- 1 MR. NOSEWORTHY, CHAIRMAN: Thank you and good
- 2 morning. I trust everybody had a good weekend. Before
- 3 we get started, counsel, are there any preliminary matters?
- 4 MR. KENNEDY: I don't believe so, Chair.
- 5 MS. BUTLER, Q.C.: I wonder, Mr. Chairman, if we might
- 6 just introduce Mr. Larry Brockman, who is Newfoundland
- 7 Power's witness on the cost of service matters.
- 8 MR. NOSEWORTHY, CHAIRMAN: Good morning, Mr.
- 9 Brockman. How are you? We've used your name a couple
- 10 of times in vain last week. *(laughter)* Good morning and 11 welcome, sir.
- 12 MR. BROCKMAN: Good morning.
- MR. NOSEWORTHY, CHAIRMAN: Good morning, Mr.Osler.
- 15 MR. OSLER: Good morning, Mr. Chair.
- 16 MR. NOSEWORTHY, CHAIRMAN: Good morning, Mr.
- Browne. I wonder could I ask you to begin when you're ready, please?
- MR. BROWNE, Q.C.: Thank you, Chairperson. Goodmorning, Mr. Osler.
- 21 MR. OSLER: Good morning, Mr. Browne.
- 22 MR. BROWNE, Q.C.: Mr. Osler, can you go to your
- evidence of September 12th, 2001, on page 12, which is the
- first supplementary ... there you deal with issues of rate
- design on page 12 and use of an energy-only rate for NP.
- 26 Can you just read that into the record, please?
- 27 MR. OSLER: Line 13?
- 28 MR. BROWNE, Q.C.: Yes, line 13.

MR. OSLER: "Use of an energy-only rate for NP. Hydro has proposed an energy-only rate for NP that is inconsistent with normal rate design principles and fails to track the costs NP imposes on the hydro system. In addition, this rate fails to reflect the practice regarding wholesale rates on similar systems in Canada."

MR. BROWNE, Q.C.: Now, what other similar systems in Canada are you referring to there?

MR. OSLER: I had two in mind, first being the Ontario 37 system, which is, you would know, I guess, has a fair 38 amount of capital intensive generation either in the form of 39 nuclear or hydro, as well as some thermal. With Ontario 40 Hydro, and I'm thinking back to the days when it was a 41 regulated system, Ontario Hydro providing the bulk of the 42 power for all of the residents but there were many, many 43 municipal utilities as well as a number of what they call 44 larger users, that's five megawatts or more, served directly 45 by Ontario Hydro, and the practice that evolved in it there 46

was one of a two-part rate structure for all of these, what
they call large users, either municipal distributors or large
users industrial. On a much smaller level, I'm advised that
in the Northwest Territories, Power Corp, it too has used a
two-part rate in dealing with its distributor in a hydro-based
system.

- 53 MR. BROWNE, Q.C.: When you ...
- 54 MR. OSLER: Sorry.

55 MR. BROWNE, Q.C.: Okay. No, continue. You need to 56 complete your answer.

MR. OSLER: One more example was that in Yukon when 57 the Northern Canada Power Commission had been 58 supplying power to the local distributor, introduced a two-59 part rate. That got melded into a one-part rate similar to the 60 one you've got here at the time period when the distributor 61 effectively was managing the Crown company through a 62 contract and they ended up putting it into a one-part rate. 63 64 Now that contract is over, I don't know what would be the situation there as they go into the next rate hearing, 65 whenever that may be. 66

MR. BROWNE, Q.C.: Now when you say in the first
sentence, there, "NP ... Hydro has proposed an energyonly rate for NP that is inconsistent with normal rate design
principles," what do you mean by that?

MR. OSLER: Well, in normal ... removed from the 71 classification and allocation of costs step inter rate design. 72 73 When dealing with customers who are purchasing power at a scale that makes clear the, clearly justifies in terms of 74 economics the meterings for more sophisticated, keeping 75 track of their loads, metering of demand, etc. It's been my 76 experience that one would try to track both capacity costs 77 and energy costs in the rate structure as well as having 78 gone through the effort of putting them together when 79 doing the classification of allocation of costs and assigning 80 costs to different customer groups, and the reasoning for 81 that approach to rate design would be that you want to 82 give people price signals on the one hand for efficiency 83 84 reasons that relate to both capacity and energy use, and secondly it would have some advantages in lines of rate 85 design people historically in stabilizing revenue to a certain 86 degree by locking in certain demand charges through 87 ratchets and other things so the utility could rely on a 88 certain amount of relatively stable income relating to its 89 fixed costs and its capacity costs, and how you design the 90 energy tariff becomes an interesting challenge, but you can 91 design it various ways. You don't have to have only one 92 energy rate when you're doing the energy portion of it. 93 You could have stepped rates or increasing blocks or 94 decreasing blocks depending on what you're dealing with, 95 so that when we look at even Newfoundland Power, they 96 do (inaudible) what I'm saying when they start treating their 97

- 1 own customers. They treat those who can afford meters
- 2 with a two-part rate, whereas the residential customers who
- 3 traditionally don't consume enough power to justify that
- 4 type of metering, they have a single rate.

5 MR. BROWNE, Q.C.: So there could be advantages and 6 options for customers with a demand component in the 7 rates.

8 MR. OSLER: The rate design approach would look at it, I guess, from the point of view of both customers and the 9 utility, and the advantages that would be there would be 10 either from the perspective of tracking costs as they've 11 been discussed and assessed in the cost of service, 12 separately for capacity and energy, and you would try and 13 design it in such a way you could also achieve some price 14 signals and perhaps some incentives towards better 15 efficiency in use by both the utility and the customer. 16

MR. BROWNE, Q.C.: On page 26 of your evidence, the
same supplement, line 27, you make reference to
Newfoundland Power's energy-only rate as well. Just can

20 you read that into the record, please?

MR. OSLER: "Newfoundland Power is currently subject to a rate that includes only an energy component with no demand charges or fixed monthly charges. This energy component far exceeds the cost of service study conclusions regarding the embedded energy cost assigned to NP as it encompasses the demand costs and customer costs assigned to NP as well."

28 MR. BROWNE, Q.C.: What do you mean by that, it far 29 exceeds the cost of service study conclusions?

MR. OSLER: What I mean is that the amount in the rate includes not only what we call energy in the cost of service study but also what is called capacity in the cost of service study, so the actual energy rate far exceeds the costs that are classified as energy and assigned to NP in the cost of service study as energy.

MR. BROWNE, Q.C.: And on the next page, on page 27, on
line one, can you read that into the record, sir?

MR. OSLER: Hydro has proposed no change to the
energy-only rate structure for NP. In addition, Hydro has
filed a letter they have received from NP in **PUB-68** which
states, "NP's interpretation that a demand charge and fixed
charge component of the wholesale rate would increase
revenue volatility to the detriment of customers."

- 44 MR. BROWNE, Q.C.: Do you agree with that?
- 45 MR. OSLER: I do not think that a two-part rate needs to 46 necessarily increase revenue volatility to the detriment of
- 47 customers. I can see why utilities may be concerned with
- it but I do not think it necessarily flows.

49 MR. BROWNE, Q.C.: And your last sentence, line seven50 there?

51 MR. OSLER: "Our view of the matter does not support the 52 conclusion that an energy-only rate is the suitable rate 53 design for NP."

MR. BROWNE, Q.C.: Now, Newfoundland Hydro and
Newfoundland Power in this hearing are advocating an
energy-only rate. Has that always been the position of
Newfoundland Power to ...

MR. OSLER: I'm not intimately familiar with the history but
I understand that hasn't always been the position of
Newfoundland Power from what I've heard in testimony in
the last week.

MR. BROWNE, Q.C.: Can you go to page 29 of your
evidence, sir, and beginning with line six, "In contrast," can
you read that into the record?

MR. OSLER: "In contrast, NP's expert, Brockman, page 28,
notes that at this time he is not recommending a demand
energy rate for Newfoundland Power despite the fact that
he has recommended one at times in the past."

MR. BROWNE, Q.C.: Okay. How do you know that? Howdid you come to that conclusion?

MR. OSLER: I believe he said so in his testimony. I think
he acknowledged that he had recommended in the past and
although he had done that he wasn't recommending it in

74 this instance. I hadn't reviewed his past testimony.

75 MR. BROWNE, Q.C.: And just continuing with line eight.

76 MR. OSLER: "The reasoning given is that it would tend to

- <sup>77</sup> increase the volatility in revenues for both Hydro and NP,
- however, he provides no substantiation as to how such arate would increase volatility."

MR. BROWNE, Q.C.: Do you share that conclusion, that
a demand rate would increase volatility in revenues for
both Hydro and NP?

83 MR. OSLER: It doesn't have to necessarily. If there were very specific concerns, they would identify as to what 84 happens on the margin when you're charging for the 85 energy that one could address it in a two-part energy rate, 86 but essentially a demand charge with some ratchet 87 provisions, which I assume would exist, would introduce 88 stability to Hydro's, Newfoundland Hydro's income stream 89 because regardless of the load, whether, if it declined, they 90 would get locked in this amount of income, and it would 91 introduce similarly, perhaps to the adversity of 92 Newfoundland Power, but it would introduce stability into 93 how much it was being charged if its load went down. In 94 the case of the energy rate, the issue for Newfoundland 95 Power has to relate to how the energy rate compares to the 96

1 (inaudible) run-out rates that it's using for its customers

2 and I assume it would probably have a need for the two

3 utilities to think through how the rate designed worked as

an integrated package.
MR. BROWNE, Q.C.: Now, if Newfoundland Power

advocated a demand component in the past, using that
reasoning, reasoning that they give now for not
introducing it, wouldn't it have increased volatility in their
revenues at that time?

10 MR. OSLER: I'm not ...

11 MR. BROWNE, Q.C.: Wouldn't the same rationale apply?

MR. OSLER: I'm not aware of anything that has changed 12 in the nature of the system in the time period since I gather 13 this other testimony was offered that would explain a 14 change in position. I think though I have heard people say 15 that this position is intimately tied into their interpretation 16 of the RSP and that absent the RSP I think Mr. Brickhill at 17 least suggested that the situation could be quite different. 18 Anyway, the RSP has been in effect since the mid '80s from 19 the point of view of Newfoundland Power and Hydro, so 20 again I don't see how it has changed anything that would 21

- lead to a change in position on this matter.
- 23 (9:45 a.m.)

