: Your counsel, Ms. Greene, took me
 to task yesterday. She didn't like my tone when I was
 examining you, but that's just my style. I can't apologize for
 it. Were you aware of the Steering Committee in place
 between Hydro and Power that was formed March 5th,
 1997, for the purpose of coordinating efforts in reducing

82 expenditures between Hydro and Power?

83 MR. HENDERSON: Yes, I am.

84 MR. BROWNE, Q.C.: You were aware of it?

MR. HENDERSON: I was aware of it.

86 MR. BROWNE, Q.C.: Were you aware of the formation of it?

88 MR. HENDERSON: I was aware there were communications to the employees of the existence of that.

90 MR. BROWNE, Q.C.: Were you a participant in the 91 process?

MR. HENDERSON: I was a participant outside. I wasn't involved in any of the committees. There was one person in my staff who was involved with one of the committees,

so I was aware of what that person was doing.

MR. BROWNE, Q.C.: So one person on your staff.

97 MR. HENDERSON: One person on my staff was looking 98 after, was involved with one of the committees, which was

- a committee involving switching coordination. 1
- MR. BROWNE, Q.C.: And did he report back to you on 2
- 3
- MR. HENDERSON: He reported back to the Steering 4
- Committee on that but I was aware of the issues. He 5
- briefed me somewhat on the issues that were being 6
- involved, and when we ... in that committee there were 7
- some issues with respect to our switching training program 8
- which I was brought in on and somewhat involved with. 9
- MR. BROWNE, Q.C.: Were you consulted by Mr. Reeves 10
- concerning any recommendations that the committee may 11
- be making? 12
- MR. HENDERSON: No, I wasn't. The only one that I was 13
- involved with was the switching committee. 14
- MR. BROWNE, Q.C.: You weren't consulted on fuel 15
- purchases or anything of that nature? 16
- MR. HENDERSON: No, I wasn't. 17
- MR. BROWNE, Q.C.: The transcript of October 9, 2000, 18
- (sic) page 37, you can refer to that for a moment. I'm just 19
- looking for some clarification here, and there was a 20
- question put to you by our colleague, Ms. Butler, in 21
- reference to the Bottom Brook substation and some 22
- problems that were experienced, an outage in Burgeo and 23
- La Poile at the time. Do you have that there? 24
- MR. HENDERSON: Yes. 25

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- MR. BROWNE, Q.C.: What exactly was the problem there? 26
- MR. HENDERSON: There wasn't a problem per se. We 27
- were performing maintenance. This would have been Mr. 28
- Reeves' staff, would have been doing maintenance on what 29
- we call Bus 1, which is a 230 kV bus, at Bottom Brook, and 30 in order to do maintenance on that bus you had to de-
- energize it, and when you de-energize it you would be 32
- separating the Burgeo and Port aux Basques area from the 33
- grid by just de-energizing that, but the Newfoundland 34
- Power 400 L line comes up from Stephenville, so it basically 35
- 36 provides another path to get the power into the Bottom
- Brook station in which you can have Bus 1 de-energized to 37
- do maintenance and get the power back into the Bottom 38
- Brook station through another means, and that's using 39
- Newfoundland Power's line, and when we did that, the 40
- power was brought up through that line and used to 41
- supply the Port aux Basques area but it was not used to 42
- supply the Burgeo and La Poile area because the 43
- transmission line ... there's a lot of 138 kV transmission line 44
- there and the transmission lines, which are lightly loaded, 45
- act as, like a capacitor, and I don't want to get too technical. 46 Basically the voltage level on the line will get extremely
- high. If you have a lightly loaded line, the voltage can get 48
- quite high, beyond a level that would be acceptable to 49

- supply a customer. So as we couldn't have both the line
- going to Burgeo and Port aux Basques energized using
- Newfoundland Power's line, 400 L, we chose at that time to
- go ahead and do some maintenance on our line between
- Bottom Brook and Burgeo.
- MR. BROWNE, Q.C.: Now if you're going to use
- Newfoundland Power's line, are they notified? How ... 56
- what's the protocol in place for that?
- MR. HENDERSON: Oh, yes, they are certainly notified and
- there is a coordinated effort made to getting ... you know, 59 60
  - when we decide to do that line or do the bus, we would
- have contacted Newfoundland Power to make sure that 61
- their line was available and that we could use it so we do
- not have an outage to the Port aux Basques area, and we
- would coordinate with them to get that line closed in
- because it's normally not closed, to bring the power into
- Port aux Basques, so they were aware of that issue. They 66
- would not necessarily know what we are doing in the 67
- 68 Bottom Brook station because that is in our station. They
- would have known that we were using 400 L to get the
- power into Bottom Brook, but what they didn't know was
- that we did not use it to supply Burgeo, because it's our ...
- that's our equipment and we would choose whether we
- close that and pick up Burgeo or not, and at that time it was 73
- not, we weren't technically able to do that.
- MR. BROWNE, Q.C.: And what kind of notification do you
- 76 give Newfoundland Power if you're going to use their line
- 77
- and how long does this process take?
- MR. HENDERSON: For this type of an outage there would
  - be a week's ... our maintenance people would give us in the
  - Control Centre a week's notice that they would like to be
  - able to take that bus out of service to do maintenance. We
  - would then at that point contact Newfoundland Power of
- the plan to do that in a week's time and they would then
- check with their people to see what maintenance they're
- doing to see if there's any coordination that could be done
- so that, you know, you get as much done when you got the
- equipment out of service. Everybody would get as much 87
- 88 work as they can get done. We coordinate it so that the
- customers are out of service for the least amount of time.
- That takes a bit of going back and forth. That's why we
- take a week's notice. For those maintenance activities that
- don't require coordination, there would be a shorter notice required by our staff, maybe three days, that type of thing.
- MR. BROWNE, Q.C.: Now if you own that line that's now the property of Newfoundland Power, would that expedite
- matters? Would you have to go through that process?
- MR. HENDERSON: I don't know that ... there would be a
  - little bit of time saving that there is ... there has to be that back and forth phone calls. There are, as I'm sure
- 100 everybody is aware, there's times you call the other person,

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- they're not there and you have to wait for a response. 1
- There's those types of things. But generally that doesn't 2
- take that much time but you have to allow for it in case 3
- 4 there is problems, in case Newfoundland Power were
- planning to do work on that line. You have to give a bit of 5
- time. Now we, like you say, we own the line, we would 6
- know that there was maintenance going on so we wouldn't 7
- require to make that same type of contact, so there would 8
- be some marginal time savings in the set-up of the planning 9 of the outage, but the actual execution of the outage, there
- 10 would be no difference because that is very well
- 11 coordinated and flows quite well. We have a very good 12
- relationship with Newfoundland Power's Control Centre 13
- and we talk regularly and make sure that any outages that 14
- affect either one of our customer groups, that we minimize 15
- that time and coordinate as best we can. 16
- MR. BROWNE, Q.C.: So they have a control centre and 17
- you have a control centre. 18
- MR. HENDERSON: That's right. 19
- MR. BROWNE, Q.C.: And your control centres both 20
- coordinate any activity there. 21
- MR. HENDERSON: That's right. 22
- MR. BROWNE, Q.C.: What duplication is there, the fact 23
- that two of you have two control centres dealing with 24
- transmission lines? 25
- MR. HENDERSON: There's very little duplication. 26
- Newfoundland Power, I think, has been mentioned 27
- previously as primarily into distribution and their control 28
- centre controls ... a large part of what their control centre 29
- would be controlling would be the lines, distribution lines 30 in and around the St. John's area as well as in all of their 31
- regions, but they have only control of the distribution 32
- system and some of their transmission, while for us, our 33
- control centre is focused much more on the high voltage 34
- transmission and the generation. So there is a very distinct 35
- difference there between the two roles in that they deal 36
- with a lot of distribution, they also would deal with a lot of 37
- customer calls because they have a lot of customers, while 38
- we wouldn't have that same type of emphasis in our control 39
- centre because we would deal with Newfoundland Power, 40
- who then deals with the ultimate customer. 41
- MR. BROWNE, Q.C.: But you're in transmission and 42
- they're in transmission, is that correct? 43
- MR. HENDERSON: There is some ... we're into a lot more 44
- transmission than they are. We have a large 230 kV 45
- transmission network which they don't have. They have 46
- some 138 kV transmission between Sunnyside and Grand 47
- Falls, and they have some 138 kV transmission on the 48 Avalon Peninsula, and that would be their ... and they do 49
- have a small bit on the Bonavista Peninsula and the Burin 50

- Peninsula but it's very small relative to ours.
- MR. BROWNE, Q.C.: And they're in some generation and
- you're in generation as well.
- MR. HENDERSON: That's right, but their generation again
- is a much different scale than ours. It doesn't require the
- same amount of attention because it doesn't have the same
- impact on customers as our generation. We have much 57
- larger ... their largest unit may be ten megawatts or
- something like that while our smallest one that we operate
- from our control centre is eight megawatts, so there's a big 60
- difference in scale in the amount of generation. 61
- MR. BROWNE, Q.C.: Would there be any efficiencies in
- 63 the system if some joint committee was set up to ensure
- one company dealt with generation and transmission and 64
- the other company dealt strictly with distribution, stringing 65
- the wires from home to home, if you will?
- MR. HENDERSON: I can't say how much efficiency.
- 68 That's obviously one of the topics that was covered by Mr.
- Reeves, which I wasn't involved with that. On the
- generation side, I can make the comment that our 70
- generation is so dissimilar that there would be very little
- duplication on the generation because they have a lot of 73
- small hydro units. They do have the gas turbine down, or
- a couple of gas turbines on the Burin Peninsula, one of 74
- 75 which will be moved next year, that would be similar to
- ours, and I think there is some coordination effort between
- Mr. Reeves' department and Newfoundland Power on 77
- specialized equipment and that sort of thing to assist on
- that side of things, but on the hydro generation side, there's so much difference that I don't think there would be
- much there as far as economies to be gained.
- MR. BROWNE, Q.C.: But yet you would acknowledge that
- even marginally, consumers in the area that were affected
- by this particular outage, in Burgeo and La Poile, would
- have been better served or more efficiently served if that
- line was your line, that 400?
- MR. HENDERSON: I don't think that the customers would
- 88 have seen any difference. There is a bit of going back and
- forth between the two control centres. There is maybe
- efficiency in use of time that you might make a marginal 90
- gain, but the customers, I have, you know, no problem
- saying that the customers were not impacted in any way by
- the fact that there was two utilities.
- MR. BROWNE, Q.C.: In the transcript of October 10,
  - yesterday's transcript, and page 12, we see a question again
- from our colleague, Ms. Butler to you on line 17. Ms.
- Butler asked you a question and you respond on line 21. 97 "I understand that there were multiple people from
- Newfoundland Power calling all across Canada to all these
- utilities, calling the people we contacted, we understand

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they contacted other people. There was a lot of phone calls. We also understand there was a contact of somebody from Boston connecting with these people as well." Now, how do you understand that, that there were multiple people from Newfoundland Power calling all across Canada?

MR. HENDERSON: When we called ... when we were aware that we were providing a list of people that we had contacted, we called some of them back to ask them if there was any problems with the information that they had given us and whether Newfoundland Power or anybody had been calling them, because we had put their names, published their names. We wanted to sort of contact them and let them know that this was happening, and they did say that there had been calls, and this was relayed to me, that there had been a number of people calling in the, some of these utilities. I don't know how many people, but I was given the impression that there was more than one person at Newfoundland Power contacting different people. They may have been trying to find out about the rates issue. We were talking to the hydraulic people. Newfoundland Power were probably calling the rates people to find out what's been going on in the rate practice. So one of the people that we said that there had been these calls, and they also mentioned a Boston firm had been contacting them on the same, on a similar topic. Now we don't know if that Boston company has anything to do with this proceeding. We just know that they told ... it was coincidental at this time that there was a Boston consulting firm calling, asking questions on the same topic.

31 (10:45 a.m.)

MR. BROWNE, Q.C.: There seems to be quite a duplication of effort there. I mean, the consumers are paying for it all, aren't they?

MR. HENDERSON: That's ... they are in the fact that they're paying the salaries of the people that made the calls.

MR. BROWNE, Q.C.: I was wondering was there any thought given, if there was a problem with the figures that you were presenting from Newfoundland Power's perspective, and indeed from your evidence yesterday there very well may be some problems with these figures, if the two of you couldn't have gotten together, the process wouldn't have been better served if the two of you had gotten together to discuss the issue so you could speak and advise the regulator here with some authority as to the nature of the problem or how it could be resolved? Had you thought of that ...

48 MR. HENDERSON: Well, we ...

MR. BROWNE, Q.C.: ... undertaking that particular process?

MR. HENDERSON: We certainly hadn't because we hadn't anticipated that this would be a problem at all. We had provided the information in the same manner we had always done in the past and we were, personally certainly I was quite surprised at the extent that this became an issue, so we wouldn't have anticipated talking to Newfoundland Power about it because we didn't, weren't aware that there was an issue there. The first we knew of the issue was when we saw it appear in Mr. Brockman's evidence.

61 MR. BROWNE, Q.C.: Did your company ever discuss the
62 issue of climate change with a climatologist? Did you ever
63 seek expert advice? There's a theory being advanced that
64 there was a climate change here in the province that affects
65 hydraulic flow. Did you take the trouble to try to retain a
66 climatologist so you could advise the Board as to, with
67 some exactitude in reference to that particular issue?

68 MR. HENDERSON: What we did, we didn't retain a climatologist, we did try to find the person in Environment Canada who may be knowledgeable on that subject matter, and I believe we have a response to one of the NP questions that indicated that. I'll see if I can reference it for you.

MR. BROWNE, Q.C.: Did you discuss the matter with a
 climatologist yourself? Are you the person we should be
 speaking to?

MR. HENDERSON: No. It's one of the people, one of my staff made that call, because I was involved with this process here. I didn't make the calls myself. I had one of the people working for me make the call, and ... let's see if I can get that for you. It's **NP-309**.

MR. BROWNE, Q.C.: So someone went to the Environment Canada web site, is that your response there?

MR. HENDERSON: And at line 14 there, "When contacted by staff in Mr. Henderson's Department, Environment Canada indicated that there is no current research that would provide meaningful indication regarding the impact of climate change upon hydrology conditions on the Island of Newfoundland. As a matter of interest, the atlantic region summer precipitation for 2001 was the third driest on record, falling between the years 1957 and 1960, in the 54 year seasonal ranking."

93 MR. BROWNE, Q.C.: So you had someone on your staff 94 check with Environment Canada and that was their 95 response.

96 MR. HENDERSON: Yes.

97 MR. BROWNE, Q.C.: Mr. Henderson, do you agree with 98 this statement, "Conserving electricity is more cost-99 effective than producing electricity"?

- 1 MR. HENDERSON: I couldn't say that, no, because it
- 2 depends on how much you have to pay, I guess, to
- 3 conserve, in the sense that if you're, in order to conserve
- 4 you have to re-insulate your home and that sort of thing.
- 5 Whether there is a direct benefit coming back on that, on
- 6 your generation side, I can't clearly say, but generally, my
- 7 own feeling is, is that you should try not to make excessive
- 8 use of a limited resource, so you should, in a general sense,
- 9 be conserving it.
- MR. BROWNE, Q.C.: Can you go to, and we're going to
- have to use our hard copies for this. There are a series of
- reports. Can you go to **CA-106** for a moment? You'll see
- there various reports dealing with conservation measures
- in Labrador. Now I know that you're not, your jurisdiction
- is not Labrador, but I'm not asking you for purposes of
- Labrador as such. If you go to CA-106 there are a number
- of reports there. The way they were presented is in no
- particular chronology, but we're looking for December 1994.
- MR. HENDERSON: Is that the Charlottetown DSM Pilot
- 20 Project?
- MR. BROWNE, Q.C.: Yeah, the Charlottetown DSM Pilot
- 22 Project. Are you familiar with that project at all?
- 23 MR. HENDERSON: Not at all, I'm afraid.
- MR. BROWNE, Q.C.: You don't know who did the project?
- MR. HENDERSON: I'd only be guessing as to who did it.
- MR. BROWNE, Q.C.: Because in the cover in December
- 27 1994 it says, "Economic Analysis Department, Corporate
- 28 Planning Division, Newfoundland and Labrador Hydro."
- MR. HENDERSON: There you go, that says who did it.
- That would be under Mr. Budgell's responsibility.
- MR. BROWNE, Q.C.: So Mr. Budgell would know about
- 32 this.
- 33 MR. HENDERSON: Yes.
- MR. BROWNE, Q.C.: But just on the ... and I'm not going
- to ask you in great detail about Labrador. We'll reserve
- 36 that to Mr. Budgell. But on page one in the Executive
- 37 **Summary**, the third paragraph, it says, "Conserving
- 38 electricity is more cost-effective than producing electricity,
- 39 however, revenue loss will condition such a conclusion."
- And then it goes on to discuss diesel and diesel fuel. Now
- 41 you deal with diesel fuel as well, don't you, on the island?
- 42 MR. HENDERSON: I do. It's used, very limited amount on
- the island, on the island interconnected system. On the
- 44 island isolated system of course there's, it's used
- extensively, but I'm not familiar with the isolated systems.
- MR. BROWNE, Q.C.: So you're not familiar with any of the
- 47 conservation programs that were put in place in Labrador

- 48 through your ...
- 49 MR. HENDERSON: On these isolated systems, no. I
- 50 wasn't involved with any of that. That would be Mr.
- 51 Budgell's department that would have done the studies to
- determine what programs would be affected and so on.
- 53 MR. BROWNE, O.C.: Have you done any studies in
- reference to demand side management?
- 55 MR. HENDERSON: No, I haven't been involved with any
- of that. That would be Mr. Budgell's area of responsibility
- on DSM.
- 58 MR. BROWNE, Q.C.: But what is your responsibility in
- 59 terms of diesel fuel?
- 60 MR. HENDERSON: With diesel fuel we have some
- 61 standby plants in Hawke's Bay and St. Anthony and
- 62 Roddickton that use diesel fuel, and we may call upon
- 63 those for supplying power to the interconnected system
- 64 when we have shortages of generation because maybe it's
- an exceptionally cold day and the load on the system is
- quite high, so we may have to put them on for that. We
- $\,$  could also end up putting them on because we have other
- 68 generators that we're having difficulty with, can't get them
- 69 on, so we'll go to these which are there for standby
- 70 purposes, and the other reason for using them would be for
- 71 supplying local loads when you have a transmission
- 72 outage to an area where those diesel plants are. For
- 73 instance, in St. Anthony, if the transmission line going into
- 74 St. Anthony was out of service for some reason, then we
- vould use the diesel plants there to supply that load during
- 75 Would use the dieser plants there to supply that load dull
- 76 that period.
- 77 MR. BROWNE, Q.C.: And you're familiar with the cost of
- 78 diesel fuel.
- 79 MR. HENDERSON: Yes.
- 80 MR. BROWNE, Q.C.: And is there anything to be made by
- a hydro company for using diesel fuel? Is diesel fuel
- 82 generally considered expensive?
- 83 MR. HENDERSON: Oh, yes, yes, it is.
- 84 MR. BROWNE, Q.C.: It's to be stayed away from, is that
- 85 fair comment?
- 86 MR. HENDERSON: Certainly we would ... that would be
- one of the last types of generation that we would use to
  - meet load on the island interconnected system.
- 89 MR. BROWNE, Q.C.: And yet besides diesel fuel you are
- also responsible for the Bunker C that's purchased.
- 91 MR. HENDERSON: That's correct.
- MR. BROWNE, Q.C.: And would you concede that that is
- 93 an expensive process as well, acquiring Bunker C and
- burning it in a thermal generator?