MR. BROWNE, Q.C.: And other companies with which
you're familiar, they must have a demand component, do
they not?

MR. OSLER: Well, the ones I listed earlier, certainly haddemand components.

MR. BROWNE, Q.C.: And they survive, do they not?
They end up with revenues and they are not subject to a
volatility which is going to bring them under or anything,
are they?

33 MR. OSLER: No.

34 MR. BROWNE, Q.C.: Just moving to another topic, last

35 week there was some discussion about the 1-CP, 2-CP and

36 4-CP, and on page 10, lines 24 through 25 of your

37 September 12th, 2001, testimony ...

38 MR. OSLER: Which lines were you on?

MR. BROWNE, Q.C.: Lines 24 and 25. You say, "Both 39 Bowman, pages 7 and 8, and Brockman, page 23, disagree 40 with Hydro in this regard, however, there is no basis to 41 increase the allocation to 4-CP and there is likely benefit to 42 retaining the current 1-CP for consistency with allocation 43 transmissions and consistencies with similar utilities." So 44 it is your evidence then that if the Board in its, decides 45 against moving to the 4-CP that you will be content with 46 the 1-CP? 47

48 MR. OSLER: Correct.

49 MR. BROWNE, Q.C.: And the 4-CP, would 4-CP cost the50 industrials money?

51 MR. OSLER: I have to check the percentages. It might be

52 that 4-CP has a slightly more adverse classification, sorry,

53 allocation to industrials than 1-CP but ...

MR. BROWNE, Q.C.: So it could be more expensive for theindustrials.

MR. OSLER: It could be, but that wasn't central to my thinking. My thinking was based on what the experience is with other utilities of this type in Canada, and I'm not aware of any of them using the 4-CP.

60 MR. BROWNE, Q.C.: On page 10, lines 27 to 28, of your

September 12th, 2001, supplementary evidence, you state, 61 "Hydro's application does not consistently address the 62 various interruptible demand alternatives that Hydro 63 maintains. The treatment is critical for calculation of the 64 65 system load factor for classification of hydraulic plant and cost for allocation of the generation and transmission 66 demand costs on the coincident peak of generation and for 67 rate design of interruptible demand programs." Then you 68 say, "In calculating the CP for allocation and for 69 determining the system load factor for COS purposes, 70 Hydro reduces NP's peak to reflect interruptible demand." 71 And then you say, "This treatment appears to be 72 inconsistent with the industrial customers' interruptible 73 demand and in any event serves to calculate a revised load 74 factor for its cost of service purposes that is different than 75 Hydro's load factor for planning purposes." Can you tell 76 us exactly what that means? 77

MR. OSLER: This whole topic is dealt with in Section 3.5 78 of this evidence and starting, I guess, at page 17. I'll try 79 and just summarize it. I think the Board has heard by now 80 considerable evidence on how the interruptible contract 81 with one of the industrials, called Interruptible B, allows the 82 Utility to interrupt that customer for, I think, up to 46 83 megawatts during the peak periods of the year and that this 84 85 is a cheap way of getting extra capacity security on the integrated island system. I think the Board has also heard 86 evidence that there is a similar capability Hydro has with its 87 wholesale customer, Newfoundland Power, and it's called 88 a generation credit, but essentially it allows Hydro to 89 control the dispatch such that if it had a shortage during 90 the year at a certain point in time it could call upon NP's 91 generation, and return for each of these provisions, which 92 I think many people have now described as being basically 93 similar, at least there's answers to questions that say they 94 are similar and there's evidence on the record that says 95 they're similar in terms of what they do for the Utility, 96 Hydro. In the one case, the Interruptible B case, the 97 customer by a contract receives \$1.33 million a year as 98

- payment for making this interruptible capability available. 1 That comes down to about \$28.20 a kilowatt per year. That 2 cost is treated in the cost of service study as a production 3 demand cost and it is assigned, therefore classified to 4 demand and allocated according to the ground rules that 5 you've been talking about among all the different customer 6 classes, so that the industrial class pays a share of that 7 cost. It is transparent, it is cost justified, it is fully treated 8 9 in the cost of service. The only thing that's a bit odd about it is it's done by contract rather than by a rate approved by 10 the Board, and there's an issue there as to whether or not 11 that should become part of the rate structure offered to 12 anybody who's prepared to take it up rather than done on 13 a contract basis. 14
- MR. BROWNE, Q.C.: **On page 18 at lines 11 to 20** you indicate there, "There are inconsistencies in the treatment of Newfoundland Power generation on the industrial customer Interruptible B power."
- MR. OSLER: Right, because if I look at the Newfoundland 19 Power generation credit, it is not dealt with as a cost 20 payment to Newfoundland Power. It is done as a credit in 21 the cost of service study. It is very difficult to find it, so it's 22 not done in great transparency. It's there and we found 23 what it's worth through interrogatories and questioning but 24 it's not something you could find by picking up the cost of 25 service or anything else in terms of its value. It has effects 26 on the cost of service study given the way it's dealt with by 27 reducing certain loads and things like that and that are 28 difficult to understand and not necessarily clearly justified, 29 and of course it's very difficult to understand the extent to 30 which the one form of interruptible dispatchable control 31 that the Utility has with Newfoundland Power is being 32 fairly and consistently costed and paid for compared with 33 the Interruptible B type of dispatchable control that they 34 have with Abitibi, and that's in essence the issue at the 35 stage that it was presented in the September evidence as a 36 concern about consistency and transparency and trying to 37 get to the bottom of it. I think since then we have learned 38 a little bit more and can know a bit more now of the costs 39 40 relating to the credit, we didn't have before, and I gave some comment on that in my opening direct testimony. 41
- MR. BROWNE, Q.C.: Do you believe that an explicit
  interruptible rate option made available by Hydro to Power,
  similar to that offer by Hydro to industrial customers, was
  appropriate?
- MR. OSLER: Well, I wouldn't even call it a rate structure
  the way it's done. It's sort of ... it's a credit in ... done, I
  gather, with the approval of the Board historically, so it's
  not underhanded or anything but it's in the cost of service
  study rather than a rate in the normal sense of the word. I
  would think it would be preferable to have a transparent
  rate structure that clearly treats all parties the same way,

indeed makes it open in a DSM context for other partiesthat might want to think about making interruptible loadavailable.

56 MR. BROWNE, Q.C.: So you would say that it should be 57 available.

MR. OSLER: I think it should be available, should be 58 available on a rate form rather than by deals and it should 59 60 be available to anybody who can provide it subject to the terms and conditions, and I cite as an example of that, in the 61 1990s, in Manitoba Hydro's case, with a fair amount of 62 persistence from some of its customers, they eventually got 63 64 around to offering curtailable rates as a rate form for their 65 larger industrial users, and historically had said this is not possible to do on a hydro system and wouldn't be worth it, 66 but they do have at least one customer still on that and 67 very important to them and they had another one on it for 68 a while, so it didn't ... not everybody jumped to use it but 69 some people used it to their benefit and to the benefit of all 70 71 the other customers in the system.

MR. BROWNE, Q.C.: Do you feel that there should be a contract specifically identifying the generation services to be offered by, be it between Hydro and Power along with compensation similar to contracts between Hydro and the industrial customers? Do you believe things should be collapsed to a contractual basis between Hydro and Power?

MR. OSLER: I think they should be dealt with on a similar 79 80 basis. I'm not sure whether the contract role (phonetic) range is necessary when you have rates approved by a 81 board. I think that's an interesting question all by itself. If 82 there was a rate approved by the Board, then it's 83 transparent, it's open and everybody can see it. Many 84 utilities seem to still feel that we need to have a contract as 85 well, and if that's felt to be the case then we should have a 86 contract with each of them. 87

MR. BROWNE, Q.C.: So are contracts prevalent in theindustry from your understanding?

MR. OSLER: They vary. They are, I guess, prevalent more
than I would perhaps like at times but they are ... utilities'
law departments seem to feel they like to have a contract.

MR. BROWNE, Q.C.: Will be more of a business-to-business relationship, I guess, would it?

95 MR. OSLER: Right, but it's always subject to the board's 96 orders so, you know, what I find personally is that 97 sometimes you have difficulty making darn sure that the 98 contract is consistent with the order because usually 99 people that write it, in the big utilities, they're not 100 necessarily involved in the rate case, so they sit down and 101 start all over again. Anyway, that's a side comment.

- MR. BROWNE, Q.C.: The earlier part of this hearing we 1 dealt with duplications and services between Hydro and 2 Power, and I think there was some discussion concerning 3 4 a VHF radio system which Hydro was proposing to purchase at \$8.5 million, and there was some suggestion, I 5 think, that themselves and Power at one point could have 6 worked out some agreement when Hydro was about to 7 purchase a new system, which hasn't happened. But from 8 the industrial perspective, do you see savings for the 9 industrials if duplications in services between the utilities 10
- 11 were dealt with?

MR. OSLER: I think there's potential proceedings for all the
customers to the extent that the system can avoid
duplication and increase its overall efficiency between the
two utilities.

MR. BROWNE, Q.C.: Do you see any merit in this provincein having one vertically-integrated utility?

18 MR. OSLER: I haven't considered it. It would seem, from

19 experience I've seen in a few other places, it would require,

20 I would think, careful consideration of all the issues before

- 21 I'd want to get any comment on it.
- 22 (10:00 a.m.)

MR. BROWNE, Q.C.: On page 11, lines 10 to 13, of your
September 12th, 2001, testimony ...

- 25 MR. OSLER: Sorry, page?
- 26 MR. BROWNE, Q.C.: Page 11, lines 10 to 13.
- 27 MR. OSLER: Thank you.

MR. BROWNE, Q.C.: We're discussing frequency 28 converters there. You indicate, "There's no principle or 29 reasonable basis justifying a change in assignment of cost 30 related to frequency converters from common to industrial 31 customer specific," and you can recall there was previous 32 discussions during these hearings on this particular issue. 33 If the converters which were judged to be useful to two or 34 more classes previously are now judged to be useful for 35 only one customer class, would that justify changing the 36 assignment of costs from common to specific? 37

MR. OSLER: I think in this case, no, because the benefit related to the overall system is embedded in the system in its origins and very hard to take away fairly at a later time and say it doesn't matter anymore, whereas the cost of changing the rules would be very significant, it would appear, for the one customer that is likely to be affected by it.