- MR. HENDERSON: Yes, relative to hydro it certainly is a
- 2 lot more expensive or is cheaper than the diesel, in that
- 3 range of expenses. It's on the high side. It's one that we
- 4 would limit use of because of its expense.
- 5 MR. BROWNE, Q.C.: Well, given that fact and given the
- 6 high price we see for oil, how is it that you, who are
- 7 responsible for the fuel budget, is not familiar with demand
- 8 side management?
- 9 MR. HENDERSON: The way that we are structured ... I am
- aware of the theories and that sort of thing of DSM to a
- degree, but I'm not aware of any of the detailed plans that
- we have, and right now, to my knowledge, we do not have
- any DSM plans in place on the island interconnected
- system, so there isn't anything there right now for me to be
- familiar with for my position.
- 16 MR. BROWNE, Q.C.: Well if you could reduce fuel
- consumption at the thermal generating plant in Holyrood,
- wouldn't you be doing us all a favour?
- MR. HENDERSON: Sure. The less you use, the lower the
- 20 cost
- MR. BROWNE, Q.C.: And I guess that was the theory that
- 22 Hydro had in place in reference to the diesel units in
- 23 Labrador when they launched this program to try to get
- 24 people to conserve there because they had, they were
- using diesel fuel. Is that fair comment?
- MR. HENDERSON: There's a number of factors, I would
- think, that go into that process. That certainly is true but
- there's also, you may want to limit it for, to limit the
- expansion of the plants as well. If you have growing use,
- 30 then you end up having to expand your plant and you want
- 31 to try to limit the growth in use to limit the additional plant
- as well.
- 33 MR. BROWNE, Q.C.: But yet you've been at no meetings
- or attended no committee meetings at Hydro to discuss
- demand side management on the island or the province
- 36 given the expense that we're all incurring at the thermal
- 37 generating station at Holyrood?
- 38 MR. HENDERSON: No, I haven't been involved with any
- meetings, and Mr. Budgell would be able to tell you
- whether there are any plans right now, but I'm not aware
- that there is anything going on right now.
- 42 MR. BROWNE, Q.C.: I just find that extraordinary. You're
- 43 the point person on fuel out there at that thermal
- 44 generating station, spending a tremendous budget, and yet
- you're, you haven't been at any meetings dealing with
- demand side management or finding out ways to try to
- reduce the acquisition of that fuel?
- 48 MR. HENDERSON: What we do is we look at ways of
- improving the operation of the thermal plant to minimize the

- amount of fuel that we do use in order to meet the energy
- 51 requirements. We try to operate our hydroelectric plants as
- efficiently as possible to minimize the use of the oil, but as
- far as the load side. I'm not involved with that. I'm involved
- 54 with the production side, so I haven't been involved with
- anything going on in the load side.
- MR. BROWNE, Q.C.: I guess that's fair comment, that's the
- 57 truth of it. And you're not familiar at all with the demand
- side initiatives that were made into Labrador.
- 59 MR. HENDERSON: No. Like, I don't have any involvement
- with the operation of those isolated diesel systems.
- 61 MR. BROWNE, Q.C.: And you're not familiar with the
- 62 program that was put in place. You're not aware that Hydro
- 63 had an extensive program in place, you're not familiar with
- 64 that.
- 65 MR. HENDERSON: I'm not familiar with any of the details.
- 66 MR. BROWNE, Q.C.: You have no knowledge of it?
- 67 MR. HENDERSON: To say I had no knowledge, I do know
- that there have been consideration of DSM programs in the
- 69 diesel systems but I didn't know any of the details of them.
- 70 MR. BROWNE, Q.C.: Now, when you're all phoning
- 71 around to these utilities across Canada, Newfoundland
- 72 Power is on the phone and you guys were on the phone,
- 73 did you bother to check with any of them to see what
- 74 conservation measure they had in place, if they had any
- 75 programs in place across the country ...
- 76 MR. HENDERSON: We didn't make that ... that wasn't ...
- 77 MR. BROWNE, Q.C.: ... to conserve?
- 78 MR. HENDERSON: That wasn't the issue for our phone
- calls. Whether we've made any polling of other utilities, I
- 80 don't know, but that wasn't the issue that I was dealing
- 81 with.
- MR. BROWNE, Q.C.: Can you ... we'll just stay away from
- 83 that now because you can't speak to it at all, and we'll wait
- 84 for another witness in reference to that. I guess that
- 85 witness will tell me that it's your jurisdiction on the
- 86 interconnected, so he can't speak to that, and it's only his
- 87 jurisdiction up in Labrador.
- 88 MS. GREENE, Q.C.: I assure Mr. Browne that will not be
- 89 the case. Mr. Budgell is responsible for that area and he's
- 90 prepared to speak to it.
- 91 MR. BROWNE, Q.C.: Okay, thank you very much. This
- 92 was one case now where it might have been beneficial if
- 93 you had the two witnesses up there together, so either one
- 94 could answer. It might have been more efficient. In any
- case, can you go to CA-171, please? And CA-171, if we
- just go to the question, Mr. O'Rielly. Thank you. And it's

- a report and it's not in electronic form and it refers to a 1
- "In 1997, Newfoundland Hydro question we put. 2
- participated in a joint study with Newfoundland Power into 3
- 4 the potential for mini hydro in island rural isolated
- systems," and we asked for a copy of the study. Are you 5
- familiar with that or did you have any input into that? 6
- MR. HENDERSON: No. That would have been a system 7
- 8 planning function. Again that's Mr. Budgell's area.
- MR. BROWNE, Q.C.: And did you read the report? 9
- MR. HENDERSON: No, I'm afraid I haven't. 10
- MR. BROWNE, Q.C.: Okay. Do you know who did the 11
- 12
- MR. HENDERSON: I'm going to look at the title page. It 13
- says it was done by Newfoundland Power and 14
- Newfoundland and Labrador Hydro. Who within those 15
- two companies, I don't know. 16
- MR. BROWNE, Q.C.: But you haven't even read it. 17
- MR. HENDERSON: No. 18
- MR. BROWNE, O.C.: Okay. I have no further questions 19
- for you now but my colleague, Mr. Fitzgerald, has an area 20
- he wishes to explore. Thank you, Mr. Henderson. 21
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. 22
- Browne. 23
- MR. BROWNE, Q.C.: Do you want to break for coffee or ... 24
- MR. NOSEWORTHY, CHAIRMAN: I would, please, yeah. 25
- (laughter) Thank you. We'll break until quarter after. 26
- $(11:00 \ a.m)$ 27
- (break) 28
- (11:30 a.m.) 29
- MR. NOSEWORTHY, CHAIRMAN: Mr. Fitzgerald, could 30
- I ask you to begin your cross-examination please, of Mr. 31
- Henderson? 32
- 33 MR. FITZGERALD: Mr. Henderson, you'll be relieved to
- know that I'm the good cop (laughter). 34
- MS. GREENE, Q.C.: Oh, I certainly didn't mean a direct 35
- comparison. 36
- MR. FITZGERALD: If I could, Mr. Henderson, I'd like to 37
- turn to page 14 of your pre-filed evidence, and I want to 38
- discuss briefly with you fuel management, cognizant of the 39
- Board's ruling regarding duplication. I don't believe there 40
- will be any. I'm looking here at line 10 of your evidence, I 41
- just want to discuss ... you say Hydro currently has a 42
- volume only contract for ten million barrels of No. 6 fuel 43 which began in 1997, and you indicate there how much you
- 44
- had left at the end of 2000, and could you tell me when in 45

- 1997 this contract began? Do you know?
- MR. HENDERSON: I don't know the exact date.
- MR. FITZGERALD: Would it have been early in the year 48
- 49 or ...
- MR. HENDERSON: I can't hazard to guess, really. 50
- MR. FITZGERALD: Okay, so when we're looking at the
- end of 2000 and we have 5.4 million barrels left, we don't
- know exactly how much you have been consuming from
- 1997 to 2000. We can't work it out, I guess, because we 54
- don't know which month the contract started.
- MR. HENDERSON: That's right. We could go back and
- 57 get that number, you know, that record is available. I just
- don't know the numbers off the top of my head as to when 58
- the contract started, but I think in recent years we've 59
- probably been burning somewhere around two million to
- two and a half million per year.
- MR. FITZGERALD: Which years would that have been?
- MR. HENDERSON: In 1999 and 2000.
- MR. FITZGERALD: Okay, just on that point, I take you to
- Mr. Osmond's evidence, and I won't yet, I'll just put it to
- you that he has indicated that the average consumption 66
- has been about three million barrels per year, he has said 67
- that. Do you recall that in his evidence?
- MR. HENDERSON: Three million barrels is probably a
- 70 typical year.
- MR. FITZGERALD: Typical.
- MR. HENDERSON: The last few years have been wet.
- MR. FITZGERALD: Uh hum.
- MR. HENDERSON: And as a result we've used less oil at
- Holyrood because of that. I think in the 2002 year it's
- probably something like three and a half million barrels.
- MR. FITZGERALD: Yeah, but you as the person in control
- of this budget, should we prefer your version of the 78
- 79 average consumption being 2 million to 2.5 million barrels,
- or Mr. Osmond's version?
- MR. HENDERSON: What I was trying to explain is that 81
- typically we would use around three million barrels a year.
- The most recent years were less than that because of the
- wet period, so I'd have to read Mr. Osmond's evidence to 84
- get the context in what he was referring to that three
- million, but I would expect that it was to do with typically
- as opposed to the specifics of the recent years.
- MR. FITZGERALD: Okay, looking then, again, at your
- evidence, by the end of 2000 you had 5.4 million barrels left, 89
- that tells us, I guess, that from the time the contract started,
- as referred to in your evidence, to the end of 2000, you

- 1 burned 4.6 million barrels?
- 2 MR. HENDERSON: That's right.
- 3 MR. FITZGERALD: Right, so that includes 1998, '99, and
- 4 2000?
- 5 MR. HENDERSON: Right.
- 6 MR. FITZGERALD: So that's three years, 4.6 ...
- 7 MR. HENDERSON: Right, so that's showing that actually
- 8 I overstated the two million, it's even less than that.
- 9 MR. FITZGERALD: Okay, so what would it ... so ...
- MR. HENDERSON: In recent years the ... let's see if I've
- got that here. I'm trying to see if I have it in my evidence,
- but I don't think I did, to give you the exact amount that
- was used in recent years. I can come up with a rough
- 14 calculation maybe.
- MR. FITZGERALD: Okay, actually there is an information
- request, **IC-24** (**revised**). There's a schedule attached there.
- Maybe this ... does that schedule help you any?
- MR. HENDERSON: Yes, you see there that in 2000 ... yeah,
- what we're showing here is that we've got, for '98 to 2000
- we're in around five million barrels.
- 21 MR. FITZGERALD: Yeah.
- MR. HENDERSON: So the contract starting in 1997, I
- would say that that's probably when we went to tender,
- and the actual starting of purchasing of that fuel probably
- 25 started in 1998.
- MR. FITZGERALD: Uh hum, okay, so as we see in 1998
- there's approximately 1.9 million barrels?
- MR. HENDERSON: In 1998, it's two million.
- 29 MR. FITZGERALD: Yeah.
- 30 MR. HENDERSON: The fuel purchase, okay, I'm looking at
- 31 the fuel consumed. Yeah, the fuel purchased was 1.9, that's
- 32 right.
- MR. FITZGERALD: Okay, and the fuel consumed in '99 is
- 34 1.5?
- 35 MR. HENDERSON: Right.
- 36 MR. FITZGERALD: And 2000, 1.5 ...
- 37 MR. HENDERSON: Right.
- 38 MR. FITZGERALD: 1.6, arguably.
- 39 MR. HENDERSON: Sure.
- 40 MR. FITZGERALD: So then we have this jump in the
- forecast for ... well let me ask you this, the forecast here for
- 42 2001 of 3.2 million, do you have any current information
- that would indicate that that forecast is going to be met?

- 44 MR. HENDERSON: I would say it would be probably
- 45 exceeded but at this point in time I would say we're very
- close, at this point in the year, to the end of August or end
- of September even, we're pretty close to being on that
- number, but right now, looking out to the end of the year,
- 49 we're anticipating higher thermal production that we were
- originally forecasting because it's been dry lately, and I
- 51 wouldn't be surprised at the end of the year that we would
- be above 3.2 million.
- 53 MR. FITZGERALD: But you will be providing us
- information, I guess, as this hearing goes on regarding
- 55 that?
- MR. HENDERSON: As we ... we will be updating our, with
- 57 actual figures to the end of August in some information
- that we will be filing later in October or early November,
- and so that will have an update until the end of August. I don't know when we would be providing the next update.
- 61 MR. FITZGERALD: Okay, just back to the contract that
- 62 you're currently ... or that you refer to in your evidence. I
- would expect that this contract, at the rate of this
- consumption, is going to be expiring relatively soon?
- 65 MR. HENDERSON: That's right, I would expect that we
- would have to go out to renew that contract in 2002.
- 67 MR. FITZGERALD: Are you going to be involved in that
- 68 renewal at all?
- 69 MR. HENDERSON: I will be, I will be providing our
- 70 Purchasing Department with indications of our production
- 71 levels and our fuel requirement levels over the next few
- 72 years that would be applied, you know, when we go to
- 73 tender.
- 74 MR. FITZGERALD: Okay, that is the production side of
- 75 the effort.
- 76 MR. HENDERSON: Right.
- 77 MR. FITZGERALD: You wouldn't be on the negotiating
- 78 side of this new contract, would you?
- 79 MR. HENDERSON: The way we've done it in the past is
- 80 that we've gone, we write up the technical specification that
- 81 meets our requirements for Holyrood, and then we have
- gone to tender on that seeking competitive bids ...
- 83 MR. FITZGERALD: Uh hum.
- 84 MR. HENDERSON: For supply into Holyrood. What we
- 85 have been doing is we have been going for ten million
- 86 barrel contracts, so that would get us through,
- approximately three years, from one supplier.
- MR. FITZGERALD: Okay.
- 89 MR. HENDERSON: So when you go through the public
- 90 tendering process then, and getting the bids in, we would

- evaluate them and be looking for those that meet our 1
- technical requirements and also looking for the best price. 2
- MR. FITZGERALD: Okay, on that issue of best price, are 3
- you involved in that? 4
- MR. HENDERSON: Well the best price, the prices are bid 5
- and then we would do, our Purchasing Department would 6
- do an evaluation of the bids to come up with a 7
- recommendation as to which one would give us the best 8
- price ultimately to determine the contract. 9
- MR. FITZGERALD: Do you expect that you will be 10
- involved with Perra again on the new contract that's 11
- anticipated? 12
- MR. HENDERSON: Well, Perra is not tied to the contract 13
- for the going out for purchasing of oil. Perra provides us 14
- a forecast of fuel prices going out in the future. 15
- MR. FITZGERALD: Okay, you'll be relying on their 16
- 17 forecasting?
- MR. HENDERSON: Yes. 18
- MR. FITZGERALD: Right, now if I could ask you to look 19
- at NP-17 briefly. Okay, that's what ... you have that on 20
- your screen there, I believe? 21
- MR. HENDERSON: Yes. 22
- MR. FITZGERALD: Now you may have already answered 23
- this but at least for my purposes, I'm looking at, there are 24
- several columns here. It says pre-purchase ... and this is 25
- the schedule referring to the Holyrood No. 6 Fuel Cost, 26
- 2002 Test Year ... as the pre-purchase inventory price, 27
- dollars per barrel, and I'm looking at the top line that refers 28
- to \$28.77. Then as you go right along that, there is 29
- underneath the purchase column, there's a price \$28.32, and 30
- then post-purchase, there's a figure of \$28.57. Could you 31
- explain what these different figures mean? 32
- MR. HENDERSON: What happens in our inventory there's 33
- a blending of the prices. You have an inventory that has a 34
- value prior to the purchase at \$28.77 per barrel, and that 35
- 36 would be applied to the total volume that's in the inventory
- at that time, and so you have a total dollar value, and then 37
- you add into it your purchase at a certain dollar value, so 38 you've got that additional dollar value that's gone into 39
- inventory, plus you've got additional volume that's gone 40
- into inventory, and then you end up with a new inventory 41
- value by dividing the total value of the inventory prior to 42
- purchase, total value after the purchase, divided by the 43
- volume after the purchase, which is your purchase plus the 44
- inventory prior to the purchase. That gives you a blended 45
- or an average inventory price. So right here where the 46
- purchase price is lower than the previous inventory price, 47
- you've got moving down of the inventory price after the 48
- purchase, because that inventory price is a blended or 49

- average price in the tanks in the storage.
- MR. FITZGERALD: Okay, so the far right-hand column is
- lower because it reflects, even though you bought current
- oil at \$28.77, it's been blended with the previous order?
- MR. HENDERSON: No, the \$28.77 was what was in there
- previously. We just bought current oil at \$28.32.
- MR. FITZGERALD: Okay, right.
- MR. HENDERSON: So that ...
- MR. FITZGERALD: So that goes up.
- MR. HENDERSON: That had a tendency to bring the value
- down after the shipment to \$28.57, from \$28.77.
- MR. FITZGERALD: Okay, looking at the same schedule,
- and I guess this is ... if you look at the far right column
- there, the cost, the forecast cost of No. 6 in 2002 ... the
- bottom right.
- MR. HENDERSON: Yes.
- MR. FITZGERALD: You have a \$100,584,000.
- MR. HENDERSON: Yes.
- MR. FITZGERALD: And that's the forecast amount that
- you're going to be required to purchase?
- 70 MR. HENDERSON: No, that's the cost of production.
- That's taking the volume that was used in producing
- electricity, applying it to the inventory price in the month
- that the production occurred, to give you a cost of
- production in that month. So that cost is the actual
- production cost, not your purchase cost. Your purchase
- cost is actually not shown in that table. Oh yes it is, I'm
- sorry, it is. It's under the purchase heading ... sorry, Terry's 77
- got the little hand there on top of it. The \$99,330,000, that's
- the actual purchase cost for the year.
- MR. FITZGERALD: Okay, alright, so the \$100 million 80
- figure, that is really what, it's the amount of revenue you
- would be required to purchase the oil that you need?
- 83 MR. HENDERSON: That's the cost of producing the
- electricity at Holyrood for that year, \$100 million. That's the
- cost. The inventory is ... you'll notice there that the
- production on the bottom right-hand column, the second
- one in from the right, you've got 3,537,000 barrels.
- MR. FITZGERALD: Right.
- MR. HENDERSON: And that's how much we will consume 89
- in producing electricity. If you move over now to the, over
- four more columns to the left, you can see it's three and a
- half million there. That's how much we purchased, so the
- difference here is one column is showing the purchases, the other is showing the volume that was consumed in
- producing electricity and there's a difference there because

- what has happened during this year is that we've drawn
- down our inventory. Our inventory at the end of the year
- would be a little bit lower than it was at the beginning of
- 4 the year because we purchased less than what we
- 5 consumed.
- 6 MR. FITZGERALD: Okay, well then perhaps if I could ask
- you to look briefly at Schedule 1, appended to Mr.
- 8 Roberts' pre-filed testimony. If we could enlarge that a bit
- 9 please? This is the revenue requirement for Hydro for the
- test year. It has a list of expenses and it has No. 6 fuel,
- 11 2002 forecast, so that figure there of \$100,585,000, is that to
- be reflective of a figure that I see in **NP-17** that we've just
- been discussing?
- MR. HENDERSON: Yes, that would be the number that's
- on the furthest right hand column of **NP-17**, on the bottom.
- MR. FITZGERALD: Yeah, so that's the \$100 million we're
- talking about?
- MR. HENDERSON: Right, that's the production costs as
- opposed to the purchase cost.
- 20 MR. FITZGERALD: Okay, and I understand now that from
- your testimony yesterday, of course, that this figure would
- change, this \$100 million figure would change with the
- 23 anticipated reduction in the price of oil forecast.
- MR. HENDERSON: Yes, it would change. Right now we're
- seeing the price somewhere around \$27.00 a barrel in 2002
- and previously we were forecasting around \$28.00 a barrel,
- so there will be some savings in that.
- MR. FITZGERALD: Okay, do you have, can you give us
- any idea in dollar amounts what that would be?
- 30 MR. HENDERSON: Not right off the top ... but it would be
- 31 the ratio of 27 over 28, multiplied by that number.
- 32 MR. FITZGERALD: Okay, well I won't do the math here
- right now, I'm (inaudible) my math.
- MR. HENDERSON: There will be a reduction in the
- magnitude ... and again, because of the inventory and the
- blending and the month you purchase it and all that sort of
- 37 thing, it won't be the direct purchase price ratio but it will
- tend towards that.
- 39 MR. FITZGERALD: Okay, now again for my clarification.
- I don't want to jump around here too much but if I could
- ask you to look at NP-62, we don't need that screen
- 42 anymore. This is a detailed calculation of the fuel
- inventory for the end of the year 2002, and at line 8 there is
- a figure there of No 6 fuel, in the case \$13,257,589.
- 45 MR. HENDERSON: Right.
- MR. FITZGERALD: Now when I compare that to **NP-17**,
- 47 referring to the forecast inventory at the end of the test

- year, it appears to be ... fuel inventory is indicated there at
- 49 \$14 million.
- 50 MR. HENDERSON: No, no, that \$14 million is the
- 51 production cost for December. It's not the inventory. The
- 52 inventory volume is not shown in that table, so you
- wouldn't be able to take it off of that table, but to get it you
- would have to take the inventory price at December, which
- is \$28.38 ... 16, which is ... there you go ... do you see where
- 56 Terry is pointing?
- 57 MR. FITZGERALD: Uh hum.
- 58 MR. HENDERSON: It's the third column from the right, the
- 59 bottom number. That's \$28.38. That would be the
- 60 inventory price at the end of the year. That would be
- multiplied by the volume in the inventory at the end of the
- 62 year to give your inventory value, and that's what is in that
- RFI ... I forget which number you were just referring to.
- 64 MR. FITZGERALD: NP-62.
- 65 MR. HENDERSON: NP-62.
- 66 MR. FITZGERALD: That explains that difference. And
- 67 again, so I understand some aspects of your fuel
- management, if I could ask Mr. O'Rielly to bring us now to
- 69 **NP-144**, page 10 of 10. If I could scroll right down to the
- 50 bottom of that screen ... okay, unfortunately we don't have
- 71 the top legend, but this is, this table is to reflect the total
- 72 Bunker C, or the total fuel inventory really for Hydro for the
- 73 end of 2000.
- 74 MR. HENDERSON: Right.
- 75 MR. FITZGERALD: And it's indicating there at the end of
- 76 2000, am I reading this right, that figure there of 468 odd
- 77 thousand, that's the number of barrels you had left?
- 78 MR. HENDERSON: That's the number of barrels in the
- 79 inventory at Holyrood at the end of 2000.
- 80 (11:45 a.m.)
- 81 MR. FITZGERALD: Okay, alright, if we could just go back
- 82 to page nine of this same document, scrolling down, we
- 83 have ...
- 84 MR. HENDERSON: 708,909 at the end of '99.
- 85 MR. FITZGERALD: I'm going to guess that you're going
- to tell me that's some kind of Y2K stockpiling, are you?
- 87 MR. HENDERSON: That's exactly right.
- 88 MR. FITZGERALD: Yeah, okay, so your maximum capacity
- 89 for storage, I understood yesterday, is about 840,000?
- 90 MR. HENDERSON: That's right.
- 91 MR. FITZGERALD: And so you were practically, the tank
- 92 was full then with this ...

- MR. HENDERSON: That was the highest we could 1
- practically get it. We get shipments of 250,000 barrels, so 2
- you can't, we couldn't fit 250,000 in, so that's as far as we 3
- 4 could get it for going over the Y2K.
- MR. FITZGERALD: Okay, was that your decision to 5
- purchase that oil? 6
- 7 MR. HENDERSON: That was a corporate decision that we
- would build our inventories for the end of 1999 in case 8
- there were any problems related to Y2K in getting 9
- deliveries, to make sure that we had the highest inventory 10
- in our tanks to get us through a period of time if there was 11
- computer-related problems, or delivery-related problems 12
- because of the Y2K problem. 13
- MR. FITZGERALD: Okay, did I understand yesterday in 14
- your evidence that you indicated that the price of the No. 15
- 6 is really not your concern? Not that it's not Hydro's 16
- concern, but it's not your department's concern? 17
- MR. HENDERSON: I'm kept appraised of the price. I know 18
- what the price is. We will have discussions and there 19
- would be a number of people within Hydro that will get 20
- together to discuss maybe opportunities to take advantage 21
- of low prices when they are, when they present themselves, 22 so that we can take advantage and lower the cost, and I am 23
- involved with those discussions, but it's not a ... it's not my
- 24 decision per se. That would be something that would
- 25 involve more people to make a decision because there is 26
- some level of speculation if you're going to be doing that. 27
- You're assuming that the price you're going to get ... it 28
- takes about four weeks to get a shipment in. When you 29 say you want it, it's going to be four weeks later before you 30
- get it, because the ships sail from the Caribbean primarily 31
- to come up to supply us, so there is a time for the supplier 32
- to get a ship lined up and get the oil from the refineries and 33
- get it in to us, so you have to be careful what you do there 34
- because the price today will not set that price. The price 35
- that will be set on this is when you actually receive the fuel, 36
- and therefore, you know, that's the type of decision that I 37
- wouldn't be making. That would be a decision made by 38
- involving higher levels of management. 39
- MR. FITZGERALD: Okay, so at the end of December 1999, 40
- you were sitting with 708,000 barrels of oil. 41
- MR. HENDERSON: That's right. 42
- MR. FITZGERALD: And the price had been determined by 43
- then, had it, the price of what you had there? 44
- MR. HENDERSON: That price was determined in 45
- December when we received that shipment. 46
- MR. FITZGERALD: When it landed, right, so a decision 47
- was made prior to December to buy that amount of oil. 48
- MR. HENDERSON: Yes. 49

- MR. FITZGERALD: And do you know if those who were
- making the decision in your operation were consulting with
- other utility companies across Canada regarding this, this
- 53 decision?
- MR. HENDERSON: I wasn't involved or aware of what
- discussions may have happened, so I couldn't say whether
- there were or weren't.
- So if I could use the word MR. FITZGERALD:
- "stockpiling", would you agree that that's what was ... it's
- not a trick question, I'm just trying to struggle for a word 59
- here for what you were doing.
- MR. HENDERSON: Right, what we were doing was we
- were trying to get our inventories as high as we could by 62
- the end of, before the end of the December 1999.
- MR. FITZGERALD: And you don't know if other utilities
- across Canada, or in North America, were doing the same 65
- thing? 66
- MR. HENDERSON: I expect that there was a lot of that
- going on, but I don't know, I have no knowledge of what
- the other utilities were doing.
- MR. FITZGERALD: And do you know if, if you suspect 70
- what you've just said, do you recall any, any pricing impact 71
- of the stockpiling that was occurring? 72
- MR. HENDERSON: I don't recall off-hand, but I expect that
- there was a bit of ... there normally is at that time of the year
- a bit of a rising in price anyway because there is a lot of 75
- purchases going on late in the year in preparation of the
- winter season, the heating season, because a lot of people
- use No. 6 fuel for heating purposes in their manufacturing
- processes or electricity generation, so there is a general
- tendency at the end of the year, in every year, for the price
- to be rising.
- MR. FITZGERALD: Okay, as it turned out, there was no
- need to stockpile.
- MR. HENDERSON: In hindsight.
- 85 MR. FITZGERALD: Correct, in hindsight there was no
- reason to stockpile. Are you aware, or can you tell us
- whether the price of the Bunker C was cheaper in February 87
- and January of 2000 than it was, say in October and 88
- November of 1999?
- MR. HENDERSON: I'd have to ... I can't tell off the top of
- my head what the prices were at that time. I'd have to look.
- MR. FITZGERALD: Would you ... you're not prepared to
- venture a guess?
- MR. HENDERSON: Not at this moment, no.
- MR. FITZGERALD: I mean a guess from the point of view,
- you were talking about cyclical changes in ...

- MR. HENDERSON: The price tends to stay up through the 1 winter period and late winter my recollection is there is a 2 3 little bit of a decreasing demand, if you like, for the fuel, and 4 then there is, there is a tendency too for the price to go up a little, I think, for the summer because of the demand for 5 other petroleum products for, like the driving season, 6 everybody is going, moving their cars or whatever. There's 7 those kinds of dynamics that go on in the petroleum market 8 9 that causes these things ... like the price of No. 6 isn't strictly based on the demand for No. 6, it's also based on 10 what's happening with crude prices, and there's a whole lot 11 of dynamics going in there that I'm not really familiar with 12 but I know, generally speaking, there is a, somewhat of a 13 levelling through the winter, a little bit of the drop in the 14 spring, and a rise early summer, and then there's a little bit 15 of a drop going into the early fall, and then it's a steady rise 16 then back up, but those variances, there is that general 17 trend there but it isn't always there because of the problems 18 with what's happening ... I'd say the geopolitical things that 19 go on that drive crude oil prices around, and then they 20 impact on the No. 6 fuel prices and so on. 21
- MR. FITZGERALD: So we don't know then if the price of oil was cheaper in January and February 2000 than it had been in November and December of 1999?
- MR. HENDERSON: I don't like to say we don't know. I don't know off the top of my head, but it can be found.
- MR. FITZGERALD: Okay, I want to ask you to now look at the transcript from your evidence on October 9th, 2001, at page 30. Now I'm looking at the hard copy. I don't know if it translates into the same ...
- MR. HENDERSON: On your previous question, my Schedule 7 shows the fuel prices that we incurred in 2000, and you can see that our purchases in January of 2000 were \$33.00 a barrel, and in February \$30.00 a barrel. I think that's what you were asking ...
- 36 MR. FITZGERALD: I'm sorry, which schedule?
- 37 MR. HENDERSON: **Schedule 7 of my pre-filed**.
- MR. FITZGERALD: Okay, so we don't know, we still don't know 1999, do we?
- 40 MR. HENDERSON: No, I thought you were looking for
- after the shipments in ... I thought you were looking for
- 42 winter 2000.
- MR. FITZGERALD: Well I was looking for a comparison as to the price prior to Y2K.
- 45 MR. HENDERSON: Oh ...
- 46 MR. FITZGERALD: And post.
- MR. HENDERSON: Yeah, I don't have that. I don't think
- it's there in any of the evidence.

- MR. FITZGERALD: So turning then to your transcript, and I guess we're starting at line 25 there, and Ms. Butler put the question to you, or the idea, I guess. She said, "And the impact of using that hydraulic forecast in the test year instead of Hydro's hydraulic forecast in the test year, that's the current forecast of 4,285, is 192 gigawatt hours, or \$6.336 million in reduced revenue requirements in the test year", and your response was "That's right". And I take it to mean that that \$6 million approximate figure is directly related to a reduction in the amount of oil that's burned in Holyrood. Is that too oversimplified?
  - o MR. HENDERSON: That's correct.
- MR. FITZGERALD: That's correct, alright. I'm interested in your remark that follows that. Certainly down around line 44, you say that, "The customers will pay what the real hydraulic production is, and what we're doing here by debating these two numbers is we're playing what I like to 65 call a shell game, which is we're trying to decide whether 66 we're going to put it into the cost of service, or is it going to go into the Rate Stabilization Plan, because whatever it is, it's going to be, it's going to end up ... either the 69 hydraulic production will be exactly as it turns out to be, and then there will be an adjustment in the RSP". Now do I take that to mean that the price of the fuel doesn't matter because the customers are only going to pay for what's 73 74 burned?
- MR. HENDERSON: The price matters in that the customer pays for the cost of supplying electricity which comes from 76 the cost of operating Holyrood, and the costs are 77 determined based on both the volume of fuel used, and the price of the fuel, so there's two components. And the 79 volume is largely dictated by our hydraulic production. The price, of course, is dictated by market prices at the time. So when we put into the plan a price of \$20.00, then 82 the variances from that \$20.00 will go into the plan, in 83 whatever the real price is. Plus when we put in an average 84 hydraulic production, any variances from that hydraulic production will result in a variance in fuel consumed in Holyrood, and thereby another adjustment in the plan in the volume that would be applied at the \$20.00 per barrel price that's in the plan.
- MR. FITZGERALD: In the test year you have, it's forecast that you will be purchasing through your department, 3.5
- 92 million barrels of oil.
- 93 MR. HENDERSON: Yes.
- 94 MR. FITZGERALD: And that appears to be higher than the
- amount that you've purchased in previous years?
- 96 MR. HENDERSON: In most recent years.
- MR. FITZGERALD: Right, and that is, of course, because of the low hydraulic forecast that's been pointed out in the

- 1 Grant Thornton report, etcetera.
- 2 MR. HENDERSON: I don't like the term low forecast. It's
- 3 the historic, long-term historical average hydraulic
- 4 production. I wouldn't classify it as low. I know that in
- 5 Grant Thornton it was, that was used, that term was used,
- 6 but it's low relative to recent years, but I wouldn't say it's a
- 7 low forecast.
- 8 MR. FITZGERALD: I understand that, so if the Board was
- 9 to ask you how much oil you're going to buy in the test
- year, you have stated 3.5 million barrels.
- 11 MR. HENDERSON: That's based on the assumption of that
- the actual year will be an average water year.
- MR. FITZGERALD: Yeah, and I take it to mean by your
- remark to Ms. Butler's query, was that so what if I buy 3.5
- million barrel. The consumer is only going to pay for it if I
- burn it. Is that a fair statement?
- MR. HENDERSON: What my statement was is that the
- 18 Rate Stabilization Plan, as it's currently used, takes the
- variances between what the actual hydraulic production is
- and the forecast hydraulic production, and takes that into
- account so that in the end the customer will pay the actual
- 22 cost
- 23 MR. FITZGERALD: What if we have a situation though
- like the Y2K when perhaps you buy too much oil at a
- 25 higher than world market price.
- MR. HENDERSON: Well we've always bought at the world
- 27 market price with a discount because of the way we go with
- our contracts there is some discount from the world market
- 29 price at the time so we're always paying the world market
- price. We don't pay more than that.
- 31 MR. FITZGERALD: So is it possible that you can get stuck
- with ... well let's say that at the end of the test year you've
- estimated that you'll have about 500,000 barrels of oil, and
- 34 the following month the price of oil drops and you're
- hanging on to this oil, you have, you have bought 500 (sic)
- barrels of oil. I'm assuming that each, of the \$3.5 million
- 37 that you have projected, that that's broken down into a
- monthly amount that you intend to purchase.
- 39 MR. HENDERSON: That's the forecast. What we will
- 40 actually purchase will depend on how our thermal
- 41 production is actually going to occur based on our actual
- 42 hydraulic conditions that we incur.
- 43 MR. FITZGERALD: Okay, so let's say for, that in January
- of 2002 you're predicted to buy 500,000 barrels of oil and
- you have no fear that that's an over-purchase?
- MR. HENDERSON: What we ... that is the estimate right
- now based on the average hydraulic conditions. Whatever
- turns out to be the condition in January, we will adjust that

- purchase amount so we'll buy only what we need. We
- 50 won't over buy. If it turns out that we don't need to use
- 11 Holyrood as much this coming winter as we have
- forecasted, then we won't buy 500,000 barrels, we'll buy
- 53 something less.
- 54 MR. FITZGERALD: Okay, I guess my question comes
- 55 down to then, are we confident then that whenever Hydro
- is burning a barrel of oil, that that barrel, the cost of that
- 57 barrel is reflecting the current price of that barrel of oil on
- the world market?
- 59 (12:00 noon)
- 60 MR. HENDERSON: When we burn it it's based on the cost
- 61 in our tanks.
- 62 MR. FITZGERALD: Which you already bought.
- 63 MR. HENDERSON: Which we already bought a week
- 64 before or a month before. It's a blended price that's, I guess
- 65 ... no, it's over a period of time that that price for the
- 66 inventory was determined and it's based on our inventory
- 67 cost, but it will not reflect what the current market price is
- at the time. It will reflect on the inventory costs which is
- 69 reflective of the market prices when we made the purchases.
- 70 MR. FITZGERALD: If I could now, Mr. Henderson, I'd like
- 71 to turn to your supplementary evidence, to page 1, the
- bottom, line 27. Now here I believe you had been examined
- 73 by other counsel here regarding the contact to the other
- viilities, significant hydroelectric utilities to confirm their
- 75 practices. You contacted Manitoba Hydro, Ontario Power
- 76 Generation, Hydro Quebec, and B.C. Hydro, and several
- 77 other large Canadian hydroelectric generators. Of those
- 78 that you contacted, are these regulated hydroelectric
- 79 organizations?
- 80 MR. HENDERSON: As far ... I'm not sure of the details of
- all of them. I know like in Ontario there is a process in
- 82 which they're being deregulated, so Ontario right now is in
- a transition state, so I don't really know. Hydro Quebec, as
- 84 far as I know, is still regulated, and B.C. Hydro is, and
- 85 Manitoba Hydro is, but Ontario is going through a
- 86 transition.
- 87 MR. FITZGERALD: Okay, I understand that the statement
- that you made was offered, and correct me if I'm wrong, to
- 89 counter, if you will, Mr. Brockman's supplementary
- 90 evidence, where we have this ongoing debate with Hydro's
- 91 preference for the 50 year reliable historical average, versus
- 92 the 30 year running average.
- 93 MR. HENDERSON: That's right.
- 94 MR. FITZGERALD: That's right. Did it occur to you to ask
- 95 any of these regulated utilities whether the regulator had
- 6 made a ruling on preferring one method over the other?