MR. BROWNE, Q.C.: So if they only service one particularcustomer, how could they be described as common?

47 MR. OSLER: Common in their origin in the sense that the 48 decision was made by all parties to develop the system a

certain way which left these customers, and this one in 49 particular, continuing to rely upon a system that would 50 provide them through the utility as a common cost feature 51 52 for their frequency conversions. If the system had developed a different way, perhaps along the lines of the 53 frequency that this customer has, that issue would be 54 moot. The benefits of that decision continue to flow for all 55 of Newfoundland. The costs of making the change today 56 rather than umpteen years ago would be borne only by the 57 one customer. I think that creates issues that don't make 58 me comfortable with saying it's easy to no longer call it 59 60 common.

MR. BROWNE, Q.C.: Well, effectively, I guess, they could
be taken out of service, couldn't they, if the industrial
wasn't there to use them, is that not correct?

64 MR. OSLER: If there was no user they could be removed 65 from service, correct.

MR. BROWNE, Q.C.: So the only one that they are servingis the industrial.

MR. OSLER: (inaudible) two industrials, likely only one inthe future, yes.

70 MR. BROWNE, Q.C.: On page 12, lines 18 to 25, of your September 12th, 2001, testimony, we're talking about the 71 wheeling rate and transmission costs there, and you note 72 that, "All transmission costs are included in Hydro's 73 calculation of the wheeling rate." Does this not result in an 74 average cost of transmission or what is commonly referred 75 to in the industry as a postage stamp rate? Are you familiar 76 with that term, postage stamp rate? 77

78 MR. OSLER: I'm familiar with the term, yes.

MR. BROWNE, Q.C.: Okay. Can you tell the Board whatthat means?

MR. OSLER: Generally applied to customers over, say, a
whole country or a whole jurisdiction, that they all can
have the same rate for use of a service without it being
differentiated on the basis of distance or location so that a
rural customer would pay the same as city customers, and
in our province, people up north would pay the same as the
people down south, etc., that type of thing.

MR. BROWNE, Q.C.: It's the same as the postage stamp,
right, we all pay whatever it is now, 47 or 48 cents?

90 MR. OSLER: Right.

91 MR. BROWNE, Q.C.: No matter where you live in the ...

92 MR. OSLER: No matter where you live you pay the same

amount to send a letter in Canada, a different amount ifyou're going to send it somewhere else.

95 MR. BROWNE, Q.C.: Saving Labrador, I think. Some

- 1 people have an argument up there on occasion. Is postage
- 2 stamp pricing not a common method of transmission
- 3 pricing used in the industry?

4 MR. OSLER: I'm not intimately familiar with transmission

tariffs but my understanding of the recent evolution of 5 some of the tariffs as required for utilities such as Manitoba 6 Hydro to meet American requirements is that they have to 7 8 develop a cost justified, I've never heard them use the term in this context, but postage tariff for your jurisdiction so 9 that anybody who's a wholesaler can have access to flow 10 through the jurisdiction, etc. If Manitoba Hydro wants to 11 have access to American markets, they have to turn around 12 and provide a tariff that does the same for the Americans, 13 14 however, there have been tariffs, I believe, that have been done on different bases than just postage stamp, and I 15 don't know whether, I don't know enough to know whether 16

- the (inaudible) rules in the States allow variations as long
- 18 as they're cost justified.

MR. BROWNE, Q.C.: In this province, provided all the wheeling transactions in the province, say subject to this charge, is this not an acceptable rate and procedure for wheeling?

MR. OSLER: It could be if that was the overall intent, to
 develop a tariff across the whole jurisdiction for wheeling
 from any point to the other one.

MR. BROWNE, Q.C.: On page 21, lines 14 to 19, of your

September 12th, 2001, testimony, you state that, "It is not
clear why the \$3 million on the secondary sales revenue in
Labrador would be allocated to the Labrador consumers

Labrador would be allocated to the Labrador consumerswith already low rates rather than being allocated to offset

the rural deficit." On what basis should the \$3 million be

32 allocated to offset the rural deficit? What's your rationale?

MR. OSLER: I think this is addressed very briefly in a 33 response to Newfoundland Hydro No. 96, but the point is 34 that we are dealing with something that is a surplus and is 35 therefore not cost justified, and that's a surplus that arises 36 without any debate about it not going back to the 37 customer, so you start from the premise that there isn't a 38 cost-justified basis for assigning this surplus any more 39 than there's a cost-justified basis for assigning the rural 40 deficit, and because there is no principled cost causation 41 basis to distribute the revenue credit and there's no cost 42 causation basis to distribute the rural deficit, it would seem 43 that you then have some discretion, and it struck me, and 44 I think others, a few others mentioned this, that it may be 45 something that you would apply this to the rural deficit 46 rather than apply it only to the customers in that particular 47 system. 48

MR. BROWNE, Q.C.: Why, just because it's a surplus and
it's \$3 million worth of money so the Board can just take it
and order it to be applied against the deficit? What is the

52 rationale here?

MR. OSLER: There's no rationale for deciding that it 53 should be assigned specifically to that system or the 54 customers in that system. The rural deficit is assigned to 55 56 customers in different systems, as I think the evidence has gone through. If there's a problem with the rural deficit in 57 the sense that it is not being paid for by the customers that 58 are getting the service from it, and you got a surplus that 59 has been derived in another situation over and above the 60 61 cost required to serve that customer, it seems that an option is there to apply the surplus to the deficit. I'm not 62 advocating it and I'm not disputing it. I'm just saying it 63 seems to be an option that would be before the Board for 64 65 parties to argue and consider seriously.

MR. BROWNE, Q.C.: That's a form of secondary revenue,wouldn't you agree?

68 MR. OSLER: Definitely.

MR. BROWNE, Q.C.: And is it your position that allsecondary revenues which may appear be allocated to therural deficit?

72 MR. OSLER: No.

73 MR. BROWNE, Q.C.: Just this particular one.

74 MR. OSLER: This is a pretty big one and the other
75 secondary revenues are fairly small and very much relate to
76 use of a specific system and their benefits are assigned
77 back to the users of that system.

MR. BROWNE, Q.C.: On page 22, lines 10 to 11 of your
September 12th, 2001, testimony, you're referring to
various adjustments there, and in addition you say, "We
do not see the basis for proposing to delay past 2002 the
other adjustments that Hydro considers appropriate in the
long-term." Can you expand upon that, please?

MR. OSLER: We're talking in this context around again the 84 rural deficit and the rural rates and the issue of phasing in 85 on higher charges or new ways of dealing with them, and 86 87 it struck me that the application in many respects in this regard said we're going to do something but we'll tell you 88 what it is next time, and given the history of what happened 89 the last time we had a, you had a rate hearing here in detail 90 and how long it took to come to grips with some of the 91 92 things that came from it, one would have thought that it would be nice to have tabled in this hearing an actual five-93 94 year plan starting now or a seven-year plan or whatever, and start implementing it now. That's what I'm getting at. 95

MR. BROWNE, Q.C.: So that's what you're recommendingthe Board to do.

98 MR. OSLER: I'm not sure the Board has the ability to deal 99 with it absent the evidence as to, from the applicant, and I guess the Board could order the applicant to provide a
 game plan and then let's review it.

3 MR. BROWNE, Q.C.: I want to ask you some questions

4 concerning your position on the RSP. Is it fair to say that

5 since the RSP was set at \$12.50 in the early 1990s,

6 customers have been receiving incorrect price signals?

7 MR. OSLER: Yes.

MR. BROWNE, Q.C.: And is this because Hydro has been
undercollecting revenues through the RSP balancing
account rather than passing them through to consumers in

the year in which they occur? Is that the nature of the incorrect price signals?

MR. OSLER: It's been sending them a price signal each year in their rates that doesn't reflect the full cost of the oil and the result is that it undercollects through rates and assigns the deficit, so-called, to the RSP, so therefore gives the wrong price signals.

18 MR. BROWNE, Q.C.: Now, are industrial customers

concerned that they're facing a ... there's a \$26 milliondeficit in the RSP account in 2002 and 2003, according to

deficit in the RSP account in 2002 and 2003, according to
your table on page 35. Can you go to that table, please?

22 MR. OSLER: Sorry, which number did you look at?

MR. BROWNE, Q.C.: The table on page ...

24 MR. OSLER: 35, yeah.

25 MR. BROWNE, Q.C.: ... 35.

26 MR. OSLER: Right.

MR. BROWNE, Q.C.: Okay. We're referring to the deficit
that you see the RSP account from an industrial
perspective in 2002, 2003, and I think you base oil at 25 and
20 and 15. You don't base it at \$28, I notice.

MR. OSLER: No. I was just looking for some symmetry of trying to understand the implications of \$5 up and down.

33 MR. BROWNE, Q.C.: And just before we get to the table,

is it your position that it should be based at what is
forecast, \$28 a barrel? Is that the position of the industrial
customer?

MR. OSLER: I think we should keep clear that whatever I'm
testifying to is my position and I don't ...

MR. BROWNE, Q.C.: Yes, but you're brought in by them
and I think you're brought in to give opinion, so can you
give us your opinion?

42 MR. OSLER: I'll give you my opinion. I'm just not speaking 43 for the industrial customer. My opinion would be that in a

rate stabilization plan you should have a plan to do what

45 you're saying, which is to stabilize the rates at the cost that

46 you think they're going to be at. Now it doesn't necessarily

mean you have to put it to \$28 in the year 2002 and you 47 only had about \$12.50 before, but it would imply that you'd 48 have a game plan to get to where you think the price of oil 49 50 is going to be, charging that to your customers and having that as your base in your plan. That is not the way I 51 interpret the, approach the problem. So you could phase it 52 in over a few years given that you don't want to have a 53 shock of doing it all at once, but you would not deliberately 54 55 set a base that was different than where you thought the price was forecast to be in the sense of a two or three-year 56 time horizon, some reasonable time horizon. 57

MR. BROWNE, Q.C.: So you're saying it should go to what
is forecast, the \$28, only it should be phased in over time.
Is that your position?