- MR. HENDERSON: No, we were more, we didn't ask that
- 2 specific question. What we asked is do you do an average,
- 3 and what do you average for, and that answer was that
- 4 they used it for a number of purposes which included rate
- 5 setting purposes.
- 6 MR. FITZGERALD: Okay, do you know whether other
- 7 regulators have actually dealt with this issue?
- 8 MR. HENDERSON: No, I haven't ... I have no idea. I
- 9 haven't ... you know, I'd have to study the rulings of
- regulators and I haven't done that. All we did was we tried
- to find out, and I think that's been made clear, that we were
- trying to find out if other utilities were shortening their
- record to reflect climate change or more recent records, and
- that's where our focus was on that.
- MR. FITZGERALD: Do you agree that it would be helpful
- to this Board to have the benefit of the reasoning of other
- 17 regulators if, in fact, they have decided on this issue
- 18 previously?
- MR. HENDERSON: I guess the Board will have to use
- whatever evidence that they are presented. What I'm
- 21 presenting is what Hydro feels is the correct way to do the
- 22 average, or determine the forecast for the test year, and I
- 23 guess that's, that's our evidence, is that we would
- recommend the way we've done it.
- MR. FITZGERALD: Oh, surely, but if you were aware that
- 26 this issue had already been dealt with, don't you, would
- you believe that you would have a duty to bring that to the
- intention of the Board?
- MS. GREENE, Q.C.: Yes, and I guess that would be done
- as a matter of argument, and that's how we usually refer to
- other regulatory precedents, and so far we haven't found
- 32 any.
- 33 MR. FITZGERALD: So you haven't asked the question,
- you don't know.
- 35 MR. HENDERSON: Right.
- 36 MR. FITZGERALD: Okay.
- 37 MS. GREENE, Q.C.: And what I wanted to point out, it may
- not be Mr. Henderson asking the question as to what the
- 39 regulatory precedent is.
- 40 MR. NOSEWORTHY, CHAIRMAN: We don't know in any
- 41 event.
- MS. GREENE, Q.C.: No, but I can assure ...
- 43 MR. FITZGERALD: I have no response to that, I don't
- 44 think.
- 45 MS. GREENE, Q.C.: I can assure you that if there is one out
- 46 there we will find it, and that's what lawyers normally do
- 47 when they look for precedents and rulings from other

- 48 jurisdictions.
- 49 MR. FITZGERALD: Okay, Mr. Henderson, those are my
- 50 questions.
- 51 MR. HENDERSON: Thank you.
- MR. NOSEWORTHY, CHAIRMAN: Thank you very much,
- 53 Mr. Fitzgerald ... Mr. Henderson. It's five after. I'll ask
- 54 counsel for the Board to begin cross-examination please?
- 55 MR. KENNEDY: Thank you, Chair. Mr. Henderson, I
- 56 guess before we break for lunch, I'd just like to get an
- 57 understanding, if you will, of the communications system.
- As I understand it, you're responsible for the operational
- 59 aspect of the communications system used by Hydro in the
- generation and transmission of electricity?
- 61 MR. HENDERSON: I will be responding to the questions
- 62 regarding that, but in my position within the Hydro
- 63 organization, I don't want to leave the impression that I'm
- 64 responsible for it. There is a director for that department
- that's responsible for it but I am presenting the evidence
- and answering questions for that for Hydro.
- 67 MR. KENNEDY: You volunteered to. Perhaps it might be
- 68 helpful to turn to your **pre-filed evidence** at page 8, and I
- 69 just wanted to, like I said, get an understanding of how this
- 70 all fits together. You had, I believe, one of your charts in
- 71 your presentation may have provided ... it might be helpful
- 72 if you take that out as well.
- 73 MR. HENDERSON: It's number ten of the presentation,
- 74 slide number ten.
- 75 MR. KENNEDY: Okay, so you start with the Energy
- 76 Control Centre located in St. John's, correct, so that's the
- 77 mother ship?
- 78 MR. HENDERSON: Sure.
- 79 MR. KENNEDY: Okay, and as you described in your pre-
- 80 filed evidence, the backbone, if you will, of the mother ship
- 81 is the energy management system, is that right?
- 82 MR. HENDERSON: That's right.
- 83 MR. KENNEDY: And I take it, that's just a complex piece
- 84 of code, a software application?
- 85 MR. HENDERSON: It's a computer system.
- 86 MR. KENNEDY: Okay, and then you have what's referred
- 87 to in this as RTU's.
- 88 MR. HENDERSON: The remote terminal units.
- 89 MR. KENNEDY: Terminal units.
- 90 MR. HENDERSON: That's right.
- 91 MR. KENNEDY: Okay, and the remote terminal units are
- 92 located where exactly?

- 1 MR. HENDERSON: They're located in each site that we
- 2 have remote control of, so there's a number of them around
- 3 the system. For instance, looking at the map there, you can
- 4 see there's, there'd be one in Bay d'Espoir, for instance.
- 5 Actually Bay d'Espoir probably has a couple of RTU's for
- 6 control of that, and each one of these red dots that are
- 7 shown on this map, I would suggest to you, have an RTU
- 8 in them, but there's more than those that are shown there as
- 9 well.
- MR. KENNEDY: Okay, so they would be located in your,
- certainly your principal generating sites, like Bay d'Espoir
- and Cat Arm, and Hines Lake and so on?
- 13 MR. HENDERSON: Yes.
- MR. KENNEDY: Okay, and they would be located, would
- they be located in any of the remote diesel generating
- 16 stations?
- 17 MR. HENDERSON: No.
- MR. KENNEDY: Okay, so is the Energy Control Centre tied
- into the remote generating stations, the remote diesel?
- MR. HENDERSON: No, not the isolated diesel systems.
- MR. KENNEDY: Okay, so do you know how many RTU's
- are hooked in with the, with the ECC?
- 23 MR. HENDERSON: In my evidence it says there are
- remotely controlled 41 sites, so the RTU count would be
- very close to that.
- 26 MR. KENNEDY: Okay.
- MR. HENDERSON: Some sites have more than one RTU.
- 28 MR. KENNEDY: Now the automatic generation control
- 29 system that's also housed in the energy management
- 30 system ...
- 31 MR. HENDERSON: Yes.
- 32 MR. KENNEDY: Or sorry, in the Energy Control Centre, is
- that a different system entirely from the EMS?
- MR. HENDERSON: No, the automatic generation control
- is a program, a software program that runs on the EMS
- 36 system.
- MR. KENNEDY: So it's a separate module that operates
- with the EMS?
- 39 MR. HENDERSON: Yes.
- 40 MR. KENNEDY: Integrated in with it.
- 41 MR. HENDERSON: Yes.
- 42 MR. KENNEDY: Okay, and then, in turn, that's all housed
- by the ECC?
- 44 MR. HENDERSON: Yes.

- 45 MR. KENNEDY: Okay, and you then go on to talk about
- 46 the, the communications systems that are maintained by
- 47 Hydro, and you say that there are SCADA, teleprotection,
- 48 and operational voice?
- 49 MR. HENDERSON: That's right.
- MR. KENNEDY: Okay, am I pronouncing that right, by the
- 51 way?
- 52 MR. HENDERSON: I say SCADA.
- 53 MR. KENNEDY: SCADA, tomato and tomato. So could
- 54 you just explain to us what the SCADA is first?
- 55 MR. HENDERSON: SCADA stands for Supervisory
- 56 Control and Data Acquisition, and it involves with the
- 57 receiving of data or information from remote sites,
- $\,$  collecting it up and bringing it to the mother ship, as you
- call it, to the Control Centre. It also allows for the remote
   control so the SCADA system allows for signals to be sent
- from the Control Centre out to the remote sites to operate
- breakers or control different pieces of equipment, and the
- other aspect of it is there's data that comes back from the
- remote sites that we give ... provide alarms to the operator
- of Temote sites that we give ... provide alarms to the operator
- $^{65}$  in the Control Centre, so that's part of the SCADA system.
- 66 Those alarms that come back which may say that there's a
- piece of equipment that's in some difficulty, if you like, at
- one of the remote sites.
- 69 MR. KENNEDY: So is SCADA again a computer program
- or are we now talking about hardware?
- 71 MR. HENDERSON: SCADA is sort of a process or it is a
- 72 collection of all of these different components.
- 73 MR. KENNEDY: Okay.
- 74 MR. HENDERSON: So it's the RTU's, the communications,
- 75 the Energy Control Centre computer, the EMS, that would
- all be considered part of the SCADA system.
- 77 MR. KENNEDY: So SCADA on top, and then SCADA has
- 78 part of it, the Energy Control Centre, and then you have the
- 79 ..
- 80 MR. HENDERSON: Well, the Energy Control Centre, we
- 81 call that ... that's the building and the people that are in
- 82 there use this SCADA system. The SCADA system
- includes the EMS computer and the remote terminal units.
- 84 MR. KENNEDY: Okay, I'm trying to get a ... because I'm
- 85 going to sort of get a firm understanding of how all this
- 86 hooks together, because it involves a fair amount of
- 87 money, as you know, so just so I understand it here, so
- 88 when you say SCADA, is that just the reference to an
- 89 overall system, or is it a reference to a particular computer
- 90 application or hardware or a combination of ...
- 91 MR. HENDERSON: It's the overall system.

- MR. KENNEDY: Okay, so just to perhaps put it in a silly ...
- 2 if I went out to go buy a SCADA, I'm buying an entire
- 3 system, both software and hardware?
- 4 MR. HENDERSON: Yes.
- 5 MR. KENNEDY: And as I understand from your pre-filed
- 6 ... the SCADA provides the mechanism for the RTU's to
- 7 actually talk to your Energy Control Centre, to your EMS
- 8 software?
- 9 MR. HENDERSON: Yes.
- MR. KENNEDY: Okay, and in turn, for your automatic
- generation control module to talk back to the RTU?
- MR. HENDERSON: Right.
- MR. KENNEDY: Okay, now you also refer to teleprotection
- and operational voice, so teleprotection a separate thing
- 15 from SCADA then?
- MR. HENDERSON: Teleprotection is a separate item, yes.
- MR. KENNEDY: And so what does the teleprotection do?
- MR. HENDERSON: Teleprotection is used primarily on
- transmission lines for providing communications from one
- 20 end of the transmission line to the other, so that if there is
- 21 trouble or a problem on that line, the two ends of the line,
- 22 the equipment on both ends of the line can talk to each
- other and identify that the problem is on the line, and then
- take appropriate action to open the breakers and so on to
- protect the line from damage. So you require ... the telecommunications give you very very fast
- communications between the two ends of the line.
- MR. KENNEDY: Okay, so there's some trip, or some event
- 29 that takes place on a transmission line and there's these
- 30 teleprotection units sitting on the transmission line on
- 31 either end?
- MR. HENDERSON: That's right.
- 33 MR. KENNEDY: And would they only be on either end or
- would they be dispersed over the transmission line?
- MR. HENDERSON: No, they're only at the terminals.
- 36 MR. KENNEDY: Okay.
- 37 MR. HENDERSON: And the teleprotection system, the
- 38 communications system, goes between those terminal
- 39 stations, but there is no ... the teleprotection equipment
- 40 itself is at the terminals.
- MR. KENNEDY: Okay, so the units talk to each other and
- 42 they determine that the event was something that's solved
- by throwing a breaker.
- 44 MR. HENDERSON: Right.
- 45 MR. KENNEDY: Okay, so how, how does the

- teleprotection unit talk to the breaker then?
- 47 MR. HENDERSON: It's wired from ... the teleprotection is
- a control system in itself that would then provide signals to
- a relay, if you like, that then would go and trip a breaker.
- 50 MR. KENNEDY: Okay, so ...
- 51 MR. HENDERSON: But it's a complex sort of control
- 52 system with a lot of wiring and relays and so on involved
- 53 with it.
- 54 MR. KENNEDY: Okay, so does the teleprotection unit talk
- to the, the ECC?
- 56 MR. HENDERSON: Not in that sense, no.
- 57 MR. KENNEDY: So this is a stand-alone system that
- 58 doesn't involve direct intervention by any of the staff in
- 59 your Energy Control Centre.
- 60 MR. HENDERSON: No, the teleprotection is all designed
- to operate automatically and very very quickly, like within
- 62 milliseconds.
- 63 MR. KENNEDY: Okay, and what's the principal means
- 64 through which the signals are sent back and forth on the
- 65 transmission line? Is it over the transmission line itself,
- used to carry it over the line?
- 67 MR. HENDERSON: There's different modes, if you like, for
- 68 use of the teleprotection. There's the microwave system,
- 69 and there is power line carrier equipment, and I believe
- 70 there is, in some places we have fiberoptic.
- 71 MR. KENNEDY: Okay, so you're using three different
- types of systems to operate the teleprotection system?
- 73 MR. HENDERSON: Different communication means.
- 74 MR. KENNEDY: Okay, is it a case of this mix of
- 75 technologies to operate the teleprotection system, just a
- 76 product of history, or is one certain type of technology
- more appropriate to use in certain areas than in others?
- 78 MR. HENDERSON: Well, there'd be a lot of analysis done
- 79 to determine which is the most appropriate. It depends on
- $\,$  the system that you're looking at, which is most appropriate
- 81 for that particular system.
- 82 (12:15 p.m.)
- 83 MR. KENNEDY: Okay, so putting the question another
- 84 way, if you were to build this entire system today would
- 85 you still be selecting different technologies to use to
- operate the teleprotection system, or would you just go
- with with one of these which is the best of the three?
- 88 MR. HENDERSON: No, I would say you would have a mixture.
- MR. KENNEDY: Okay, so can you describe to me when

- 1 you would use one versus the other, just in layman's
- 2 terms?
- 3 MR. HENDERSON: It's most probably defined by cost. It
- depends on how far apart your terminals are, and whether
- 5 you're talking about a new line or an old line would make
- some difference as to whether, which way you go, so it
- 7 comes down to cost and the distance that you have
- 8 between your terminal ends. This would impact on the
- 9 method that you would choose.
- MR. KENNEDY: So, in the case of ...
- 11 MR. HENDERSON: I guess the other thing too would be
- the reliability of that method is also critical. You know, you
- have to have a very reliable communications method, and
- if you had an area where the reliability problem is not quite
- required to the same degree, like if you have ... certain areas
- are much more critical to the system and it would require
- maybe a little higher reliability than others, so you may
- choose ... these different systems may have different levels
- of reliability as well.
- 20 MR. KENNEDY: Okay, so for instance, the main feed
- 21 coming out of Bay d'Espoir is a particularly critical
- component of your transmission system.
- MR. HENDERSON: Absolutely.
- 24 MR. KENNEDY: And so you would want the Cadillac of
- teleprotection for that line?
- MR. HENDERSON: You would want to have the absolute
- best, most reliable teleprotection circuit there.
- 28 MR. KENNEDY: So out of these three, out of the
- 29 microwave, power line carrier equipment, and fiberoptic,
- what's the Cadillac?
- 31 MR. HENDERSON: Well, I think, and I'm not real close to
- 32 this, but I would say that your fiberoptic and microwave are
- probably very closely the same. The power line carrier is
- not as reliable because it is using the wires of the line, and
- if you had the line actually damaged and on the ground,
- 36 then the teleprotection signal may not go through.
- 37 Certainly if the wire broke on your line your signals won't
- go through, so the power line carrier would be less reliable
- than the other two.
- 40 MR. KENNEDY: I guess that's not going to be solved by
- 41 throwing a breaker then either if your power line is down.
- 42 MR. HENDERSON: Well you've got to throw your
- breakers to keep the line from being damaged.
- 44 MR. KENNEDY: Right, okay, so the fiberoptic and the
- microwave you are saying are comparable in functionality,
- and that the power line carrier system is not as good as
- those other two?

- 48 MR. HENDERSON: That's right.
- 49 MR. KENNEDY: Okay, the operational voice, could you
- 50 just describe for me what ... I take it operational voice is just
- 51 a voice transmission.
- 52 MR. HENDERSON: That's right.
- 53 MR. KENNEDY: Okay, and could you tell me what systems
- 54 Hydro has in place for voice transmission?
- MR. HENDERSON: We would use all the same ones that
- 56 are used for the teleprotection, plus we have VHF, VHF
- 57 radio.
- MR. KENNEDY: Uh hum, and ...
- 59 MR. HENDERSON: And there's also the public service
- 60 telephone system.
- 61 MR. KENNEDY: Okay, so you would use, you would use
- 62 the microwave, fiberoptic, and power line carrier equipment
- also to carry voice at times?
- 64 MR. HENDERSON: Yes.
- 65 MR. KENNEDY: And then you'd have VHF to carry voice?
- 66 MR. HENDERSON: Yes.
- 67 MR. KENNEDY: And public phones.
- 68 MR. HENDERSON: Yes.
- 69 MR. KENNEDY: What about the UHF?
- 70 MR. HENDERSON: UHF, there is some limited use of UHF
- 71 in, I believe it's at Upper Salmon and Hines Lake.
- 72 MR. KENNEDY: Could you tell me what the difference is
- 73 between VHF and UHF from a functional perspective, why
- you would select one versus the other?
- 75 MR. HENDERSON: It's not an area that I'm really up on,
- 76 but it's to do with distances. You have very high
- 77 frequency and ultra high frequency. I think that's what the
- 78 V and the U stand for.
- 79 MR. KENNEDY: And the voice, could you tell me who
- 80 that's used by?
- 81 MR. HENDERSON: The voice is used by our employees
- 82 who are going about their work at all of our stations,
- 83 terminal stations along our transmission lines throughout
- our whole system.
- 85 MR. KENNEDY: So if I'm an employee of Hydro and there
- 86 is some event on one of your transmission lines, I am
- 87 dispatched out to go have a look because the SCADA
- system says it can't be solved remotely, if you will.
- 89 MR. HENDERSON: That's right.
- 90 MR. KENNEDY: And I'm off in the boon docks now,

- 1 nowhere near any civilization. What do I use to
- 2 communicate with my coworkers who are remote from me
- working on the same transmission line?
- 4 MR. HENDERSON: You'd be using the VHF radio.
- 5 MR. KENNEDY: And what if I wanted to speak to
- someone back at, for instance, St. John's, in the Energy
- 7 Control Centre?
- 8 MR. HENDERSON: VHF radio.
- 9 MR. KENNEDY: So when would I use the microwave
- 10 system?
- MR. HENDERSON: When you're in a terminal station.
- MR. KENNEDY: And is that the same for the fiberoptic
- then?
- MR. HENDERSON: I'm not sure that we're using fiberoptic
- anywhere for voice, but ...
- MR. KENNEDY: Okay, I thought you said you used it for
- 17 voice.
- MR. HENDERSON: Yeah, I may have, and I'm trying to
- think now ... we have a limited amount of fiberoptic, and it
- 20 may be, but I'm not really sure about that.
- 21 MR. KENNEDY: Okay, and the power line carrier
- equipment, the same thing, I would use that if I was at a
- 23 terminal?
- MR. HENDERSON: Yes.
- MR. KENNEDY: Okay, so when I'm in the field, not at a
- terminal, my option ... I only have one option and that's the
- 27 VHF, is it?
- MR. HENDERSON: That's right.
- MR. KENNEDY: And the UHF if it's available?
- 30 MR. HENDERSON: Well, you could, in some places, be
- able to use a cell phone.
- 32 MR. KENNEDY: Right, yeah, when I described no
- 33 civilization, I meant that the regular communication system
- wouldn't work, so the UHF though, would I use that at
- 35 times for voice as well in the conditions as I described,
- where you're in a remote area?
- 37 MR. HENDERSON: I'm not sure of the detail of the UHF in
- the Upper Salmon and at Hines Lake, whether we're using
- 39 that for voice or what it's used for actually. I know it's
- there, but I'm not sure of all its uses.
- MR. KENNEDY: Okay, Chair, that's all the questions I
- 42 think I have on this area, so it might be an appropriate time
- to break for lunch.
- 44 MR. NOSEWORTHY, CHAIRMAN: Thank you very much.

- 45 MS. BUTLER, Q.C.: Excuse me, Chair, I wonder if I might ...
- 46 I'm sorry, Ms. Greene, you go ahead.
- 47 MS. GREENE, Q.C.: It may be the same question. I was
- 48 wondering for planning purposes if Mr. Kennedy could
- indicate how long he plans to be.
- 50 MR. KENNEDY: I don't think I'd be more than an hour.
- MS. GREENE, Q.C.: I have a faint hope here, or I hope that
- 52 we may have Mr. Henderson finished by the end of the
- week tomorrow.
- MS. BUTLER, Q.C.: Mr. Chairman, my question was related
- 55 .
- 56 MR. NOSEWORTHY, CHAIRMAN: I had more than a faint
- 57 hope of that (*laughter*).
- 58 MS. BUTLER, Q.C.: I was just wondering for my own
- 59 planning purposes if I might be required to start Mr.
- 60 Budgell this afternoon, but of course that's dependant on
- 61 how long the panel is going to be with their questions for
- 62 Mr. Budgell.
- 63 MS. GREENE, Q.C.: You meant Mr. Henderson, questions
- 64 for Mr. ...
- 65 MS. BUTLER, Q.C.: No, I meant am I going to have start
- 66 Mr. Budgell this afternoon.
- 67 MS. GREENE, Q.C.: Oh, you said questions, how long
- would the panel be with Mr. Budgell.
- 69 MS. BUTLER, Q.C.: With Mr. Henderson.
- 70 MR. NOSEWORTHY, CHAIRMAN: Yes, well, I guess if
- Mr. Kennedy is looking at an hour redirect, I would think
- 72 among us, I don't know, I haven't discussed it yet, but we'll
- 73 likely, we will likely be close to the end of the afternoon
- vith Mr. Henderson.
- 75 MS. GREENE, Q.C.: Excuse me, Mr. Chair, I will have
- 76 redirect following Board counsel.
- 77 MR. NOSEWORTHY, CHAIRMAN: Yes, yes, I understand
- 78 that.
- 79 MS. GREENE, Q.C.: So it's an hour and then ...
- 80 MR. NOSEWORTHY, CHAIRMAN: Yes, an hour and
- some and I think we'll be at least until the afternoon, so you
- 82 can count on Mr. Budgell possibly tomorrow, certainly not
- 83 this afternoon, okay?
- 84 (break)
- 85 (2:00)
- 86 MR. NOSEWORTHY, CHAIRMAN: Thank you, good
- 87 afternoon. Before we get started, counsel, are there any
  - preliminary matters?

- MR. KENNEDY: Not that I'm aware of, chair. 1
- MR. NOSEWORTHY, CHAIRMAN: No undertakings, Ms. 2
- Greene? 3
- MS. GREENE, Q.C.: Yes, actually, there are. But what I 4
- thought I would do is when I start my redirect with Mr. 5
- Henderson later this afternoon I'd do them at that time and 6
- we will be responding to them at that time, as well. 7
- MR. NOSEWORTHY, CHAIRMAN: Sure. Thank you. 8
- Could we proceed, counsel, now, with your cross-9
- examination, please? 10
- MR. KENNEDY: Thank you, Chair, commissioners. Mr. 11
- Henderson, just a couple of last questions concerning the 12
- telecommunications of Hydro. And I guess, just turning to 13
- page 10 of your presentation that you made back at the 14
- beginning of your testimony. Just before we look at that 15
- map, in particular, would you, Mr. Henderson, have had 16
- involvement in the determination by Hydro of what 17
- systems to install in your total telecommunication network? 18
- MR. HENDERSON: No, I didn't have any direct 19
- involvement with that. That's our tele-control department 20
- would have determined that. Now, a lot of this 21
- infrastructure was built long before I started at Hydro, as 22
- well, so ... 23
- 24 MR. KENNEDY: So the tele-control department, what does
- that fall under in the hierarchy of your organization? 25
- MR. HENDERSON: The director of information systems 26
- and telecommunications had responsibility for the tele-27
- control department and he reports to the vice-president of 28
- production, who I also report to. 29
- MR. KENNEDY: Okay. So, it's a parallel to the vice-30
- president of production? 31
- MR. HENDERSON: That's right. 32
- MR. KENNEDY: Okay. So did I gather you correctly, then, 33
- as head of operations for generation and transmission the 34
- actual use of these systems, that would fall in your 35
- 36 department?
- MR. HENDERSON: We're one of a number of users of the 37
- telecommunications. You know, the people in Mr. Reeves' 38
- department, the transmission, the people who maintain the 39
- systems use it extensively, as well. 40
- MR. KENNEDY: Okay. Alright. But you, yourself, or your 41
- department, if you will, never had direct involvement in the 42
- selection of what communication system to put in where? 43
- MR. HENDERSON: No. We just required, you know, a 44
- reliable system to ensure the reliable operation of the power 45
- system. 46
- MR. KENNEDY: Okay. Well, if that's the case, that's all the 47

- questions I have on telecommunications. Thank you. I
- have a couple of days of questions on hydrology. Mr.
- Henderson, actually, I do have one or two. And despite
- 51 the number of questions, or perhaps because of them, I'm
- in somewhat of a state of confusion about the actual 52
- process employed by you and your department in the
- determination of the different mixes between hydraulic and
- thermal. But I'd like to try to keep it at a 30,000 foot view, if 55
- you could. And what I'll attempt to do is describe to you 56
- what my understanding is and then you can step in when I go horribly wrong. And as I understand it, one of the first
- things that's done is the load forecast for the particular
- year, for 2002?
- MR. HENDERSON: That's right.
- MR. KENNEDY: Okay. And then there's an attempt made
- to plan your system of generation so that you'll meet that
- 64 load?
- MR. HENDERSON: Exactly.
- MR. KENNEDY: Okay. And principally, that involves, or
- chiefly, that involves a balance between your hydrologic ... 67
- hydraulic electrical generation verses your thermal
- generation?
- MR. HENDERSON: That's right.
- MR. KENNEDY: And the chief objective there is to try to
- generate as much energy hydrologically as opposed to
- thermally?
- MR. HENDERSON: That's right. That's our day-to-day 74
- operating philosophy. When it comes to the forecast we
- assume the average number for the budget forecast.
- MR. KENNEDY: Okay. So, turning to your hydraulic 77
- generation, you look to what capability you have in
- producing electricity from that source?
- MR. HENDERSON: That's right.
- MR. KENNEDY: And in doing so, you use an average of
- the total capability, based on as long a period as you have 82
- for the data field?
- MR. HENDERSON: That's right.
- MR. KENNEDY: And then, after you generate that number
- of what you feel is the total capability to be generated by
- all your hydraulic capacity you then ... it's just a simple
- subtraction to determine how much you're going to have to 88
- generate thermally?
- MR. HENDERSON: On an annual basis it's that simple.
- MR. KENNEDY: Okay.
- MR. HENDERSON: The part of the complication is 92
- choosing a forecast of how that spreads out over each

- 1 month of the year.
- 2 MR. KENNEDY: Sure. No, I can appreciate that. And
- 3 that's a question I have now in a minute. But, now, the
- 4 wrinkle which throws me off is some evidence that you've
- 5 provided regarding using the ... a three-year period of the
- 6 worst possible scenario for the inflows into your reservoirs
- 7 in determining what your capability is. Is that an accurate
- 8 statement?
- 9 MR. HENDERSON: No, that's not used to determine our
- capability, that three-year. What that is used for is
- determining the storage levels that we have to try to
- maintain in our reservoir in case we hit that dry years that
- three-year dry sequence. So I think what might be helpful
- 14 for this is if you went to my Schedule 3 of my evidence.
- And in Schedule 3 you can see there's a green line there,
- which is our minimum energy storage target. That level is
- determined by the three-year dry cycle.
- MR. KENNEDY: Okay. So, you state "As the load grows
- 19 higher reservoir levels are needed to ensure that Hydro can
- 20 meet the load. Even under a three-year period of dry
- 21 conditions this was experienced in the late 1950s and early
- 22 1960s."
- 23 MR. HENDERSON: That's right.
- 24 MR. KENNEDY: And that's what this green line
- 25 represents?
- MR. HENDERSON: Right.
- 27 MR. KENNEDY: And it fluctuates month to month
- because your load changes month to month, of course?
- MR. HENDERSON: It's that, plus the ... what we're doing
- 30 is basically from the end of each month we're projecting
- outward the dry period.
- 32 MR. KENNEDY: Okay. So, you're actually using
- 33 hydrological data on a month to month basis, as well?
- 34 MR. HENDERSON: Right.
- MR. KENNEDY: And then load data on a month to month
- 36 basis?
- 37 MR. HENDERSON: Yes.
- MR. KENNEDY: To calculate your total capability on a
- month to month basis under those conditions?
- 40 MR. HENDERSON: Right. To ensure that we operate to
- 41 keep our water levels to that green line so that if, at that
- 42 point in time, we hit the dry period, we would have
- sufficient water in the storage, on top of what comes in
- over that three-year period to meet our levels.
- MR. KENNEDY: Okay. And this green line represents, if
- you will, the amount of water that you have to keep in your

- 47 reservoir?
- 48 MR. HENDERSON: That's right.
- MR. KENNEDY: Alright. Just a curious question, in 2001
- 50 you dropped below that line?
- 51 MR. HENDERSON: Right.
- 52 MR. KENNEDY: As indicated by your graph?
- 53 MR. HENDERSON: Right.
- 54 MR. KENNEDY: So can you explain if that's the minimum
- 55 then we've dropped below the minimum, so now it's not a
- 56 minimum, so can you just explain that one?
- MR. HENDERSON: When you drop below the minimum
- you would be operating your thermal to a maximum to try
- 59 to get you back up. So you're producing less from your
- 60 hydro and more from your thermal to get it up, so that's
- 61 what normally would happen. Now, what was happening
- 62 in April of this year, you may recall that we had a lot of
- snow, and we had done snow pack measurements and
- 64 knew that there was a lot of snow out there and we were
- able to let the reservoir go lower, knowing that there was
- snow to come that would bring us back up.
- 67 MR. KENNEDY: Okay. So, the minimum is a minimum, but
- 68 you still exercise some judgment, based on your known
- o conditions about whether you'll dip below that minimum?
- 70 MR. HENDERSON: That's right. And that particularly
- 71 holds true in the wintertime when there's snow on the
- 72 ground.
- 73 MR. KENNEDY: So, that's going out and buying the couch
- because you know you're going to get paid on Friday? It's
- a case of borrowing, if you will, from the reservoir knowing
- that it's going to be paid back into the reservoir?
- 77 MR. HENDERSON: Yes.
- 78 MR. KENNEDY: Okay. And that's based purely on, in this
- 79 case, your snow pack data, it's not based on ... is it based,
- 80 also, on what you expect the inflows to be in addition to
- 81 that snow pack?
- MR. HENDERSON: It's ... well, obviously there's a lot of
- precipitation that falls in Newfoundland between April and
- 84 June.
- 85 MR. KENNEDY: Okay.
- 86 MR. HENDERSON: And so, there's a combination of two
- 87 things there, it's the snow pack, plus the precipitation that,
- you know, we would normally expect to get during that time
- 89 period.
- 90 MR. KENNEDY: Now, first I'll ask you, is there a reason
- why you use a three-year worse case scenario?

- 1 MR. HENDERSON: What we do is we actually, in
- developing this, use all years, and that three year period
- dictates what we say. We can have a repeat ... one of our
- 4 assumptions in developing our operations is we're
- assuming that we could have a repeat of any sequence that
- 6 we've seen, historically. So, when you do your model runs
- 7 and that sort of thing with this, that sequence dictates
- 8 where your reservoir has to be.
- 9 MR. KENNEDY: Okay. So, that's out of the data set for the
- full 50 years, if you will, they're the three worst years?
- 11 MR. HENDERSON: Right.
- MR. KENNEDY: That's the worst period among the whole
- 13 50 year period?
- 14 MR. HENDERSON: Exactly.
- MR. KENNEDY: Okay. In response to an earlier question
- 16 from one of the counsels you had indicated that the
- capability, the generation capability of your plants, of your
- 18 hydraulic plants, is also impacted by new generation that
- 19 comes on stream?
- 20 MR. HENDERSON: That's right.
- MR. KENNEDY: And that as that new generation comes
- on stream that would allow you to take more from your
- reservoir than if the new generation wasn't on stream?
- MR. HENDERSON: That's right.
- MR. KENNEDY: Alright. And you're aware that Granite
- Canal is scheduled to come on stream in 2003?
- MR. HENDERSON: Yes.
- 28 MR. KENNEDY: And I understand that the average
- capability of Granite Canal is 224 gigawatt hours?
- 30 MR. HENDERSON: Yes.
- 31 MR. KENNEDY: Okay. So, can I ask you whether your
- minimum to be used for 2002 was adjusted to take into
- account that by 2003 you have this new generation coming
- on stream?
- 35 MR. HENDERSON: Yes, it was.
- MR. KENNEDY: So this minimum bar that we see there
- now, that would be a different minimum bar for 2002?
- 38 MR. HENDERSON: Yes.
- MR. KENNEDY: And it would be lower, or in this case it
- would be higher but your reservoir would be lower?
- 41 MR. HENDERSON: I would expect so. Some of it will also
- depend on what we see as load coming on, the additional
- load growth coming on after Granite Canal is built, and that load, on top of what generation we have, that will all come
- into play to help determine these levels. So, it's ... you

- 46 know, what I said in ... if your load was staying the same,
- 47 certainly, as you add more generation you could run it
- 48 lower, but if your load is also growing you may not come
- 49 down as much.
- MR. KENNEDY: Okay. But, the introduction of Granite
- 51 Canal in 2003 will mitigate some of the risk that would have
- otherwise ... that Hydro would have otherwise experienced?
- 53 MR. HENDERSON: Yes.
- MR. KENNEDY: Okay. The other two things, or the other
- topic I wanted to talk about concerning hydrology was
- your use of conversion factors, and there were a number of
- different types of conversion factors and efficiency factors,
- so I just wanted to make sure I understood or differentiated between the two. And that's what I have is two different
- between the two. And that's what I have is two different ones. And one, as I understand it, is the actual conversion
- 61 factor for converting water to energy?
- 62 MR. HENDERSON: Yes.
- 63 MR. KENNEDY: And the other one is more of an efficiency
- 64 factor of converting barrels of oil or Number 6, in this case,
- 65 to energy?
- 66 MR. HENDERSON: Right. Well, they're both conversion
- 67 factors. One is for oil to energy, the other is water to
- 68 energy.
- 69 MR. KENNEDY: And they're both efficiency factors, in a
- 70 way?
- 71 MR. HENDERSON: And they're both efficiency factors, in
- 72 a wav.
- 73 MR. KENNEDY: Okay. Just a curiosity, in one of the
- tables Cat Arm has a conversion factor, an efficiency factor
- of close to .9, whereas Bay d'Espoir is .46 or something?
- 76 MR. HENDERSON: Right.
- 77 MR. KENNEDY: Is there a reason why Cat Arm is so much
- 78 more efficient than any of your other hydraulic generation?
- MR. HENDERSON: The conversion factor is a lot higher
- 80 because Cat Arm has a much higher head, so it takes less
- 81 water to produce a kilowatt hour of electricity than Bay
- 82 d'Espoir.
- MR. KENNEDY: Okay.
- 84 MR. HENDERSON: It's a head difference.
- 85 MR. KENNEDY: I wonder if we can just turn to **NP-51**? So
- 86 I just wanted to be clear that in the case of the conversion
- 87 factor or efficiency factor for the Holyrood thermal
- 88 generating station that the period that you're using for
- 89 2002, the calculation and the efficiency factor for 2002 is
- 90 based on the efficiency factors for 1996 through to the year
- 91 2000, is that correct?

- MR. HENDERSON: That's right. 1
- MR. KENNEDY: Okay. So that's the five-year period, and 2
- during that period it fluctuated anywhere from 577 to 629? 3
- MR. HENDERSON: Right. 4
- MR. KENNEDY: Okay. And one of the counsels already 5
- brought you through a series of questions concerning the 6
- fact that a change, small percentage change in the 7
- conversion factor for the thermal generation at Holyrood, 8
- will have an impact on the RSP and the net income?
- MR. HENDERSON: Yes. 10
- MR. KENNEDY: Okay. And so I just want to make sure I 11
- 12 understand that correctly, because this brings us back to
- the differences between the split in hydraulic and thermal 13
- verses the effects of the conversion factor on thermal. And 14
- as I understand it, your testimony was that, well, if Hydro 15
- is low in its estimate of how much ... or let me put it the 16
- other way, because it'll be easier to work. If Hydro 17
- overestimated the amount of hydraulic generation that it 18
- was going to produce in a particular year so that, in turn, it 19
- had to rely more on thermal than was anticipated. 20
- MR. HENDERSON: Okay. 21
- MR. KENNEDY: Okay? 22
- MR. HENDERSON: Yes. 23
- 24 MR. KENNEDY: Did I have ...
- MR. HENDERSON: You may have had it backwards. 25
- MR. KENNEDY: I may have had it backwards. 26
- MR. HENDERSON: You may have had it backwards. But 27
- let's assume that the thermal generation is higher than we 28
- would have anticipated. 29
- MR. KENNEDY: That in that case, all else being the same, 30
- the additional cost, if you will, because of the fact the 31
- thermal has a higher marginal cost, will be picked up by the 32
- 33
- 34 MR. HENDERSON: That's right.
- MR. KENNEDY: Okay. And that the ratepayers will end 35
- up paying for that, anyways, as the RSP gets collected 36
- back year over year? 37
- MR. HENDERSON: Yes. 38
- MR. KENNEDY: Okay. Now, will you agree with me 39
- though that that's not quite what the RSP was designed to 40
- do, was it? 41
- MR. HENDERSON: The RSP was designed to take into 42
- account those hydraulic fluctuations. Because our 43
- hydraulic production can vary considerably. I'll say plus or 44
- minus 800 gigawatt hours around the average. So those 45

- large swings in hydro production would have large swings
- in the Holyrood fuel requirements and have, you know,
- great variance in the cost of production on the system.
- MR. KENNEDY: Okay.
- MR. HENDERSON: So the RSP was meant to carry those
- MR. KENNEDY: Can we just turn to NP-45? If we could
- go to the next sheet and starting at 96, and again, one of
- the counsels brought you through this, but I think they
- may have been looking at different numbers. I wanted to 55
- look at the actual production for thermal generation for the
- period `96 through the year 2000.
- MR. HENDERSON: Okay.
- MR. KENNEDY: And I believe we may have this on 59
- another chart, as well, which I'm going to flip to, but I just
- wanted to make sure that I got it off of this chart first. And
- starting from '96 the actuals in gigawatt hours were 1406,
- then 1530, then 1262, then 919 and then the year 2000, 968?
- MR. HENDERSON: Right.
- MR. KENNEDY: Okay. And then in the year 2002 you 65
- were forecasting thermal generation of 2162?
- MR. HENDERSON: Right. 67
- MR. KENNEDY: Okay. And I don't know if this is an over
- simplistic way of dealing with it, but when I took an
- average of the thermal generation for that five-year period
- it worked out to 1217 gigawatt hours.
- MR. HENDERSON: Okay.
- MR. KENNEDY: So, your thermal generation in 2002 is
- forecasted to be 78 percent higher than the average for that
- five-year period from `96 to 2000?
- MR. HENDERSON: I would accept that, yes.
- MR. KENNEDY: Okay. I wonder if we could just go to NP-77
- 259? Okay. This, too, is a chart that we have already
- referred to, Mr. Henderson, and this is the month to month 79
- breakdown for the year 2000. And what I did was I attempted to try to find some correlation between your net
- efficiency calculation and then the month, either by net
- production or by fuel consumption. And I don't know if
- you've ever done that, but I can tell you you get just a
- shotgun graph. So there doesn't seem to be any direct
- relationship, or even indirect relationship or inverse
- relationship or any relationship whatsoever between net
- efficiency and fuel consumption and net efficiency and net
- production. And so, what I'm going to ask you is, what
- does net efficiency depend upon?
  - (2:15)