MR. OSLER: Well, \$28 may be a moving target. I think 61 their forecast, when they filed it, was that \$28 would tend 62 to come down, so my position is, to take an example if we 63 could without hanging me on it, if you said three years was 64 65 a reasonable phase-in time period, so what do you honestly think the price of oil is going to be in three years, and after 66 67 evidence the Board says, yeah, we think the price of oil in three years is going to be this, let's aim to get there in three 68 years. Let's not set a plan that is designed to not be where 69 we think we're going to have to be. 70

#### 71 (*10:15 a.m.*)

MR. BROWNE, Q.C.: From the industrial customers'
perspective, according to your evidence, they are to be in
a \$26 million deficit if it's based at \$25 a barrel by the end of

2001. Is that a concern for the industrial customers?

MR. OSLER: I think it's \$26 ... I think those were opening
balances. No matter which price we set there ... looking at
this table ...

79 MR. BROWNE, Q.C.: \$26 million.

MR. OSLER: Yeah, \$26 million. I don't know what the
industrials think as a group but the concept of \$26 million
being in a fund that has to be charged back to you should
be of concern to any group of customers, and what you're
in effect doing is creating a mortgage account that has to
be paid some day.

MR. BROWNE, Q.C.: Now, do you know how the
industrial customers place this amount of money on their
books, this \$26 million deficit? How do they ... what do
they inform their auditors, do you have any idea of that?

90 MR. OSLER: I have no idea.

MR. BROWNE, Q.C.: If the Board decided to collapse the
RSP Plan and have the industrials pay in a period of time,
how would the amount be divvied up among the three
industrials, among the two paper companies and North
Atlantic Refinery?

- 1 MR. OSLER: I have no idea. I think one of the troubles 2 with this plan is that I have a lot of difficulty even with the
- allocations as they exist between Newfoundland Power and
- 4 the industrials. The concept that we could then take it and
- 5 try and divvy it up between individual customers would
- 6 seem to me to introduce another level of confusion or
- complexity, possible. There's no rules that I'm aware of as
- 8 to how they would do it.
- 9 MR. BROWNE, Q.C.: And there are three industrials being
- 10 represented here. If one of the industrials left the system,
- 11 is it your evidence the other two industrials would be
- responsible for the entire deficit?
- 13 MR. OSLER: No, not my evidence.
- MR. BROWNE, Q.C.: What do you believe would happenin that case?
- MR. OSLER: My view is that if you re-ran the cost of 16 service where they, having lost an industrial customer, then 17 the implications would be borne by the entire system and 18 all its customers, not just by the remaining industrial 19 customers. That's the fair and appropriate way to do it. 20 The thought that one industrial customer is held 21 accountable for the loss of load or benefits directly 22 because of a gain in load from another industrial customer, 23 I don't see any justification for that. 24
- MR. BROWNE, Q.C.: Now, if another industrial, if another industry was to be attracted to the province and do a deal with Hydro for the provision of electrical services, would that other industrial be taking on the debt of this particular
- 29 class?
- 30 MR. OSLER: I'm not as sure we have an assigned debt to
- the customers here, but the way I understand the scheme,
- if you became privileged enough to be called an industrial
- customer, you'd be having to pay the charges flowing fromthis account in a practical sense that they would charge
- this account in a practical sense that they would charge you when they sought to recover the balances through the
- extra mill rate that they charge to the RSP, and if you were
- an industrial customer you would, as I understand thescheme, you would be privileged to pay that amount.
- MR. BROWNE, Q.C.: So you would come in under the
  umbrella of the debt if new industry was to come into the
  province, is that your answer?
- MR. OSLER: Yeah. You would ... I have never, I guess,
  thought of it from that issue, but it would be an interesting
  concern ...
- 45 MR. BROWNE, Q.C.: I would think so.
- 46 MR. OSLER: ... for a new industry coming in.
- 47 MR. BROWNE, Q.C.: It's a great attractor. Come in, we can
- 48 give you, what is it, \$26 million divided by four. Yeah.

MR. OSLER: The mill rates, according ... yeah, it would be
... I could see them giving some concern to that, yeah.

- MR. BROWNE, Q.C.: So the lawyer might want to do their
  due diligence if they're acting on behalf of that company.
  In reference to the RSP, is it your evidence that the end
  users are ultimately responsible for payment of deficiencies
  in the RSP, consumers, from Newfoundland Power's
  perspective and the industry, from the industry's
  perspective?
- MR. OSLER: Is your question, is it my understanding ofhow it works, that that's how ...
- 60 MR. BROWNE, Q.C.: Yes.

MR. OSLER: Yes. Ultimately my understanding of the
intent and the way in which it's structured is that whatever
amounts are in there are to be charged out on this declining
balance basis to customers, end users.

MR. BROWNE, Q.C.: And is it your understanding thatHydro has the liability on its books and borrows the moneyto fund the RSP?

MR. OSLER: Certainly it's on Hydro's books. I don't know 68 how you deal with it here in the sense of a, what some 69 would call a trust account. In the Yukon the rate 70 stabilization plan, which is called the Diesel Contingency 71 72 Fund, is effectively created as a, on the books of the company, but it's under the control of the utility board, and 73 there's no way that the company can do anything it wants 74 with that fund without getting approval from the board, so 75 in that sense stabilization funds are often on the books of 76 77 a company but subject to the rules and directions of a utility board. 78

MR. BROWNE, Q.C.: Would it be on the books, from your
knowledge of the RSP here, on the books of Newfoundland
Power?

MR. OSLER: I have never looked at it but I would assumethat that'd be the case and I could be dead wrong.

- MR. BROWNE, Q.C.: Or would it be just on the, to be flow
  through to their customers? Is Newfoundland Power off
  the hook here? We have the end users, the industrials
  having to pay, the consumers having to pay, we have
  Hydro having it as a debt, which they're borrowing money.
  What is Newfoundland Power's function here, the middle
  man?
- MR. OSLER: Well, from what I've been reading I gather
  they have their own various funds, weather stabilization
  and their own stabilization scheme so that they seem to, as
  a, if you like, a middle man, have their own additions that
  relate to the exercise which I'd have, I'm not familiar with,
  but they are sort of like a water system with a series of
  reservoirs. We fill them up at various stages as we go

1 down. Eventually it does flow down to the customer, so I

2 trust, unless somebody has found a way to syphon out

3 expenses somewhere else.

4 MR. BROWNE, Q.C.: Can you go to **CA-218**? You made

5 reference to the Yukon's Rate Stabilization Plan, and I asked

6 there for a summary of results of survey, Canadian utilities,

7 regarding rate stabilization plans and description of the

8 relevant plans. Are you familiar with any of these plans?

MR. OSLER: I'm certainly not familiar with Nova Scotia, 9 New Brunswick's or Maritime Electric's. There's nothing, 10 according to this, in Hydro-Quebec, Ontario Hydro or 11 Manitoba Hydro, Sask Power, Atco, (inaudible). I'm aware 12 ... I've been aware at times, I'm not up on it right at this 13 moment, on the rate stabilization approach in British 14 Columbia, but I think it's very much a ... I think you've 15 described it elsewhere in the transcript as very much an 16 overall stabilization to do with our export earnings and a 17 few other things like that. It's not down to customers' 18 specific accounts, if I remember correctly. Northwest 19 Territories, I'm not personally familiar with th is. I think 20 some of my staff are. They haven't got Yukon here, it 21 seems. 22

MR. BROWNE, Q.C.: But the Yukon has one as well, to your knowledge?

MR. OSLER: Yeah. The Yukon ... in the context of what 25 you're talking about here, you would have found that Atco 26 in the days when it was regulated in Alberta, I'm not sure 27 where it is right now, Alberta Utilities typically had fuel 28 adjustment clauses and in the sense that you're using the 29 term here. Somebody talking on the telephone might not 30 think of it that way but Northwest Territories, I believe, 31 certainly Yukon and Alberta Utilities, have fuel adjustment 32 riders which are part of your approach, and then they also 33 have the water stabilization type of funds, which in Yukon's 34 case is called the Diesel Contingency Fund, and the 35 concept is very similar to the hydraulic account you have 36 here, that to the extent that there is an increase or a 37 decrease in diesel generation required on the main system 38 there, due to the water availability being varying from the 39 long-term average, then the effects on diesel costs are put 40 into a, the Diesel Contingency Fund or taken out of it as 41 the case may be. This particular approach was first 42 43 instituted in the late '80s and has been modified and evolved, various stages, during the '90s, and it has 44 developed a certain level of sophistication where it actually 45 stops being utilized or stops having amounts charged to it 46 or something or another when diesel is not on the margin 47 48 in the system because the load is too low, which has happened when the major mine up there closed. So it's a 49 fairly sophisticated approach. It is entirely separate from 50 your treatment of fuel adjustment, which, with two utilities, 51 their run of fuel adjustment, what they call a rider, fuel rider 52

account, they are under direction from the Board and 53 54 indeed order-in-council, which doesn't require the Board's approval, to ensure that the rider is adjusted or installed as 55 56 required from time to time to make sure that fuel prices, fuel costs are being recovered, and they have got directions 57 from the Board up there that if they sit on their hands too 58 long after a fuel price change and don't start to reflect in the 59 rider, the Board doesn't like that so that they ... 60

61 MR. BROWNE, Q.C.: What do we mean by too long there?

MR. OSLER: I think it would be consistent with Mr. 62 Brickhill's evidence, six months to a year. They've sat once 63 64 for a little bit longer than that and the Board didn't like it when it saw them next. And the way they do it is 65 essentially to look at the deficit that they might have built 66 up or, and then look at what they think the price is going to 67 be and try and set a rider that's likely to be stable for a 68 period of time, and what's happened in the last ten years 69 plus, since I've been around, we have had two price, you 70 71 know, spikes in all, so it's worked out. The rider came on one time and it went up by three or points on the rates. It 72 73 paid off, it did okay when the price went down and they were able to get rid of the rider again, and I think it's 74 happening again as we sit here now. We had to put a rider 75 on recently when the price went up and I'll bet you that 76 rider can get reduced now or pulled back again because the 77 price has gone down lower than people thought. 78

79 MR. BROWNE, Q.C.: So it built up there in a brief period of80 time.

81 MR. OSLER: Oh, yes.

82 MR. BROWNE, Q.C.: It's not done year over year as here 83 to build up an account.

MR. OSLER: No, and I think if I can ... when I look to the
history here, you had a technique that went month by
month with a great deal of variability. I mean, there are fuel
adjustment approaches that can conform more closely with
the ideas of stability than the one you've had in
Newfoundland historically, so it got a pretty bad reputation
given the approach you took. The one I'm talking about ...