- MR. HENDERSON: It depends upon the level of output of 1
- the generating units and the condition of the generating 2
- units. If you're operating the generating units at low 3
- 4 outputs for extended periods of time then you get fouling
- inside the units where you're not getting real good 5
- combustion and that sort of thing, so you can get ... lose 6
- efficiency because of that. When you're operating at low 7
- loads the units just do not operate as efficiently. So the 8
- 9 higher the load you get on the unit the more efficient it will
- be. So the conversion factor will be higher in months 10
- where you've been able to sustain operation at a high 11 output on the units that are operating. And you can't tie it
- 12 directly to the net production because in one month that
- 13 production may have come from three units or may have
- 14 come from one. If it came from one you may have gotten a
- 15
- better conversion factor than if it came from three. 16
- MR. KENNEDY: Okay. So, is that demand component 17
- supposed to be actual energy production that effects how 18
- 19 many of the units are running at a particular time?
- MR. HENDERSON: The demand on the system has a major 20
- impact on the number of units running. For instance, 21
- during the wintertime, from December through to mid 22
- March, we have to have three units on because the demand 23
- is high during that time. And then, as you move through 24
- the year you start having fewer units on. So there is that. 25
- But there is also the aspect of the water levels. If you see 26
- the water levels approaching or going below that minimum 27
- then you may, even though your demand is not real high in 28
- that month, you may put on three units, anyway, to get 29
- more production out. 30
- MR. KENNEDY: Okay. So, given that the projected or 31
- forecasted amount of generation from your thermal source, 32
- principally Holyrood or entirely Holyrood, for 2002 is 33
- forecast at 78 percent above the five-year average for that 34
- period that you're using, is it fair to suggest that that's 35 likely to ... there's likely to be an impact on the efficiency 36
- rating of the Holyrood station by virtue of that fact? 37
- 38 MR. HENDERSON: If you do turn out to be running
- exactly as the forecast says then your efficiency would be 39
- higher. But what we're doing with the conversion factor 40
- that we're projecting is we're trying to set out a conversion 41
- factor that would apply under average conditions, which 42
- 43 means that you've got wet years and dry years, a mixture.
- So, the conversion factor that we are putting forward is 44
- meant to take care of all those swings up and down to come 45
- up with a normalized conversion factor. 46
- MR. KENNEDY: Okay. But if your conversion factor is 47
- lower you have the forecasted conversion factor of 610? 48
- MR. HENDERSON: Yes. 49
- MR. KENNEDY: If that is lower than the actual conversion 50

- factor experienced in 2002?
- MR. HENDERSON: Yes.
- MR. KENNEDY: That ... and then all else being the same.
- That the amount of total energy produced from your
- thermal unit is as forecasted?
- MR. HENDERSON: Yes.
- MR. KENNEDY: The savings, if you will, by virtue of the
- fact that the units have operated at a higher rate of
- efficiency would only go to Hydro's account, would it not?
- MR. HENDERSON: The amount above would, in the same
- way as if it was the opposite, it would go against Hydro's
- 62 account.
- MR. KENNEDY: Sure.
- MR. HENDERSON: Right. So that's a reason for coming
- up with a good average numbers so that you can balance
- it out, those pluses and minuses.
- MR. KENNEDY: Okay. I'm wondering, I know you've used
- this average. I think it's been suggested to you by Mr.
- Hutchings on cross that well, they were the five wettest
- years on record, though. So, I'm wondering, have there
- been any adjustments made to take into account that the
- previous five years were a particularly wet period? 72
- MR. HENDERSON: All five years weren't the wettest on
- record. They were very wet years in that period. You may
- notice that in 1997, for instance, the Holyrood conversion 75
- factor was quite good that year because we are able to get 76
- better production in that year. So that was not a dry year, 77
- but it was a year in which we were able to keep the unit
- loads up at a higher level. And what ... I don't know how
- much different than 1997 would be if we had the production
- in the year, coming year would be, but again, having 1997 81
- in that average did help to bring it up, okay.
- MR. KENNEDY: Okay. But that didn't ... it didn't answer
- my question, but I think it was because you didn't think
- maybe the question was fair. And is it that you're taking 85
- issue with the fact that you don't need to ... you feel you don't need to make an adjustment for those five years?
- MR. HENDERSON: It's difficult to make an adjustment
- 89 without having the experience to know exactly how well
- you're going to do.
- MR. KENNEDY: Okay. And you don't feel like you need 91
- to make an adjustment by virtue of the fact that you're 92
- forecasting thermal production to be 78 percent higher than
- the average of that same period?
- MR. HENDERSON: No. And the reason being, is is that 95
- we're trying to use some kind of a normalized or average
- conversion factor for Holyrood, and that's why we chose

- 1 610. Now, like I said, the average for that period was
- 2 actually 611 and a bit, and it was just a judgment call on our
- 3 behalf of going to 610, rounding it to the nearest whole,
- 4 you know, ten or five.
- 5 MR. KENNEDY: Would Hydro have used an estimate of
- 6 its efficiency factor in the preceding years or is this the first
- time you're using it for the rate making purpose?
- 8 MR. HENDERSON: In the past we've used ... what I'm
- 9 aware of, anyway, is back, I think it was in 1989, we were
- using 600 and had been using 600 for quite a number of
- years. And in 1989 we were coming out of a period where
- we had done better than 600. And at that time there was
- some debate at the hearing and it was decided that we
- should look at the most recent years and change our
- conversion factor, and we did that and we ... the Board, at
- that time, decided that 605 was appropriate.
- 17 MR. KENNEDY: Okay.
- MR. HENDERSON: So this time around we thought we
- should look at the most recent years and do the same thing.
- 20 MR. KENNEDY: I wonder if we could just turn to Schedule
- 4.2, the **Grant Thornton 2001** report? So, Mr. Henderson,
- 22 the lines that I'm interested in right now are the amounts
- expended from 1997 through to 2001 for major overhauls of
- 24 the units at Holyrood. And, according to this Grant
- 25 Thornton schedule there was \$2.7 million spent in 1997 for
- a major overhaul of unit No. 1. There was \$3.3 million spent
- for a major overhaul of unit No. 2 in 1999, and there was a
- \$3.1 million expenditure for major overhauls of unit No. 3 in
- 29 2001. So there's been three major overhauls, one in each of
- the units at Holyrood for the period `97 to 2001?
- 31 MR. HENDERSON: Yes.
- 32 MR. KENNEDY: And is it fair to suggest that these major
- overhauls, in addition to just the ongoing maintenance, if
- it was maintained properly, should be expected to increase
- 35 the efficiencies of the generating units at Holyrood?
- MR. HENDERSON: What the major overhauls should do
- is at least maintain the efficiency. A lot of what's going on
- in the major overhauls is refurbishing work on the boiler
- and on the turbine to keep it at a state that, like, as close to
- new, I guess, as you can, given the age of this plant. So each overhaul does that. I would expect that each overhaul
- 'II 1 ' 1 1 4 4 ' 1 1 1 4 C 1
- will bring you back to the point you were right after the
- 43 previous overhaul.
- MR. KENNEDY: Fair enough. Yeah, so you wouldn't ...
- 45 you wouldn't gain efficiencies over and above what the
- unit may have been designed to produce in the first
- instance, but you'll come close to that again?
- 48 MR. HENDERSON: Yes.

- MR. KENNEDY: So that the efficiency of the unit No. 3
- after the overhaul in 2001 should be higher than it was in
- 51 2000?
- MR. HENDERSON: Now, that's assuming that there had
- 53 been deterioration, that that was corrected in 2000, that
- would be fair, yes.
- 55 MR. KENNEDY: Okay. Well, I'm presuming that you just
- don't do a major overhaul just for the heck of it, that you do
- 57 a major overhaul because it's sensible to do it and required
- to be done?
- MR. HENDERSON: Yes, absolutely.
- 60 MR. KENNEDY: Okay. And so, similarly, the major
- overhaul on unit No. 2 in 1999 that there should be
- 62 efficiency gains in that unit for the year 2000 over and
  - above what was experienced in 1998?
- 64 MR. HENDERSON: In a similar manner. You know, it
- 65 depends on what the deterioration had been in the units
- prior to, but you would expect that it would be better.
- 67 MR. KENNEDY: Okay. So, I guess, again, I'd ask you that
- in light of these major overhauls of the three units and that
- 69 particularly indicates of unit No. 3, which you won't
- actually experience fully until 2002, that would not those ...
- vould not that work also have an impact on the efficiency
- 72 of the Holyrood thermal station overall and likely to
- 73 generate an efficiency factor greater than the 610 that
- you're using?
- 75 MR. HENDERSON: Well, that 610 is a blend of all the
- various states since the last
- 77 overhaul. And every year you've got that combination of
- various degrees of loss of efficiency, if
- 79 you want to look at it that way, since the last overhaul. So
- 80 you're ... there's always a mixture. Like, in 2002 you'll have
- unit 3 that's in pretty good shape, but you've got unit 1
- 82 that's been a number of years since it had an overhaul, so,
- 83 it's working against you.
- 84 MR. KENNEDY: Okay.
- 85 MR. HENDERSON: So you've always got those things that
- are balancing you out.
- 87 MR. KENNEDY: So just the question, then, is how often
- 88 do you do a major overhaul of the units, then?
- 89 MR. HENDERSON: Once every six years.
- 90 MR. KENNEDY: Okay. So, once every six years. So we've
- 91 had ... you'll be scheduled to do unit No. 1 in 2003?
- 92 MR. HENDERSON: That's right.
- 93 MR. KENNEDY: Okay. Just keeping Exhibit 4.2 out for the
- moment, Mr. Henderson, I'd just like to go to the routine
- 95 maintenance line. And I understand that when you look at

- those numbers from 1997 through to the year 2002 on the 1
- routine maintenance on Schedule 4.2 that I can't just 2
- compare one number to the next, because there's been some 3
- 4 changes in codes of account and there's been some
- unusual, if you will, or one off expenditures in a particular 5
- year, and we'll come to that, that make it difficult to do that? 6
- MR. HENDERSON: That's right. The other thing in 7
- reviewing this schedule, to name it routine maintenance is 8
- probably incorrect. It's more like balance of plant 9
- maintenance. It's the maintenance that's not part of the 10
- major and minor overhauls and so on. 11
- MR. KENNEDY: So if it's not major or minor overhauls or 12
- if it's not minor or minor with valves or major what ... 13
- MR. HENDERSON: There's the common plant equipment 14
- that isn't specific to a unit. Like, the tank farm, the building, 15
- there's various auxiliaries that are at the plant that aren't 16
- specific to a unit. And so what's shown here is the 17
- maintenance that was specific to the unit while the rest is 18
- maintenance that isn't specific to a unit. 19
- MR. KENNEDY: Okay. Could we just turn to RH-3? Okay. 20
- In RH-3, Mr. Henderson, in the Holyrood for 2000 actuals 21
- the total is \$6,519,752 and then there's a footnote 1, routine 22
- and breakdown maintenance of \$4,043,000, plus non-23
- routine project requirements of \$2,477,000? 24
- MR. HENDERSON: That's right. 25
- MR. KENNEDY: Okay. Now, footnote No. 2 relates to 2001 26
- and footnote No. 3 relates to 2002 as filed, and I just 27
- wanted to look at the routine and breakdown maintenance 28
- figures first. It's \$4,043,000 for 2000, \$4,400,000 for 2001 and 29
- \$4,550,000 for 2002. So there's been a slightly more than 30
- \$500,000 increase for the period 2000 to 2002, or a 12 and a 31 half percent increase in your routine and breakdown 32
- maintenance cost for that period. And I'd suggest to you 33
- that that's fairly high. And I'm wondering if you could 34
- explain why the increase and what you're doing to control 35
- those costs? 36
- MR. HENDERSON: I guess there's a number of factors that 37
- are going to work here. But first of all, in 2000, that was the 38 year that the account change was made, so there's a bit of
- 39 that going on between 2000 and 2001. The change was
- 40 actually made part way through 2000. 1999 was a full year 41
- in the old way and 2000 was not a complete year, from my 42
- understanding, in the new way, which 2001 and 2002 would 43
- be full in the new coding. So there was a little bit of mixed 44 bag there in that. And then there is also the problem we 45
- have with an aging plant which is causing to, over time, 46
- incur additional maintenance, and then there's also 47
- inflationary factors that are bringing those up? 48
- MR. KENNEDY: So, inflationary factors, old plant? 49

- MR. HENDERSON: Yeah, aging plant. The Holyrood plant
- went in service in the early `70s, it's 30 years old. It is quite
- old for a thermal plant. It does require quite a bit of
- 53 maintenance.
- MR. KENNEDY: Okay. I thought that your RCM initiative
- was an attempt to prioritize what maintenance needed to be
- done, focusing on the critical maintenance, the 56
- maintenance that was required to maintain your system? 57
- MR. HENDERSON: For maintaining reliable service, yes.
- MR. KENNEDY: Okay. And that there were expected cost
- savings going to be derived from the introduction of the 60
- RCM system?
- MR. HENDERSON: What you're talking about, I think, is
- the RCM system that's being used in TRO?
- MR. KENNEDY: Yeah.
- MR. HENDERSON: In transmission and rural operations.
- MR. KENNEDY: Oh, okay. So not in generation?
- (2:30)
- MR. HENDERSON: In generation we have been applying
- RCM at Holyrood, but we have not been doing it to the
- 70 degree that it's being done in TRO. And we have done
- some systems with using RCM practices. The bulk of them 71
- are still being done in the old, the previous method, like a
- PM doing it at a timely, you know, on a time based system
- where you ... based on the manufacturer recommending 74
- every so many hours of operation or every ... over a certain 75
- period of time you should do your maintenance. We're
- following that practice, plus, what we've learned over the
- years in maintaining and operating this plant. The RCM
- aspect of it for Holyrood, we have not implemented or
- haven't moved to the degree that has been done in the
- transmission and rural operations.
- MR. KENNEDY: So, is it the case that we can expect those
- routine and maintenance costs to continue to increase
- beyond 2002, then?
- MR. HENDERSON: Because of the age of the plant there
- is going to be a lot of pressure to continue to do a lot of ...
- a high level of maintenance at the plant. But we will be, and 87
- we have been watching those costs to see what we can do 88
- to keep them down, but it's a challenge in a plant that's of
- the age of Holyrood to maintain the reliability. This plant 90
- is now being used more than it has been called upon to do 91
  - in the past, and because of that, it also requires additional
- maintenance. If we end up with a more normal hydraulic
- year we're going to have a lot of production out of 94
- Holyrood verses what we've had in recent years, and that, 95 in itself, will bring about more maintenance. You've got a
- lot of rotating equipment. The more it's in use the more

- maintenance it requires. 1
- MR. KENNEDY: And so, did I gather you correctly, 2
- though, that you don't use RCM at Holyrood or you do use 3
- RCM at Holyrood? 4
- MR. HENDERSON: What you've said is right in that we are 5
- using RCM in some systems. What we've done is done the 6
- RCM analysis, which is looking at particular systems and 7
- identifying the maintenance practices for those systems 8
- and are following practices that will, you know, give us the 9
- best reliability for the maintenance dollar. The other 10
- systems, we've done some analysis but we haven't put the 11
- maintenance practices in place. And we're basically going 12
- at it slowly. We've done some analysis but we haven't put 13
- it all into place. And ... 14
- MR. KENNEDY: So I guess the concern is that while, you 15
- know, clearly maintenance is something that you have to 16
- do, it's more of an issue of timing, then, about when the 17
- maintenance is done and whether, in this case, it needs to 18
- be expended in the test year, for instance, or can it be 19
- postponed for a year until 2003. So how do we know that 20
- maintenance being done in a given year really has to be 21
- done in that year? 22
- MR. HENDERSON: We do a very extensive budgeting 23
- process. The people in the plant, the engineers in the plant 24
- review all the systems and identify the maintenance 25
- requirements in consultation with the people who do the 26 maintenance on the plant, and they identify the areas where 27
- it's critical. That goes through, and I think Mr. Reeves 28
- went through the process, levels of review that we go 29
- through, and certain things do get cut out of that and get 30
- postponed to future years. And we try to just have what 31
- we require ... 32
- MR. KENNEDY: On what basis ... 33
- MR. HENDERSON: ... to be done be done in any given 34
- year. If it can be delayed, we will. Now, there is ... you 35
- can't push everything off into the future or you're going to 36
- end up with one year with either a lot of breakdowns or 37
- you're going to have an extremely high maintenance bill 38
- and you just won't be able to do it. So, there has to be a
- 39 balance. And there has been an attempt to levelize these 40
- costs so that you try to keep them fairly constant over a 41
- period of time. And that is with our 2001 and 2002 we are 42
- trying to balance them out, and looking out, again, to 2003 43
- and what projects that we have to do, we try to keep that as 44
- level as possible. 45

- MR. KENNEDY: I wonder if we could turn to the Grant 46
- Thornton report again, only this ... at the 2001 report. Only 47
- I'd just like to look at professional fees, page 33. I'm not 48
- sure what significance the yellow has, but ... 49
  - MR. HENDERSON: Okay.

- MR. KENNEDY: Now, this is, Mr. Henderson, a list of the
- professional fees for Hydro overall, as I understand it?
- MR. HENDERSON: Yes.
- MR. KENNEDY: And it shows those professional fees, or
- professional services. And then it's all labelled
- professional services and then one of the lines is broken
- out and called professional service, so there's actually two
- professional services. It's a bit confusing when you start
- talking about it, for that reason, but if you can follow me ...
- but the first line is the one I'm interested in, which is the 60
- professional services.
- MR. HENDERSON: Yes.
- MR. KENNEDY: Of the professional services table. And 63
- we go from 1.5 million in `97, 2 million in `98, 2.3 in `99, 1.9
- in 2000, 2.3 in 2001 and then it's a filed amount of 2.6 million
- for 2002. And the total professional fees are climbing from
- 2.6 million in `97 to 4.3 million in 2002, which is a 65 percent 67
- increase in total professional fees for that period. And the
- professional services works out to the same, the 1.5 million
- to the 2.6 million is a 65 percent increase, so it goes lock 70
- step with the total. Now, RH-1, RH-1 indicates that in the
- 2001 budget it was \$2,623,000 for professional services, and
- in 2002 it's booked for \$2,657,000, and of those totals, of the 73
- total professional fees ... 74
- MR. HENDERSON: Uh hum.
- MR. KENNEDY: ... it works out to your, the production
- division amounts to 58 percent of the total professional
- fees in 2001 and 61 percent of the total professional fees for
- 79 2002?
- MR. HENDERSON: Right.
- MR. KENNEDY: So, I guess what we have is a clear trend
- of professional fees increasing for the period `97 to 2002 of
- 65 percent and your division is responsible for 61 percent
- of the total professional fees?
- MR. HENDERSON: Right.
- 86 MR. KENNEDY: So I guess the first question is, why is it
- increasing?
- MR. HENDERSON: It's increasing because we are making
- more use of professional services. In particular, there is a 89
- requirement for more professional services with respect to
- our IS, our information systems department. I think it may 91
- be part of the footnote there that we're using a new security 92
- 93
- MR. KENNEDY: Wait now. Footnote?
- MR. HENDERSON: ... program.
- MR. KENNEDY: Footnote where?