91 MR. BROWNE, Q.C.: Was it pre-1985 you're ...

MR. OSLER: Yeah, yeah. It was very, very ... if I looked at
some of the evidence, it really did have an effect and it
would drive, I could see where it might drive a reasonable
consumer a little bit frenzied.

MR. BROWNE, Q.C.: So if they had the six-month to the
twelve-month period as other jurisdictions had at the time
...

MR. OSLER: Right, right, and if they tried to stabilize it to
the extent they can, smooth it out rather than, you know,
go to one extreme or the other.

- 1 MR. BROWNE, Q.C.: Are we at the other extreme now?
- 2 MR. OSLER: I think you've gone from one extreme to the
- 3 other, yes. This one has the virtues of stability. *(laughter)*
- 4 MR. BROWNE, Q.C.: What specifically are you suggesting
- 5 that the Board should do with regard to the cost treatment
- 6 of the investment in the Great Northern Peninsula
- 7 interconnection?
- MR. OSLER: If the Board is satisfied that the project was
  prudent, I would recommend that the transmission facilities
  be specifically assigned to the rural customers.
- 11 MR. BROWNE, Q.C.: Why?
- MR. OSLER: Because I think the facility is primarily almost
  exclusively to their benefit and not to the customers' on the
  rest of the system.
- MR. BROWNE, Q.C.: But yet you just told me in referenceto the frequency converters that the paper mills that,
- 17 specific to them, but it should be deemed as common. Is
- that an inconsistency in your position there?
- MR. OSLER: No, because the whole issue to deal with 19 converters was that without debate or dispute they were 20 21 established, the system was established on a basis that was of benefit to all and we're now dealing with the situation a 22 long time later, trying to deal with it fairly and justly. In this 23 case we're dealing with the establishment of this 24 interconnection at its origin and the dispute at its essence 25 is whether or not this is a common benefit to all the 26 customers that were on the system before or is primarily 27 and almost exclusively to the benefit of the customers that 28 were previously there called rural, so we're right at the 29 origin, we're at the nub of the issue at the start and in my 30 opinion that goes to the ... 31
- MR. BROWNE, Q.C.: Wouldn't you agree with me that the Great Northern Peninsula interconnection is of common usage, we have all different classes of rural customers there using that, people in the general category will have fish plants using it up there?
- MR. OSLER: You have a variety of rural customers and 37 they should all ... that's what I mean assigning it to the rural 38 group, the group that would have paid the costs, would 39 have had the cost assigned to them before and then to the 40 extent they weren't paying the cost it would be called a 41 rural deficit, it would be assigned out to a bunch of other 42 people. That's essentially what the situation was like 43 before you built the interconnection. The people that were 44 living there were not paying by any means all of the costs 45 of providing the power, so it seems to me that when you 46 get right down to it what we're doing is shifting, we're 47 trying to find the less costly way of serving these people 48 and if that ... 49

- 50 MR. BROWNE, Q.C.: And would you say this is the less 51 costly way?
- MR. OSLER: Well that's the prudence issue. I have not 52 been persuaded that the Company has convinced me 53 anyway that that's the case but it's close and it's already 54 done, and if the price of oil ... well, never mind, done. But 55 if it has a benefit as a result of, let's assume for the moment 56 57 it is prudent and does lead to some overall cost savings 58 over time, which was my discussion with Mr. Young, then 59 the beneficiary of that would be those who pay the rural deficit because it will simply go to reducing the rural deficit, 60 and I'm very, very concerned that by simply looking at 61 electrons and discussing things without looking at the 62 whole issue here, we say that this is called common, we 63 suddenly with the stroke of a pen assign all these costs to 64 the customers in the integrated system, including the 65 industrials, who, under no circumstances, would pay for 66 the deficit if it was left as a rural deficit under the laws as 67 68 they exist now.
- MR. BROWNE, Q.C.: You stated in your evidence, page
  nine, lines one to two, of your pre-filed second
  supplementary ... I guess that's your last filed evidence.
  Page nine, lines one and two. We're talking about the 1.5
  million which you're claiming in reference to the RSP.
- 74 MR. OSLER: Right.

MR. BROWNE, Q.C.: When did the industrial customersbecome aware that there were inconsistencies in the properoperation of the RSP?

- MR. OSLER: I can only speak to when I became aware, and
  it was in the course of preparing for this hearing. I really
  didn't understand how the allocation mechanisms worked
  until we got the answers to a series of questions that are
  addressed in this second supplementary, so I probably put
  my mind on it some point in November.
- MR. BROWNE, Q.C.: Have the industrial customers
  discussed, well, there's a billing discrepancy, I guess, with
  Hydro's Customer Service Department?
- 87 MR. OSLER: I do not know that.
- MR. BROWNE, Q.C.: If it's a dispute between Hydro and
  the industrial customers concerning a billing calculation,
  wouldn't the appropriate forum for the discussion have
  been between the two parties involved, some form of
  alternate or dispute resolution, you might want to consider
  Ms. Butler's company, rather than in a public hearing such
  as this? (*laughter*)
- MR. OSLER: I'm not aware of this ever having been a
  contractual matter between the parties. In my reading of
  their contracts I didn't see the words "RSP" once. I think
  the matter, this is the first time the matters pertaining to rate

- charges by Hydro to industrial customers have become 1 under the jurisdiction of the Board. I guess this is just one 2 of many issues that's on the table to get sorted out, the 3 4 principles, and how you want to deal with them in the future. It may be that dispute resolution ... I think 5 somebody was asked this earlier by one of the 6 commissioners. It may be here, like it has been in some 7 other jurisdictions, a very good way to proceed but it 8 9 seems to take a bit of getting everybody used to what the ground rules are before you can proceed. I mean, I think 10 there's been a long gap in time here between the last time 11 and the current time. Once the decisions are rendered and 12 rules are set, parties might look to being able to solve more 13 of their disputes through that method. 14
- MR. BROWNE, Q.C.: The industrials would have had a fair 15 opportunity to review their bills as they're given from 16 month to month. Is it really fair to go back now to 1992 and 17 say, yeah, there was a mistake we just discovered in the 18 19 year 2001?
- MR. OSLER: It has taken a long time to get a clear answer 20 as to how these things are allocated. It's not transparent at 21 all from the material that the industrial customers receive 22 along with others on a monthly basis. 23
- MR. BROWNE, Q.C.: If we go back to 1992 and you're 24 suggesting the RSP be revisited at a different rate, aren't 25 you really suggesting that rates be established 26 27 retroactively?
- MR. OSLER: I think the rates are interim, if I'm not 28 mistaken, with the industrials in any event, which means 29 that they're still subject to confirmation by the Board. In 30 the case of this RSP, I don't believe either the industrials or 31 the Board have ever sanctioned a particular approach to the 32 industrials. The Board didn't have jurisdiction at the time 33 this scheme was put in place and I'm not aware of any 34 evidence that the industrials consented to or agreed as a 35 matter of contract to a particular scheme. So I frankly think 36 what's been going on is that I am not the only one who's 37 38 been learning what this is all about, so we've been on an odyssey to find out what really has been going on and 39 whether it is consistent with a whole bunch of principles or 40 41 not.
- MR. BROWNE, Q.C.: Is it your view that the entire RSP 42 Plan is really a form of establishing rates retroactively? 43
- MR. OSLER: I hesitate on the word "retroactively." I think 44 that the RSP Plan is part, an integral part of a rate structure 45 and is reflected as such now in the application because it's 46 in as a schedule in the rates, but I don't think its intent was 47
- to do it all retroactively. The intent was to impose charges 48 that would be felt in the future. 49
- MR. BROWNE, Q.C.: Thank you very much, Mr. Osler.

50

- These are our questions. 51
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. 52
- Browne. Thank you, Mr. Osler. We'll move now to 53
- counsel's questions, Mr. Kennedy, please. 54

MR. KENNEDY: Thank you, Chair. Mr. Osler ... Mr. 55 O'Rielly, I wonder if we could pull up **DRW-1**, page five? 56 This was an exhibit put forward by Hydro early on in the 57 hearing actually and for the purposes of some of the 58 questions I wanted to ask you about the classification of 59 transmission in particular to demand and energy, and I 60 think that this map will get us there, and with the assistance 61 62 of Mr. O'Rielly helping us tip toe around through the 63 geography of the province. I fully understand that you may not be intimately aware with some of the more remote 64 locations. But as you know, one of the principal issues in 65 this application that's at issue is the allocation of, or the 66 classification of transmission (inaudible), and we've heard 67 a lot of testimony and I know in your subsequent or 68 69 supplementary evidence you've taken exception, for instance, to some of the positions of Dr. Wilson and others 70 71 regarding that, so I just wanted to see if I understood or make sure that the differences there were clear to all. I 72 guess maybe what I thought I would do is just start first 73 74 with the summation, if you will, of your position on the issue, and if I understand it correctly initially or principally 75 76 you agree with Hydro's position that generation-related costs should be classified to demand and energy in 77 accordance with the system load factor, is that correct? 78

MR. OSLER: Correct. 79

MR. KENNEDY: And that generation specific transmission 80 plant should be treated similar to the generation plant itself 81 in that it too should be classified to demand and energy in 82 accordance with the system load factor. 83

- MR. OSLER: Correct. 84
- MR. KENNEDY: But that, and this is where you perhaps 85 disagree with Dr. Wilson but continue, I think, to agree 86 with Hydro's position, which is that the grid transmission 87 88 related costs should be treated all to one and not to demand and energy, is that correct? 89
- MR. OSLER: They should all be treated as classified to 90 demand, yes, based on the practice as I've seen. 91
- 92 MR. KENNEDY: Okay. So, Mr. O'Rielly, I wonder if we could just put our cursor on Cat Arm, which is up by 93 Harbour Deep up there. Yeah. (laughter) The blind 94 leading the blind here, but ... 95
- UNIDENTIFIED SPEAKER: It's a long way from the 96 97 southern shore. (*laughter*)
- MR. KENNEDY: That's Cat Arm, Mr. Osler. 98

- 1 MR. OSLER: Okay. Where I see his hand, okay.
- 2 MR. KENNEDY: Alright. And that's a generation unit 3 owned and run by Hydro.
- 4 MR. OSLER: Okay.
- 5 MR. KENNEDY: And as I understand it, that's a hydraulic 6 generation plant and so being a hydraulic generation plant
- generation plant and so being a hydraulic generation plantyou would agree that the cost of that plant would be
- solution of the s
- 9 with the system load factor.
- 10 MR. OSLER: It would be my understanding, yes.
- MR. KENNEDY: Okay. And as I understand it, the red line that goes from Cat Arm there down to where it ties into, and I'm going to call it the grid and you can correct me if I'm wrong, but that that line would be called a radial line, is that correct?
- MR. OSLER: I'll accept it and I don't know whether, what terminology you would necessarily use here, but ...
- 18 MR. KENNEDY: Okay.
- MR. OSLER: ... it would make sense it was called a radialline.
- MR. KENNEDY: Okay. So for the purposes of this question let's just assume it's a radial line, I guess. So your, in your professional opinion, based on the overall operation of the connected electrical system for the Province of Newfoundland, the Cat Arm generation plant, together with that radial line, would be classified to demand and energy in accordance with the system load factor.
- MR. OSLER: Let me be very careful here in terms of local facts. I don't know anything about the history of this line and whether there might be other matters under debate or (inaudible), but it wouldn't surprise me if you told me that that line had been built only because of the generation and therefore in the past it had already been classified on the
- same basis as the generation. Just looking at the map ...
- MR. KENNEDY: Sure, and I'll ask you to accept that there's
  not much more up in Cat Arm other than a generation plant,
  so there wouldn't be much other reason to build this line
  from the Cat Arm plant ...
- 39 MR. OSLER: Alright.
- 40 MR. KENNEDY: ... except to provide the electricity or the 41 energy generated from that plant to the grid.
- 42 MR. OSLER: There can be some healthy debates is all I'm 43 saying over exactly which lines fit this description and I
- 43 saying over exactly which lines fit this description ar44 don't want to get dragged into it inadvertently here.
- MR. KENNEDY: And I appreciate that and I'm not talking
  about specifics but I chose this one in particular ...

- 47 MR. OSLER: Okay.
- 48 MR. KENNEDY: ... because of it's, if it, hopefully, as I
  49 understand it, it's free of such historical tainting.
- 50 MR. OSLER: I don't know in fact whether that line has 51 been so classified, which you haven't told me that.
- MR. KENNEDY: Okay. Assuming that it is though, that it 52 is a line built specifically for the purposes of delivering the 53 54 energy generated from that Cat Arm plant to the grid, in accordance with your opinion, consistent with your report, 55 you would for the, treat the cost of that radial line similar to 56 the cost of the generation plant itself and split it among 57 demand and energy in accordance with the system load 58 59 factor.
- 60 MR. OSLER: Based on the assumptions you've given me 61 to work with, yes.
- 62 MR. KENNEDY: Okay. Alright. Let's just leave that aside 63 for a second and go to Bay d'Espoir. That's the one in the 64 middle, Mr. O'Rielly. There you go. Where the cursor is 65 now is generally where Bay d'Espoir is located, and 66 actually, Mr. Osler, if you turn around you'll see then a 67 more detailed mapping of that, just to get a better feel for 68 what's taking place there in the Bay d'Espoir area.
- 69 MR. OSLER: Uh hum.
- 70 MR. KENNEDY: Okay. And again the Bay d'Espoir Hydro
  71 hydraulic generating station is itself, from a cost
  72 perspective, classified to demand and energy in accordance
  73 with the system load factor.
- 74 MR. OSLER: I assume it is, yes. It should be.
- MR. KENNEDY: And the specific, lines built specifically to deliver the energy generated from the Bay d'Espoir plant to the grid, to the main transmission grid, would, assuming there's no historical tainting again of the line, historical factors that need to be taken into account, would be treated from a cost perspective the same as the plant itself.
- 81 (*10:45 a.m.*)
- MR. OSLER: Well, that's the principle that you're looking 82 at. This map, and where Mr. O'Rielly's hand is, it looks like 83 the grid in this jurisdiction and Bay d'Espoir are very 84 closely inter-tied. I mean, the whole system is developed 85 with this in mind so that I don't know where there'd be any 86 room for directly assuming that it is a part of that little line 87 in there that's only for generation or whether it's been 88 viewed historically as the evolution of the grid, going back 89 to frequency converter questions and things like that. 90
- 91 MR. KENNEDY: Right.

MR. OSLER: So there may not be a distinction here. I
wouldn't be surprised if there wasn't in this instance.

MR. KENNEDY: As I understand it though, the point of 1 departure from your position and that of Dr. Wilson 2 specifically in regards to the classification of costs of the 3 4 transmission grid itself is that the transmission grid from Dr. Wilson's perspective should be given a demand 5 component rather than being treated purely as energy, is 6 that right, or vice versa, sorry, that it should be treated in 7 part as energy and not purely demand? 8

MR. OSLER: I take it that that's his position but I think if 9 you ... I think my comments were that I wasn't completely 10 sure also as to whether he was focusing on the type of 11 exception that we've been talking about already or whether 12 he was talking about something much broader than that for 13 14 the whole transmission system. I wasn't clear and I was waiting for his testimony to find out more about that, but if 15 ... I've assumed that that might be the case, the way you 16 put it, that he was implying that on the main grid, where we 17 don't have a case of a type we've been talking about, that 18 19 somehow or other some portion of those costs shouldn't be, should be classified to energy rather than all the costs 20 that currently being classified to demand. 21

MR. KENNEDY: Now the transmission line, these main 22 transmission lines that go from Bay d'Espoir over towards 23 the Avalon Peninsula and would hook up somewhere 24 around Goobies, which is ... Mr. O'Rielly will show you 25 where Goobies is. That portion of the line there, going from 26 the Bay d'Espoir hydraulic generating station to the next 27 main point, if you will, on that section of the transmission 28 line, you would, as I understand it again, just ignoring for 29 a moment the historical possibility there may be some 30 historical reasons to treat it differently, that if this was just 31 built yesterday, for instance, that you would treat that 32 portion of the line as being solely demand related and that 33 you would not allot an energy component to the cost 34 classification. 35

MR. OSLER: Right. If there wasn't a line going north from 36 Bay d'Espoir and this looked like it was just a hydro plant 37 built out, and I'm not meaning to be at all pejorative, 38 assuming I'm from Winnipeg, I know nothing, out in the 39 wilderness, you know, like up north, we call it the 40 wilderness and it has nothing to do with the wilderness, 41 believe me, but then I might have a different point of view, 42 but when I see the lines coming through and keeping going 43 and everything else, it looks like it's a grid serving people 44 on both sides and all this type of stuff, and therefore would 45 probably be the type you and I just discussed. 46

MR. KENNEDY: Okay. So just so I understand the
rationale itself, just going back to Cat Arm again and ... the
reason that you classify Cat Arm to demand and energy is
because in that when the plant is built it's built to serve
both, correct? It's built to provide capacity to the system
but it's also built to provide energy to customers.

MR. OSLER: Yeah. If you give me a bit of tolerance here, 53 the fact that something is a hydro plant wouldn't 54 automatically mean it's classified this way in my 55 56 professional experience. I can give you, again in Yukon, a facility that was, a hydro facility built in Whitehorse called 57 Whitehorse No. 4, which was built to take surplus summer 58 flows and translate them into energy and thereby save 59 diesel. When it was built the evidence was it would have 60 61 no effect on the system's capability to meet its peak in the middle of winter, so it had zero capacity capability 62 contribution at the time it was planned and it therefore was 63 classified by the Board entirely to energy, and I can think 64 in theory that there could be cases the other way around 65 66 where you could be classifying a lot of the cost to capacity because it's built that way. So going to the heart of your 67 question, you go to the time period it was designed and 68 built and what was the evidence as to what it was doing, 69 and we go to system load factor approach as a sort of a 70 simple way to deal with the bulk of the facilities of this 71 nature rather than trying to go through a deal with each 72 one and driving ourselves nuts. 73

MR. KENNEDY: Sure. So as I understand it, one of the
underlying principles of this classification model is that the
hydroelectric generating plant is often required to be built
in remote locations.

78 MR. OSLER: Right.

79 MR. KENNEDY: And so the plant itself is being built to80 provide energy to customers in part.

81 MR. OSLER: In part.

MR. KENNEDY: That's normally one of the reasons why
you would build a hydraulic generating station, to deliver
energy.

85 MR. OSLER: Right.

MR. KENNEDY: And, but it's also, by virtue of being built,
also provides capacity to the system as well.

MR. OSLER: Yes, and because you're using water, you will 88 89 probably design the facility to get the most value from the water, so you often build up the capacity of the facility so 90 you can pond the water at least on a daily basis so you 91 can, like, store it during the night and run it during the day 92 when you've got your peaks, or you might store it, you 93 94 know, if you got a little bit more storage capability, you might store it during the summer in order to use it during 95 the winter, and if you got lots of storage capability like 96 Quebec or something, you might store it over years, okay, 97 so you don't want to waste the water, is the principle. You 98 want to get the most value for it. So you tend to have 99 capacity for sure as one of the elements in what you're 100 building it for, but it's certainly not the only one. 101

1 MR. KENNEDY: Sure. And so the classification of the

2 cost for this purpose has a lot to do with the system

planning or the system planning that took place at the timethat it was constructed, is that right?

5 MR. OSLER: That is correct.

6 MR. KENNEDY: Chair, that's perhaps a good place to 7 break.

8 MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.9 Kennedy. We'll break until ten after.

(break)

11 (*11:15 a.m.*)

10

MR. NOSEWORTHY, CHAIRMAN: Thank you. Youcontinue, Mr. Kennedy, when you're ready, please?