- 1 MR. HENDERSON: I'm sorry. On **RH No. 1**.
- 2 MR. KENNEDY: Yeah.
- 3 MR. HENDERSON: The footnote No. 7 indicates that the
- 4 increase there is due to the new security program being
- 5 implemented in the IS department. There is other ...
- 6 MR. KENNEDY: Okay. Just while we're on that, page 33 of
- 7 the **Grant Thornton report**, the second paragraph
- 8 underneath the table says, "Professional fees for 2002
- 9 continue to increase over 2001 forecast levels by \$284,000
- or 12 percent. These additional costs relate to an equal
- billing and other pay method study in the finance division
- for \$250,000 and the installation of a True Secure IP security
- program in the production division for \$115,000."
- 14 MR. HENDERSON: That's right.
- MR. KENNEDY: So, can you just explain what this True
- 16 Secure IP security program does?
- MR. HENDERSON: I can. It's basically a system for our IS
- people to follow to ensure the integrity of our information
- infrastructure, our lands and our PCs and our ... all the
- 20 computers and software that we use to ensure that they are
- secure for various types of, I guess, security violations.
- 22 And the True Secure system is a structured system for
- evaluating your IT infrastructure and giving you a means
- of, I'll say policing the use of your IT infrastructure to make
- sure that there are no risk of loss of your security of that,
- you know, very valuable information. As you know, these
- 27 days businesses depend a lot more on IT or information
- technologies, and therefore, this is a critical area for Hydro
- to ensure that we do have a secure system.
- 30 MR. KENNEDY: It's a couple of questions arising from
- that. But, as I understand it, the total professional fees that
- we see in that table actually are professional services
- rendered by Hydro's own employees, is that right, or is it
- third party contractors?
- 35 MR. HENDERSON: This would be outside.
- MR. KENNEDY: So these are all third party contractors?
- 37 MR. HENDERSON: Right. This would include the use of
- $\,$  professional engineers, professional IT people and so on.
- 39 MR. KENNEDY: Okay. And so, that's a particular
- expenditure for \$115,000. But will you agree with me that
- 41 there's been a significant increase in the total professional
- fees on a percentage basis over this period of time?
- 43 MR. HENDERSON: Yes.
- 44 MR. KENNEDY: And that 2002 is projected to be just
- slightly below 2001 but a significant ... significantly higher
- than the preceding period?
- 47 MR. HENDERSON: Yes.

- 48 MR. KENNEDY: And 2002 is the forecast year?
- 49 MR. HENDERSON: Yes.
- MR. KENNEDY: And ... or test year, sorry. And as is
- indicated, all efforts are being made to try to lower the cost
- as much as possible in 2002 in order to try to minimize the
- 53 impact of any increase that does have to be passed on to
- customers in 2002?
- 55 MR. HENDERSON: Lower than to the level that we require
- 56 in order to operate efficiently. You can't lower ... you could,
- like we talked about, say do no maintenance in 2002 ...
- 58 MR. KENNEDY: Oh, absolutely. And I won't argue with
- you on that, whatsoever. You could save a lot of money
- 60 by indiscriminately just chopping costs out of your system,
- but that might be a very costly thing to do?
- 62 MR. HENDERSON: Exactly.
- 63 MR. KENNEDY: But, I guess, in relation to the
- professional fees, that's third party contractors that Hydro
- 65 is retaining?
- 66 MR. HENDERSON: Yeah. These are like professional
- services that we would use, like consultants that we would
- 68 refer to for special purposes that we wouldn't maintain that
- 69 type of expertise in-house.
- 70 MR. KENNEDY: And so, what ... given that this is
- 71 increased 65 percent in a five-year period, what can you tell
- 72 the panel about how that's rationalized and what efforts are
- made in order to be able to contain that cost?
- 74 MR. HENDERSON: Well, some of these cost increases are
- 75 due to what we were doing at Holyrood with our partnering
- 76 agreements in order to get that plant more reliable and get
- $^{77}$  through our maintenance in a timely fashion. That is a fair
- 78 part of our professional services budget. Also, another
- 79 large part of our professional services budget is within the
- 80 IS and T department with the new ...
- 81 MR. KENNEDY: Okay. But we're just dealing with your
- 82 department and the fact that you make up 61 percent of the
- 83 total budget.
- 84 MR. HENDERSON: Right. The IS and T department is part
- of the production division.
- 86 MR. KENNEDY: Okay.
- 87 MR. HENDERSON: So the ... I've just jotted down some
- 88 notes here. But we have, at Holyrood, I'm seeing a good
- 89 part, \$320,000 is part of our additional expertise and support
- 90 for the partnering agreements, okay. So that's a large part
- of it. The other items that are in there that are significant is
- $\,$  our JD Edwards System that we now use for our corporate
- 93 finances, was a complete package of software that we're
- 94 using for all types of things, maintenance and financial

- 1 aspects of the Company. There's the support that we
- 2 require from JD Edwards in order to maintain that system
- and keep it current. The other items, there is an item there
- for this year which is an EMS study which we will be ...
- $\,\,$   $\,$   $\,$  we're looking at our EMS at the control centre and trying to
- 6 study it, determine how much longer we can keep it in
- operation and when we should be planning to replace it. It
- 8 was put in service in 1989, 1990. So that's computer
- 9 technology that is 10 years old and there's maybe 15 years
- expected life of that type of stuff. So there's these types of
- things that we're doing to ensure the continued reliability
- of the system.
- MR. KENNEDY: Okay. But, again, I guess I suppose you
- were present when I cross-examined Mr. Reeves on the
- relationship between spending money and improving the
- reliability of the electrical system?
- MR. HENDERSON: Uh hum, yes.
- MR. KENNEDY: And so, we could spend money endlessly
- to endlessly improve the reliability of the system. And that
- 20 makes as much sense as indiscriminately cutting costs in
- the system. You'd agree with me?
- 22 MR. HENDERSON: If you just ...
- MR. KENNEDY: It's as nonsensical either way?
- 24 MR. HENDERSON: Right.
- MR. KENNEDY: So, is there some cap on what the
- 26 professional service fees are going to be in a given year or
- is it just whatever list of projects that are come up with then
- get booked?
- 29 MR. HENDERSON: It's definitely capped. It's ...
- 30 MR. KENNEDY: And what's it capped at?
- 31 MR. HENDERSON: It's not capped at a fixed number, it's
- 32 capped at what we review and decide is necessary for the
- continued reliable operation of all of our business.
- 34 MR. KENNEDY: And, in making that determination is that
- a judgment made, a professional judgment made by
- yourself or is there some sort of cost/benefit measurement
- done to ... before you determine whether you go ahead and
- spend the money?
- MR. HENDERSON: The services are looked at on a one
- 40 case-by-case basis. The department or group within the
- 41 production division that has that responsibility had to
- 42 justify it to their supervisor and so on up the chain of
- command, if you like to ...
- 44 MR. KENNEDY: Okay. So in the case ...
- 45 MR. HENDERSON: So each project is looked at and
- assessed as to whether it is truly necessary, whether we are
- truly necessary to purchase that service.

- 48 MR. KENNEDY: Okay. So in the ...
- 49 MR. HENDERSON: And if it's not necessary it won't be
  - done.
- 51 MR. KENNEDY: Well, in the case of the EMS example that
- 52 you just gave us, you said it's a ten-year system, might
- play out to 15 years before you should really have to
- replace it, perhaps. So, is that not an example of one that
- could have easily been spent in 1999 or the year 2000 or
- 2001 just as well it was spent in 2002?
- 57 MR. HENDERSON: No. It's gotten to the point now, in
- order to, like, to build that kind of a project, it's a multi-year
- 59 project. You have to start now to do that assessment. I
- 60 don't remember the dates, but I would say it was probably
- close to five years from in the previous system from when
- $\,$  we first decided that we had to go with it to when it went in
- service. And so, these types of things we review very carefully and make sure that they are necessary before we
- of carefully and make sufe that they are necessary before w
- embark on them.
- MR. KENNEDY: That's, perhaps, a good time to break,
- 67 Chair.
- 68 MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
- 69 Kennedy, Mr. Henderson. We will reconvene at 3:15.
  - (break)
- 71 (3:15 p.m)

- 72 MR. NOSEWORTHY, CHAIRMAN: Ready to proceed, Mr.
- 73 Kennedy?
- 74 MR. KENNEDY: I'm finished my questions, thanks, Mr.
- 75 Chair.
- 76 MR. NOSEWORTHY, CHAIRMAN: Totally.
- 77 MR. KENNEDY: Totally.
- 78 MR. NOSEWORTHY, CHAIRMAN: Thank you very much,
- 79 thank you Mr. Henderson. We'll begin redirect now, Ms.
- 80 Greene.
- 81 MS. GREENE, Q.C.: Thank you Mr. Chair. The first thing
- 82 I'd like to do is to distribute the list of undertakings from
- 83 yesterday. I have copies to distribute, and I will refer to
- these undertakings as I go through redirect as our intent is
- 85 to respond to all undertakings that were given yesterday at
- 86 this time.
- Mr. Henderson, the first question I have for you relates to the information on a survey that was provided in
- relates to the information on a survey that was provided in response to **NP-304**. Yesterday we were talking about the
- 90 member organizations in the CEA Hydraulic Integrated
- 91 Resource Management Group. Could you please advise
- 92 the Board who are the members of that group.
- MR. HENDERSON: The members of the group are those

- that were surveyed in the listing that's there in **NP-304**, I
- 2 believe it is.
- 3 MS. GREENE, Q.C.: And I wonder if that could be brought
- 4 up please. So could you please ...
- 5 MR. HENDERSON: So those people, those companies
- 6 have representation ... Alcan Primary Metals, B.C. Hydro,
- 7 Sask Power, Manitoba Hydro, Ontario Power Generation,
- 8 MS. GREENE, Q.C.: Excuse me, could you go to the next
- 9 page, Mr. O'Rielly.
- 10 MR. HENDERSON: Hydro Quebec, which has two
- representatives, or actually I'm not sure that Roger Lambert
- (phonetic) is a member, but he was contacted, but Hydro
- 13 Quebec is represented, and Alcan Smelters and Chemicals
- which is the eastern operation of Alcan, and there is one
- other party that we did not, weren't able to get hold of, and
- that was Great Lakes Power.
- MS. GREENE, Q.C.: And what is the purpose of this
- 18 Canadian Electricity Association interest group?
- MR. HENDERSON: They have a variety of interests with
- 20 respect to the management of hydraulic resources, and
- 21 they, they have a variety of interests from, I know that
- 22 there's environmental issues that relate to hydro plants,
- there's the operation, they all have in common very large
- 24 hydroelectric facilities with large reservoirs, and so on, so
- 25 they have common interests and all the various things
- related to the operation of those reservoir systems. They
- get together and they try to come up with some common
- research topics and things like that to develop.
- 29 MS. GREENE, Q.C.: So their common interest is the fact
- 30 that they have a significant proportion of hydro
- production, is that correct?
- 32 MR. HENDERSON: They have a large amount of
- 33 hydroelectric generation in their systems.
- MS. GREENE, Q.C.: Is Nova Scotia Power a member of this
- 35 group?
- 36 MR. HENDERSON: No, Nova Scotia Power and New
- 37 Brunswick Power are not.
- 38 MS. GREENE, Q.C.: What about Alberta Power?
- 39 MR. HENDERSON: Or Trans Alta.
- 40 MS. GREENE, Q.C.: Trans Alta, sorry.
- 41 MR. HENDERSON: No, Trans Alta are not.
- 42 MS. GREENE, Q.C.: In doing the survey, why did you
- 43 contact Alcan?
- 44 MR. HENDERSON: Because they're a member of the
- 45 group and also they have a very large hydroelectric
- 46 generating facility. Actually, I think they be larger than

- 47 Hydro, Newfoundland Hydro.
- 48 MS. GREENE, Q.C.: The next question I have relates to an
- undertaking that is shown on the list of undertakings that
- was just distributed. If you refer to yesterday's transcript
- at page 10, Ms. Butler asks if we's provide a breakdown of
- 52 hydro thermal generation of all the various utilities in
- Canada and I have a copy of that schedule to distribute at
- this time. I believe the schedule would need to be marked
- as an exhibit.
- 56 MR. KENNEDY: I believe it's NP-6.
- 57 MS. GREENE, Q.C.: RH?
- 58 MR. KENNEDY: This is going to be put in through the
- 59 witness?
- 60 MS. GREENE, Q.C.: Yes.
- 61 MR. KENNEDY: Sorry RH-5, I think it is. Yes, RH-5.

## **EXHIBIT RH-5 ENTERED**

- 63 MS. GREENE, Q.C.: Now that everybody has a copy, I'd
- 64 like to review this with Mr. Henderson. The first sheet, first
- 65 could you explain what the first sheet is? What the
- 66 heading is and what is set out on the page?
- 67 MR. HENDERSON: Yes, the first sheet that I have is
- 68 Canadian Utility Energy Production 2000, and what it
- shows is the 2000 energy produced by these various
- 70 utilities in Canada and it's broken down into hydro, thermal
- 71 and nuclear.
- 72 MS. GREENE, Q.C.: And what is the source of the
- 73 information used which produced this schedule?
- 74 MR. HENDERSON: The sources, as note one indicates,
- 75 information sources 2000 annual report except as noted and
- the exceptions are for New Brunswick Power, it's dated for
- April 2000 to March 2001 and for Hydro Quebec, the source
- 78 is CEA member guide and also for B.C. Hydro it's dated for
- 79 the period April 2000 to March 2001. The same with
- 80 Manitoba Hydro and Winnipeg Hydro. Trans Alta thermal
- 81 includes other generation which I think is wind power in
- 82 their system and their, they do not indicate in their annual
- 83 report whether the generation is for Trans Alta as Alberta
- 84 operation alone, or for all of its subsidiaries and Trans Alta
- 85 does own generating plants outside of Alberta.
- 86 MS. GREENE, Q.C.: Okay, so if we could review those now,
- one by the ... Newfoundland Hydro. Could you please go
- 88 through each utility and indicate what the schedule shows
- 89 for the split between hydro, thermal and nuclear for each
- 90 utility.
- 91 MR. HENDERSON: For Newfoundland and Labrador
- 92 Hydro we have 5,016 gigawatt hours, or 84% of the total is
- hydroelectric. 966 gigawatt hours or 16% is thermal.

- 1 MS. GREENE, Q.C.: Perhaps you can just read the
- 2 percentages opposed to the gigawatt hours, moving next
- 3 to Nova Scotia Power.
- 4 MR. HENDERSON: Nova Scotia Power, their hydro is 8%
- 5 versus their thermal which is 92%. New Brunswick Power
- 6 is 16% hydro, 60% thermal, and 24% nuclear. Hydro
- 7 Quebec is 97% hydro and we were unable to determine the
- 8 split to nuclear, but I would expect that the bulk of that
- 9 remainder is nuclear. The Ontario Power Generation, 25%
- is hydro, 31% thermal, and 44% nuclear. Manitoba Hydro
- and Winnipeg Hydro, they operate their systems together
- with 97% hydro, and 3% thermal. Sask Power is 20% hydro
- and 80% thermal. Trans Alta is 4% hydro and 96% thermal,
- and B.C. Hydro is 91% hydro and 9% thermal. The other
- thing I would notice the percentages are one thing, but the
- other thing is the energy numbers and you can see that for
- 17 Nova Scotia Power their energy production is low
- compared, relative to ours, so is New Brunswick Power and
- 19 Trans Alta. The others are either substantially greater than
- ours or similar to ours in terms of magnitude of the hydro
- 21 generation.
- 22 MS. GREENE, Q.C.: Turning to the next page, the first page
- addressed energy produced in the year 2000 by these
- utilities, could you please tell us what the second page is?
- 25 MR. HENDERSON: The second page provides the same
- utilities, but now under the name plate rating, or their capability or megawatt capability or capacity. Those terms
- 27 capability of niegawait capability of capacity. Those terms are used interchangeably. So as the name plate rating
- generating capacity is Canadian utilities in 1999 and the
- 30 source for this is Statistics Canada, Electric Power
- 31 Generating Stations 1999.
- 32 MS. GREENE, Q.C.: And is that the last year that that
- Federal document has been published?
- MR. HENDERSON: Yes, to our knowledge.
- MS. GREENE, Q.C.: Could you please, again, review each
- of the utilities by their capability and indicate the split
- between hydro, thermal and nuclear for each of these
- 38 utilities.
- 39 MR. HENDERSON: Starting again with Newfoundland and
- Labrador Hydro, 59% hydro, 41% thermal. Nova Scotia
- Power, 18% hydro, 82% thermal. New Brunswick Power,
- 42 20% hydro, 64% thermal, and 16% nuclear. Hydro Quebec
- is 93% hydro; 5% thermal and 2% nuclear. Ontario Power
- Generation, 27% hydro, 38% thermal, and 35% nuclear.
- 45 Manitoba Hydro and Winnipeg Hydro, 96% hydro and 4%
- thermal. Sask Power is 28% hydro and 72% thermal. Trans
- Alta is 16% hydro and 84% thermal, and B.C. Hydro is 90% hydro and 10% thermal, and Trans Alta numbers include
- their thermal generation in Ontario, Saskatchewan and
- 50 Alberta.

- 51 MS. GREENE, Q.C.: Thank you, so that would be the
- 52 response to the first undertaking as listed from yesterday
- which is where Hydro was asked to provide that split and
- we have done it by energy produced as well, in the year
- 55 2000, as well as their capabilities. The next question.
- 56 MS. HENLEY ANDREWS: Excuse me Mr. Chairman, I
- 57 notice that there is no mention of the Yukon Energy or
- 58 Northwest Territories. I believe they are also Canadian
- 59 utility energy producers.
- 60 MR. HENDERSON: We didn't go ... this list is not meant to
- exhaustive, it's meant to cover the larger utilities. There are
- many utilities in Ontario as well that wouldn't be there on
- 63 that list.
- MS. GREENE, Q.C.: And Saint John Power, what the intent
- 65 was ...
- 66 MR. HENDERSON: Newfoundland Power is not on it.
- 67 There are, there would be a number of utilities. This wasn't
- 68 meant to be an exhaustive list, just a list of the larger ones.
- 69 MS. GREENE, Q.C.: And it was meant to indicate those
- 70 that have hydro generation and the percentage and we
- 71 included Nova Scotia, New Brunswick and Alberta Power
- 72 so that had been the intent, the implication of the questions
- 73 from Newfoundland Power.
- 74 MS. HENLEY ANDREWS: Mr. Henderson, do the utilities
- 75 in the Yukon and Northwest Territories have significant
- 76 hydro energy capability?
- 77 MR. HENDERSON: Not that I'm aware of.
- 78 MS. HENLEY ANDREWS: The Yukon does, I believe so.
- 79 MR. HENDERSON: I don't know how significant it is.
- 80 MR. NOSEWORTHY, CHAIRMAN: Additional
- 81 information.
- 82 MS. GREENE, Q.C.: I don't know where we are right now.
- 83 I'm in the middle of redirect.
- 84 MS. HENLEY ANDREWS: Yes, but you're asking about
- 85 undertakings and the undertaking was to provide the mix of
- 86 hydro and thermal generation among the utilities and that
- was the only reason I was asking the question. It wasn't to
- 88 interrupt your redirect.
- 89 MS. GREENE, Q.C.: I guess as we read the transcript it was
- 90 with respect to a specific utility that had been on the
- 91 survey as well as the others that were raised by
- 92 Newfoundland Power. If there's other information that is
- 93 being requested, I guess we could deal with that after.
- 94 MR. NOSEWORTHY, CHAIRMAN: Sure, that's fine.
- 95 MS. GREENE, Q.C.: The next question Mr. Henderson, I
- 96 believe, was raised in the cross examination of Mr.