MR. KENNEDY: Thank you, Chair. Mr. Osler, I just 14 wanted to just make sure I understood something that you 15 had indicated just a moment ago when we were dealing 16 with Bay d'Espoir plant, and I was asking you about the 17 classification of the transmission line going from Bay 18 d'Espoir to Goobies, that line there, and I wonder if we 19 could make an assumption first in order to give you a 20 hypothetical, and the assumption is that there's no line 21 going from Bay d'Espoir up to Bishops Falls, so that for the 22 purposes of this hypothetical what we have is the Bay 23 d'Espoir hydraulic generating station and then this 24 transmission line going to Goobies, and I'd also ask you to 25 take it as a given that there's not much between those two 26 points, and so that the only purpose of that transmission 27 line would be to get the energy and capacity, if you will, 28 generated from the Bay d'Espoir plant to Goobies. And if 29 I gather correctly, you seem to indicate that that would 30 impact on your opinion about how the costs for that 31 transmission line should be classified. I'm wondering if you 32 could just elaborate on that? 33

MR. OSLER: Well, we're dealing with a hypothetical?

35 MR. KENNEDY: Uh hum.

36 MR. OSLER: And the experiences that I've seen where people get into classifying transmission lines on the basis 37 of both generation energy and capacity as per the 38 generating plant have been sort of like your Cat Arm 39 example you gave earlier, something where there's a line 40 going in typically one direction that doesn't, on its face, 41 have a lot of other purposes associated with it in terms of 42 serving loads or making a system more reliable or a whole 43 bunch of other issues that can surface, and appears to have 44 been something that was put in place because of the 45 generation being developed. Probably was part and parcel 46 of the planner's thought process, etcetera, that they had to 47 build this line in order to get the generation facility into the 48 marketplace. The most dramatic examples I'm aware of are 49

in northern Manitoba, the long high voltage direct current 50 HPDC lines that come from the north classified in the way 51 that you and I are talking about at that moment. There's a 52 53 myriad of details you could get into about other types of lines and stuff like that that make one cautious about going 54 too far with simple principles. Now, so the hypothetical 55 examples you've asked me to think about were moving in 56 the direction of making the Bay d'Espoir plant and the 57 transmission line flowing and going in one particular 58 direction from it maybe, might, under some circumstances 59 meet these types of assumptions. Hypothetically, it might, 60 and, but it would be something you'd get into a lot more 61 62 detail than you and I are getting into here, and in the case of a system where the lines do, in fact, run in different 63 directions and it's integral to the development of a grid for 64 the whole island, there could, as well, be completely 65 offsetting thought processes that would make this quite 66 apparent to be a grid system be normally assigned on the 67 basis of demand, so we'd have to go into a lot more detail 68 beyond the hypothetical. 69

MR. KENNEDY: So just following along with that
hypothetical, if there were no transmission line going from
Bay d'Espoir to Grand Falls, Bishops Falls, then the
transmission line that goes from Bay d'Espoir to Goobies is
possible that that could get classified more in accordance
with how we would classify the radial line going from Cat
Arm down to the first point in the grid?

MR. OSLER: It's hypothetically possible that someone
could come up with enough assumptions that would make
a case for doing that. I'm not aware of any such case
having been developed in practice.

MR. KENNEDY: Just going to your example in the Yukon,
you indicated that it was your experience that there was a
plant built in the Yukon which provided energy, I believe it
was, to the ...

MR. OSLER: The one you and I were talking about beforethe break?

87 MR. KENNEDY: Yes.

MR. OSLER: It's a 20 megawatt facility on the Yukon River
called Whitehorse Number 4. It was built in the 1980s
entirely to take the summer run off, if you like, and used it
to displace diesel when the load on the overall system was
big enough or high enough to do that, so it was displacing
energy and not contributing at all to the system capability
at peak.

MR. KENNEDY: Okay, so then I guess that's the
distinguishing feature, isn't it, that it is providing capacity
to the system that that example you gave us, the
Whitehorse Number 4 is providing capacity but the
purpose of it being built was to provide energy?

- MR. OSLER: The evidence was that it provided nothing, it 1 was not designed to provide anything to the system peak, 2 at the coincident peak in the wintertime because it 3 4 theoretically could not. The firm river flows were not sufficient to utilize the plant, and just to bore you with a 5 little bit more, it's called Number 4 because there were three 6 other ones built first, and the other three are also 20 7 megawatts and they're sufficient to, if you like, use the river 8 9 flow, if it's available, under firm winter conditions, so those 20 megawatts could probably run all year round or virtually 10 all year round, but the other 20 megawatts when they were 11 added on were literally only there to get the summer flow 12 and they didn't contribute anything towards meeting the 13 system peak at wintertime because they wouldn't meet all 14 the tests that you'd need to do that. So in a layman's sense 15 they provided the capability to have additional energy 16 generated and capacity supplied, but in a practical planning 17 sense and on review, they did not contribute to the system 18 peak capability, which is what capacity is all about. 19
- MR. KENNEDY: Okay. On the system peak capability and 20 the coincident peak, I had a few questions about that 21 because there's parts of it that I'm afraid I'm still a bit 22 muddled on. There was a statement you made during 23 24 cross-examination by, I believe it was counsel for Newfoundland Power, regarding the peaks in the system, 25 and my notes indicate your statement was something in 26 accordance with that this system has only one peak per 27 year, and when it occurs is irrelevant? 28
- MR. OSLER: Okay. It may have been with Hydro, butanyway, okay.
- MR. KENNEDY: Okay, and I guess from a lay person's 31 perspective, it's always going to be the case that there's 32 one peak in the year for any system? In other words, it 33 seems like the methodology employed is to look at the 34 system peak on a day-by-day basis, determine when the 35 system peak occurred and then calculate what the 36 coincidence is for the different customer groups during that 37 peak period, correct? 38
- MR. OSLER: I can understand that perspective. What I'm 39 getting at with the concept of two system peaks, I think Mr. 40 Brickhill raised it first, in the American situation they had 41 seen the evolution of the summer peak, if you like, with air 42 43 conditioning and its surpassing even to the south of Manitoba, surpassing the winter peak, but I think the 44 planners, at least in the northern part of the States, would 45 still say it hasn't surpassed it by such a level that they want 46 to just say they've only got one peak. They literally worry 47 about two peaks in their operation of the system, one in the 48 summer and one in the winter, so it's in that sense of the 49 word. Technically there may be one of them that's always 50 going to be bigger any one year, but they would probably 51 say that to plan and design this system they've got to be 52

- conscious of these two system peaks when they're buildingup their capability.
- 55 MR. KENNEDY: So that if we just go with a hypothetical
- <sup>56</sup> and we say that there's 1000 megawatt peak that takes place
- 57 in the month of January and an equal peak that takes place
- 58 in the month of July.
- 59 MR. OSLER: Uh hum.

60 MR. KENNEDY: And all other months in the run of the 61 year are substantially less than either one of those peaks.

62 MR. OSLER: Okay.

63 MR. KENNEDY: Then, as I understand it, we would clearly 64 have a two peak a year and that one of the underlying 65 presumptions is that the participation, if you will, by the 66 various customer groups, in contributing to that peak, may 67 be different in the January month than it would be in the 68 July month?

69 MR. OSLER: Right.

MR. KENNEDY: And that would drive in part the rationale
for why you should go with the 2-CP as opposed to a 1CP?

73 MR. OSLER: Right, and in the hypothetical example what's important is that there is a peak in the winter. We may or 74 75 may not have it happen in January. It may be December, it may be February or whatever, and there's a peak that's 76 going to occur in the summer, we're fairly confident of that. 77 It may happen in July, it may happen in June, it may happen 78 in August. In that sense, to put it back to the words you 79 gave in the beginning, the fact that we've got these two 80 peaks is what really matters. Whether they occur in the 81 months that you and I are talking about or in a nearby 82 month, to paraphrase what I said earlier, is irrelevant. 83

MR. KENNEDY: And so let's go with another ... and so 84 first of all, in that hypothetical, as I say, the underlying 85 presumption is that the customers contributing to those 86 peaks are likely to be different, at least proportionally, 87 because of the fact that it's over two completely different 88 time periods, and the mix would be different. The industrial 89 classes may be using energy more in the winter and less in 90 the summer or vice versa, and Newfoundland Power, for 91 instance, may be using more energy in the winter and less 92 in the summer or vice versa, and that that ... those changes 93 that take place on a seasonal basis are what provide at least 94 one of the rationales for why you would go through the 95 effort of calculating a 2-CP allocation? 96

MR. OSLER: Right. I mean, you would assume that that's
possible, so the effort would be undertaken in case those
issues arose in order to make sure you were fairly treating
the different customer classes. There would be other
issues that arise when you start going beyond 1-CP, and

- 1 they would be, you know, how much importance do you ...
- 2 is there equal loss of load associated with each one or is
- 3 one more important than the others, and do you, therefore,
- 4 weight each of the two peaks equally or do you give more
- weight to the one in one time period versus the other?Those are other questions that might arise in the
- 7 hypothetical.8 MR. KENNEDY: And just to follow that for just ever so
- briefly, that would be impacted in part by the mix of how
  the energy is actually produced or the capacity is produced
  at that given month between hydrological production and
- 12 thermal production?

MR. OSLER: It might be. I mean, you might have a lot of
water around in the summertime but not much in the winter,
and that might change your assessments. It might also be
the nature of the customer loads or all the things that could
contribute to probabilistic calculation.

18 (*11:30 a.m.*)

MR. KENNEDY: Now, just taking another hypothetical. If 19 we had peak of 1000 megawatts in the month of January 20 and an equal peak of 1000 megawatts in the month of 21 February and all other months had substantially less ... 22 place substantially less demand on the system than either 23 one of those months. Would we use a 2-CP method then 24 at that point, and how would you allocate between those 25 two months? 26

MR. OSLER: I think we would be ... we were talking a 27 hypothetical. In practical terms, when you get two months 28 side by side and a peak happens to occur of the same order 29 and magnitude in each of the two months, you have a ... 30 you would assume you'd probably have a common set of 31 conditions and circumstances affecting both the way in 32 which you supply the energy and the nature of the 33 customer load, so that ... and it may happen that it's 34 occurring that way one year and a different way another 35 year, etcetera. I would tend to think of that more as 36 examples of the one peak system rather than two peaks, for 37 the reasons you've gave me, that when you get them well 38 spread apart, summer versus winter, you do get naturally a 39 bunch of concerns about different characteristics for the 40 generating system and different characteristics for the 41 customers that make you want to think about examining 42 them very carefully. 43

MR. KENNEDY: And so if, using that same hypothetical,
we had a peak of 1000 megawatts in the month of January
and 1000 megawatts in the month of March and all other
months paled in comparison to those two months, then we
start down towards the road of going to a 2-CP,
potentially?