- 1 Hutchings and the question was asked as to when the RSP
- 2 balance for September 30th of this year would be available
- and to do you know the answer to that question?
- 4 MR. HENDERSON: It will be available the week of October
- 5 22nd.
- 6 MS. GREENE, Q.C.: The next line of questions also relate
- 7 to questions asked by Mr. Hutchings and to assist in
- answering these questions we have prepared a schedule
- 9 that I'd like to distribute at this time. The first question that
- was put as an undertaking related to the inventory of No.
- 11 6 fuel at Holyrood as of May 31, 2000. What was that
- inventory, Mr. Henderson?
- 13 MR. HENDERSON: It's noted at the bottom of this
- schedule, the inventory was 626,627 barrels on May 31st.
- 15
- MS. GREENE, Q.C.: The next request was to provide the
- 17 Perra forecast of the price of NO. 6 fuel for the summer
- period, 2000, and could you please explain how that is
- shown on this schedule?
- 20 MR. HENDERSON: The Perra forecast is in US dollars per
- 21 barrel.
- MS. GREENE, Q.C.: And that's in the top half of the
- schedule, is it?
- MR. HENDERSON: And that's in the top half of the
- schedule, yes. The, and what we've provided is the
- forecast out to September for each of the months, May,
- June, July, August, so in the first column, this is the
- forecast that would have been issued in, at the end of May
- 29 2000 indicated a forecast of June prices of \$23.55 ... for July
- $2000,\,\$25.05;\,August,\,\$25.90;\,and\,September\,\$24.05,\,and$
- 31 then as you move across the table, I won't read all the
- numbers, but you can see for June 30 there is a new forecast which obviously didn't forecast June, but did
- forecast July, August, September. You can move on across
- 35 the table and get those forecasts for each of those months
- for the following months up to September 2000. Also on
- 37 the far hand, right hand side of that top part of the table is
- 38 the exchange rates. We did not have available to us a
- 39 forecast of exchange rates to provide at this time for those
- 40 periods. We didn't have a relevant, but we provide the
- 41 actual exchange rates.
- MS. GREENE, Q.C.: The bottom half then of the schedule
- could you please explain what that is?
- 44 MR. HENDERSON: The bottom half is the same numbers
- 45 expressed in Canadian dollars at the price that
- Newfoundland and Labrador Hydro would be purchasing.
- 47 MS. GREENE, Q.C.: So just taking the actual exchange rate
- and applying it to the Perra forecast price that was in
- 49 American dollars.

- 50 MR. HENDERSON: Yes.
- 51 MS. GREENE, Q.C.: We believe, or submit this response to
- 52 the undertaking that is shown as the third undertaking,
- 53 actually the second and third undertaking on the list of
- 54 undertakings for October 10, as requested by Counsel for
- the Industrial Customers and actually the last three, the last
- three undertakings were all shown on this schedule.
- 57 MR. NOSEWORTHY, CHAIRMAN: You should mark this
- ss schedule.

9 MR. KENNEDY: That's RH No. 6, Chair.

## **EXHIBIT RH-6 ENTERED**

- MR. HUTCHINGS: Mr. Chair, just to let you know there'll
- 62 be a few questions arising out of that undertaking,
- whenever it is convenient I'll put to the witness.
- 64 MR. NOSEWORTHY, CHAIRMAN: Sure, that's fine.
- MS. GREENE, Q.C.: The last question that I have also
- 66 relates to Bunker C and arises from the cross examination of
- 67 Mr. Fitzgerald. You were asked questions with respect to
- the cost of Bunker C fuel in the fall of 1999. Do you have
- 69 that information available now Mr. Henderson?
- 70 MR. HENDERSON: I do. Another point I'll mention while
- 71 we're at this is that the contract that we're now using came
- 72 into effect on February 11, 1998, was the first shipment
- 73 under the new contract, although the contract was actually
- 74 signed in the fall of '97. We did purchase fuel in the fall of
- 74 signed in the fair of 97. We did purchase fuel in the fair of
- 75 1999 and I've got those purchase prices. On September 21,
- we purchased fuel at \$28.23 a barrel. This is Canadian dollars. In November, on November 3, we purchased at
- 77 dollars. In November, on November 3, we purchased at 827.14; December 2, we purchased at \$28.37; December 21,
- 578 \$27.14; December 2, we purchased at \$28.37; December 21, we purchased at \$27.53; and as a matter of interest, I guess,
- to parenased at \$27.55, and as a matter of interest, I guest
- 80 is that on January 31, 2000, we purchased and the price at
- 81 that time was \$33.16.
- 82 MS. GREENE, Q.C.: That concludes the questions I have
- 83 for Mr. Henderson at this time, although I gather if there's
- 84 going to be cross examination on this evidence, I would
- 85 then have a right of redirect arising from that cross.
- 86 MR. NOSEWORTHY, CHAIRMAN: Can we deal with the
- 87 questions on matters arising. Would that be okay?
- 88 MR. HUTCHINGS: I have no problem with that.
- 89 MS. BUTLER, Q.C.: I'm just debating with my learned
- 90 friend, Mr. Chairman, whether in fact I have a question on
- 91 the RH-5 which is in response to an undertaking that was
- given to me. Can you just bear with me one moment?
- 93 That's fine, Mr. Chairman, we're satisfied with the document
- 94 that was supplied in response to the undertaking. Thank
- MR. NOSEWORTHY, CHAIRMAN: So we could entertain

- matters or questions on these matters arising, is that 1
- satisfactory? 2
- MR. HUTCHINGS: That's fine with me, Mr. Chair. 3
- MR. NOSEWORTHY, CHAIRMAN: Thank you. It's now 4
- twenty to. I understand that my colleagues will likely be an 5
- hour or actually probably more than an hour, it might be an 6
- hour and a half to two hours in the morning so I think what 7
- 8 we'll do, rather than begin Board questions this afternoon,
- we'll break and we'll reconvene in the morning at 9:30. Just 9
- on the point Ms. Greene, do you have any motion or idea 10
- at this point in time in respect of your next witness. 11
- MS. GREENE, Q.C.: I know who it will be, Mr. Budgell. 12
- 13 (laughter)
- MR. NOSEWORTHY, CHAIRMAN: No, I guess, I'm 14
- wanting to try and you could probably think about it if you 15
- don't have any response. I mean clearly there's a few 16
- options here we could, we could finish with Mr. Henderson 17
- and not begin. We have a two week hiatus here over the 18
- next, beginning on Monday, I guess. We can deal with the 19
- direct testimony and defer the cross, we can do that 20 tomorrow, or again that may not be appropriate given the 21
- length of time in between or we could deal with the direct 22
- testimony and proceed to the extent possible with the 23
- cross. Again, I understand that's problematic. 24
- MS. GREENE, Q.C.: I have two suggestions. One is that if 25
- we have 20 minutes available now I think it would be 26
- appropriate for the Industrial Customers and the Consumer 27 Advocate if they wish to cross on the information that was 28
- provided in response to undertakings rather than leave it 29
- till tomorrow till after questions arising. 30
- MR. NOSEWORTHY, CHAIRMAN: Sure. 31
- MS. GREENE, Q.C.: The other is with respect to tomorrow, 32
- if we actually go till couple of hours till 11:30 or 12, I don't 33
- think it would be prudent to start with the witness. We 34
- have no additional information to file with Mr. Budgell as 35
- direct evidence. He would simply be adopting his pre-filed 36
- as well as his supplementary evidence and I think that 37
- probably we should ask the opinion of counsel for 38
- Newfoundland Power, but I don't know if counsel would 39 want to start a cross, knowing that they wouldn't be able to
- 40
- complete. So it might be more prudent to not start Mr. 41
- Budgell tomorrow for late in the morning or early in the 42
- afternoon before we'reready. 43

- MS. BUTLER, Q.C.: Mr. Chairman, to the extent that I can 44
- be of any assistance at all, my cross examination of Mr. 45
- Budgell would not be any less than it was of Mr. 46
- Henderson which was a full day, so even if I started at 47 11:00 in the morning tomorrow, I would not finish Mr.
- Budgell and I think the hiatus may turn into more like three 49
- weeks because isn't the first week when we return cost of 50

- capital witnesses?
- MR. NOSEWORTHY, CHAIRMAN: Yes, that's correct.
- MS. BUTLER, Q.C.: So in fact it would be almost a month
- before we see him.
- MR. NOSEWORTHY, CHAIRMAN: Yes you're right. My
- mistake. 56
- MS. BUTLER, Q.C.: Which would my make my cross 57
- examination quite difficult, I think, unless I only touched
- one area that was unrelated to everything else.
- MR. NOSEWORTHY, CHAIRMAN: Understood.
- MS. GREENE, Q.C.: And I agree with that, I think that it
- wouldn't be prudent to start tomorrow. The only point that
- I would want to make is, I have another faint hope, and that
- is that the public participation days that are scheduled for
- St. John's for Thursday and Friday, at this point in time we
- only have one member of the public who will present. I
- 67 would like to think that if we had most of Thursday
- available and Friday we might be able to start.
- MR. NOSEWORTHY, CHAIRMAN: I certainly have no
- objection to that. Can I now ask for the Industrial 70
- Customers comments on this issue.
- MR. HUTCHINGS: I would agree that it's probably not 72
- 73 appropriate to start Mr. Budgell tomorrow, unless Ms.
- Butler at least has time to finish her cross and the gap is
- just too long. We wouldn't have a problem with starting
- Mr. Budgell on the 25th, 26th, if the time is available for 76
- 77
- MR. NOSEWORTHY, CHAIRMAN: Okay. Thank you. 78
- MS. BUTLER, Q.C.: Mr. Chairman, however, if he does
- testify on 25th and 26th, he will be broken by the cost of
- capital witnesses.
- MR. NOSEWORTHY, CHAIRMAN: He will, yes, for a two 82
- week period, I think, actually is it.
- MS. BUTLER, Q.C.: One week period.
- MR. NOSEWORTHY, CHAIRMAN: One week, is it. Okay.
- Which is not, if we do have the opportunity for two days
- it might be a good idea to take advantage of that. Mr. 87
- Browne would you have any comments on this?
- MR. BROWNE, Q.C.: Just a reference to the 25th and 26th.
- I'd be careful about giving up those dates. I understand 90
- other people in the St. John's area are getting ready to
- testify. Some are involved in other matters right now.
- MR. NOSEWORTHY, CHAIRMAN: Certainly.
- Understood. It would depend on that quite clearly.
- MS. GREENE, Q.C.: That's why I said faint hope.

- 1 MR. NOSEWORTHY, CHAIRMAN: Do you have any
- 2 comments, Counsel, on this? Okay. Thank you. Good
- idea, Ms. Greene. I missed that one, we'll start on the cross
- 4 examination, I guess, or not cross examination any
- 5 questions on the undertakings would likely be concluded
- 6 in 15 minutes so I will begin with Newfoundland Power.
- 7 MS. BUTLER, Q.C.: No, Mr. Chairman. I had just indicated
- 8 that I didn't have any questions arising.
- 9 MR. NOSEWORTHY, CHAIRMAN: Okay. Thank you.
- 10 Industrial Customers?
- 11 MR. HUTCHINGS: Thank you Mr. Chair. Mr Henderson
- just referring to **RH-6** and this relates to the questions that
- we were discussing which arose out of your Schedule 7
- which showed purchase of No. 6 oil in October of 2000 at
- \$40.04 a barrel. Would you agree with me that it might in
- fact have been prudent at the end of July of 2000 when the
- forecast price when forecast price was \$32.00 a barrel to do
- a little early buying at that stage?
- 19 MR. HENDERSON: The price was \$32.
- MR. HUTCHINGS: The forecast at the end of July of 2000
- forecast to be in August \$32.02 or in September \$34.33.
- 22 MR. HENDERSON: Right. The difficulty was ... we didn't
- do it but one of the things that would have stopped us
- 24 from doing this, our inventory at the end of May was
- 25 626,000. We did not consume anything over that period of
- time and our shipments are 250,000 barrel minimums, so
- there wasn't enough room to take a shipment.
- 28 MR. HUTCHINGS: You had no consumption at Holyrood
- at all in June, July or August.
- MR. HENDERSON: No. Not sufficient to be able to draw
- 31 down that.
- 32 MR. HUTCHINGS: One of the other items of information
- 33 that you gave in response to the request from the
- 34 Consumer Advocate puzzled me in that you said in
- December of 1999 you had two purchases at two different
- 36 prices.
- 37 MR. HENDERSON: That's right.
- 38 MR. HUTCHINGS: One at \$28.37 and one at \$27.53. I
- 39 understood your evidence yesterday to be that you paid
- 40 the average price for the month in which the delivery was
- made, so how do you get two different prices in one
- 42 month?
- 43 MR. HENDERSON: There's two ways. One was we
- changed the contract to a monthly average price since that
- 45 time, and the other is that the exchange rate at the date of
- payment would make a difference a well.
- 47 MR. HUTCHINGS: I had been left with the impression that

- it had always been the price, the average price for the
- 49 month. When did that change, what was it previously?
- 50 MR. HENDERSON: What it was previously is we paid the
- 51 price on the day, of the day the shipment arrived and we
- changed that sometime in 2000. I'm not sure of the date.
- 53 MR. HUTCHINGS: And had that been in place since the
- beginning of your 1997 contract then that you were paying
- 55 the price on the day.
- MR. HENDERSON: It had been up until the point that we
- 57 changed it.
- 58 MR. HUTCHINGS: In 2000?
- 59 MR. HENDERSON: In 2000.
- MR. HUTCHINGS: So there was only one change during
- the course of the contract, as to how the price was done.
- 62 MR. HENDERSON: Yes, that was it. Well, well there was
- 63 two changes. We had originally our supplier was Inlong
- 64 (phonetic) Liquids or something that was the name of the
- 65 company, and now it's Westport. Inlong (phonetic)
- bowed out of the contract, if you like, and we then entered
- into the contract with Westport Petroleum.
- 68 MR. HUTCHINGS: So that's the only other change. There
- 69 was no pricing changes.
- 70 MR. HENDERSON: No. No.
- 71 MR. HUTCHINGS: No. Okay. And if I understand your
- 72 evidence then the inventory you're showing at May 31,
- 73 2000 at Holyrood would be the same inventory as would be
- in place at the end of August.
- 75 MR. HENDERSON: I believe that there was a small amount
- of production at Holyrood at the end of August, maybe for
- 77 a day or two.
- 78 MR. HUTCHINGS: Have you done any studies of what it
- 79 would cost you to increase your storage capacity at
- 80 Holyrood?
- 81 MR. HENDERSON: I haven't been involved, no, with any.
- 82 MR. HUTCHINGS: So you've never addressed the
- 83 question as to whether or not there would be savings in
- 84 increasing your storage with a view to to be able to take
- advantage of pricing of fuel?
- 86 MR. HENDERSON: I've never been involved with any. I
- 87 don't know if that had been looked at historically, but I've
- 88 never been involved.
- 89 MR. HUTCHINGS: Those are all the questions I have
- 90 arising from the undertakings.
- 91 MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
- 92 Hutchings. Mr. Browne or Mr. Fitzgerald, sorry.

- 1 MR. FITZGERALD: Just a couple of questions Mr.
- 2 Henderson. First I'm going to **RH-5**. This is your schedule
- 3 of Canadian Utility Energy Production.
- 4 MR. HENDERSON: Yes.
- 5 MR. FITZGERALD: I see here that Nova Scotia Power
- 6 appears to be, is heavily reliant on thermal generation.
- 7 MR. HENDERSON: That's right.
- 8 MR. FITZGERALD: And they, in total, in fact, they
- 9 produce more electricity than Newfoundland.
- 10 MR. HENDERSON: That's right.
- MR. FITZGERALD: And in your position as the person in
- charge, if you will, for fuel purchasing, have you ever
- liaisoned or had any information back and forth with the
- person of similar rank, if I could use that word, at Nova
- 15 Scotia Power?
- MR. HENDERSON: I haven't, with Nova Scotia Power you
- should realize that they have a lot of coal-fired thermal.
- 18 MR. FITZGERALD: Okay. So you don't know of this
- breakdown what the proportion would be Bunker C, if in
- fact they do burn Bunker C.
- 21 MR. HENDERSON: I think they did at one point, and I
- believe that they've done some conversions to natural gas,
- because of the gas that's now available from Sable Island.
- 24 MR. FITZGERALD: Okay. And just last question here,
- looking at your response to the undertaking, the last
- document, I'm not sure what number was put on this now.
- 27 MR. HENDERSON: **RH-6**, I think.
- 28 MR. FITZGERALD: RH-6. Looking at the Holyrood
- inventory at May 31, 2000, you had 626,000 barrels of oil.
- 30 Did that, is that a larger number than you would usually
- have on hand ending December, isn't it?
- 32 MR. HENDERSON: Yes.
- MR. FITZGERALD: And again, the explanation for this is
- this unused, and I use the word again, stockpiling, from the
- 35 previous year.
- MR. HENDERSON: No, this would be just as a result that
- we ordered oil for May which we ordered in the first week
- of April and we had to make a commitment in the first week
- of April for our requirements and as it turned out to be wet
- that year we ended up not requiring, having to use it but
- 41 we had to order it in anticipation to make sure we had it on
- hand in case we did use it, and as it turned out that year
- things changed, we had a much wetter April and May than
- we had anticipated and therefore our thermal production
- was low and our inventory ended up being high at the
- point that we shut down for the summer.

- 47 MR. FITZGERALD: Okay, thanks Mr. Henderson. Those
- are all my questions.

- 49 MR. NOSEWORTHY, CHAIRMAN: Thank you Mr.
- 50 Fitzgerald. Any redirect Ms. Greene?
- 51 MS. GREENE, Q.C.: No, Mr. Chair, thank you.
- MR. NOSEWORTHY, CHAIRMAN: Thank you very much.
- 53 We will now, there appears to be a consensus around
- tomorrow certainly, so we'll conclude with Mr. Henderson
- 55 in the morning and we'll adjourn then to our public
- 56 participation days and I guess anything that might occur
- on the 25th and 26th will be subject to what interest we
- have in St. John's for any participation in those days. So
- 59 we'll conclude till 9:30 in the morning.

(hearing adjourned to October 12,2001)