50 MR. OSLER: Probably not. It'd probably all be called the

winter. I mean, what happens in practice, what we have to 51 remember is that when we do the cost of service we're 52 53 doing it on a prospective basis and for the purpose of 54 these hearings, so look at what the utility that's preparing the cost of service does, it doesn't predict a roaming peak, 55 it predicts it in a certain month using whatever forecasts it's 56 received, and we tend to go with that for the purpose of 57 allocating. If it actually turns out to be a different month, 58 59 the underlying assumption is that probably we're treating everybody still fairly if we ... the same group of characters 60 that would have been there in the month that the utility 61 forecasts are probably there in the other month nearby 62 when a peak occurs, so we don't need to get ourselves in 63 a lather or we missed a month. We trust, if you like, in 64 terms of an operating assumption that we've still dealt with 65 everybody reasonably fairly. 66

Now, again, during your cross-MR. KENNEDY: 67 examination by, I believe it was counsel for Newfoundland 68 69 Power, there was an exhibit which provided the ... that was the seizure inducing exhibit, although I thought it was more 70 coma inducing than seizure inducing, but it showed the 71 peaks on a month-by-month basis historically, and one of 72 the things that struck me when I was looking at that exhibit 73 74 was the fact that really there's an awful lot of similarity ... or that's probably not the right word. The difference between 75 the peaks on a month-to-month basis is, in many cases, 76 quite small. If you look at, for instance, the four or five 77 78 winter months, December, January, February, March, that it may be 1310 megawatts one month and then it may be 79 1250 or 1275 or 1285 in a corresponding month, that there 80 isn't a dramatic difference between the peak in one month 81 than the peak in another month, and that that holds true for 82 83 several of the months in the run of a winter, and I'm wondering wouldn't that then imply that, well, really what 84 we have is a whole peak that takes place over the run of the 85 whole winter? And is it still a safe bet then from your 86 perspective, to assume that the mix of the contribution by 87 different customer groups over the whole winter is 88 consistent, and therefore you can still stick with the 1-CP? 89

90 MR. OSLER: I think in terms of issues about mix I haven't seen evidence that would suggest that that causes a big 91 problem. What happens when you go from 1-CP to 4-CP is 92 you do more averaging, and that tends to, as one of the 93 94 counsel was asking me, tends to lead you inevitably, as you extend the time that you average over, to taking it 95 away from being a capacity peak more towards and average 96 demand, which frankly, takes you away from the whole 97 point of capacity pricing, so I think it's not so much that the 98 mix changes, it's that the net result of what you're doing 99 tends to move away from the point of the exercise, which is 100 capacity allocation. 101

102 MR. KENNEDY: But when ... and if I understand it

- 1 correctly, again, one of the underlying rationales of the CP
- 2 allocation is that it plays into the system planning itself,
- 3 that when Hydro plans its system it must take into account
- 4 what the coincident peak will be?
- 5 MR. OSLER: Right. The amount, not so much the date.
- 6 MR. KENNEDY: That's correct. That it's forecasting that 7 at some point in time during the year that it will have to 8 have the capacity to produce 1315 megawatts of energy?
- 9 MR. OSLER: Correct.
- MR. KENNEDY: Now, from a system planning perspective though when Hydro is actually designing its system wouldn't it look to more of a demand average rather than that single coincident peak in the design of its system?

MR. OSLER: Well, it's a question you would put to their 14 planners, but it's my expectation that their answer would be 15 no. In terms of dealing with the capacity related issue, 16 they'd better think about the capacity that could occur at 17 any one moment and the worst moment in the year, 18 because if they don't supply it they're going to have 19 trouble. When they're thinking about their energy costs 20 they should think about the duration of the system 21 22 requirements at various levels, because if it's going to be at such and such a plateau for a long period of time then 23 you're using high cost fuel to meet it when you could use 24 a cheaper energy source if you planned for it, then you'd 25 think about that, but that's literally energy planning as 26 distinct from capacity planning in the sense that you and 27 I are using the term and what would apply to a coincident 28 peak allocation debate. 29

MR. KENNEDY: Okay. Now, I take it you're aware that Hydro classifies its turbine generated energy ... or turbine generated electricity, just for the lack of ... for the word, just to avoid the classification words for a moment. That it classifies all that to demand rather than energy?

- 35 MR. OSLER: I gather, yes.
- MR. KENNEDY: And is my understanding correct that the
  reason that they do that is because, well, the turbine is
  actually being built to satisfy those peaks that occur, and
  therefore, the turbine is specific to providing demand, that's
  the rationale that Hydro is using?

MR. OSLER: I haven't reviewed it in detail, but I would
assume that's their rationale, that they'd never run that
turbine unless they had a very ... either an emergency or a
spike at the peak.

- MR. KENNEDY: Okay, and a turbine you would normallylocate close to the source of close to where the demand is
- 47 required, wouldn't you?
- 48 MR. OSLER: All things being equal. I mean, you might

have one out in the end of a long line in order to give
stability in a line shutdown or something, but since you
can move the turbine very easily you'd tend to think you
might put it where the load is.

53 MR. KENNEDY: And you'd put it close to where the load 54 is, presumably, because you can and that would avoid just 55 load loss over the lines themselves, correct?

56 MR. OSLER: Correct.

57 MR. KENNEDY: And that's the principal difference behind 58 the fact that you've got a turbine being placed close to 59 where you need the load and it has a specific use of 60 satisfying demand during peaking requirements, and so it 61 gets from a cost allocation, all allotted to demand? Am I 62 right so far?

63 MR. OSLER: Yes.

MR. KENNEDY: Okay, and that in the case of hydraulic
generating it's often remote from the load and it's being
built both for the purposes of providing capacity to the
system but also to generate energy?

MR. OSLER: Correct, but you have to keep in mind that 68 we're focusing a lot on generating units and the different 69 reasons as to why you could classify them differently, but 70 my understanding is that historically the classification of 71 72 transmission plant was really done on the grounds that the planners looked at the transmission facilities and said we 73 have to build them and design them to meet their peak and 74 they weren't interconnecting it with generation, okay, so in 75 some of my conversations with people that are very heavily 76 oriented that way, I get told, you know, very simple, it's 77 transmission line. We build it to meet the peak, and what's 78 the issue? And you have to get to the stage and 79 discussion with such people to even bring generation into 80 bear. They just say it looks like a transmission line, it is a 81 transmission line and it should be treated this way. I mean, 82 we are adding a level of thinking and everything else to this 83 to tie the generation to it in the first place. It's the 84 exception, not the rule, to think about generation when 85 86 trying to classify a transmission.

MR. KENNEDY: Okay, and I understand your position. I
guess what I was just ... just to finish the thought. The
difference between them is that in the case of the turbine
there's no need to build a transmission line to get the
demand delivered to the load?

92 MR. OSLER: Correct.

MR. KENNEDY: In the case of the generating station there
is normally a requirement to build a transmission line to get
the demand driven to the load, delivered to the load?

MR. OSLER: Well, you're talking about the hypotheticalswith hydroelectric generation?

# 1 MR. KENNEDY: That's right.

MR. OSLER: And there'll be a certain degree of that, I 2 suppose, with every single plant. Which just to drive the 3 point home, I mean, you put a coal plant near the load but 4 it wouldn't necessarily be in the middle of the city, you'd 5 put a nuclear plant maybe a little bit further away. I don't 6 think you'd find planners getting into trying to classify the 7 transmission hook ups to those plants. It's something 8 separate than transmission grid, so you really have to go 9 outside the norm, like a very distant hydro generation 10 plant, in my experience, anyways in Canada before 11 someone can overcome the natural tendency to say 12 transmission is classified as demand, to say, no, no, this 13 particular transmission is different, it is so clearly different 14 that we do have to deal with it differently. If you get my 15 drift? 16

MR. KENNEDY: No, I understand, and so in some cases,at least in some hypothetical cases, a transmission line can

- 19 be classified as both demand and energy?
- 20 MR. OSLER: Correct.

MR. KENNEDY: Okay, and that it's a case of the system planning, the purpose of the generating plant and its remoteness from where the energy is actually required?

24 MR. OSLER: Correct.

MR. KENNEDY: Okay. That's all the questions I have,Chair. Thank you, very much, Mr. Osler.

27 (11:45 a.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
Kennedy. Thank you, Mr. Osler. We'll move now to
redirect by Hydro, please, Mr. Young?

31 MR. YOUNG: My witness.

32 MR. NOSEWORTHY, CHAIRMAN: Early morning. Yes,

Mr. Hutchings, please, if you could proceed with your redirect?

35 MR. HUTCHINGS: Yes, thank you, Mr. Chair. Firstly, Mr. Osler, I just want to clarify something in the transcript that 36 doesn't seem to read in accordance with my recollection. 37 Looking at the transcript, if you we can bring it up, of 38 November 29th, 2001, at page 45 in the electronic version at 39 lines 7 through 9. You were discussing there the question 40 of the prudence of the Great Northern Peninsula 41 interconnection, and the sentence at the end is recorded as 42 followed, "In order to do that," and you're speaking there 43 of the investigation of whether or not the costs should be 44 disallowed, "you would need a lot more information, none 45 of which was asked, and not offered." Can you just explain 46 for us what you had intended to say, what you did say, 47 perhaps, at that point? 48

49 MR. OSLER: Can I just read the ...

50 MR. HUTCHINGS: Sure.

51 MR. OSLER: I would think it would be in order to do that, which is to do that type of assessment, you would need a 52 lot more information, probably some of which was asked 53 and not offered or a lot of which was asked and not offered, 54 one of those two might have been what I'd said, because 55 56 we did ask questions of the applicant to give us an assessment of the situation with and without the line going 57 forward and they declined to answer that. It was asked in 58 many different ways and declined in a fairly consistent 59 way. 60

MR. HUTCHINGS: Okay, so the intent was to say that
there had been some questions asked but information, not
all of the information you would need to reach a conclusion
was received?

#### 65 MR. OSLER: Correct.

MR. HUTCHINGS: Okay. That's fine. I just wanted to turn 66 now to your discussion on Friday with Ms. Butler as it 67 related to your second supplementary evidence, and 68 specifically, the effects on the RSP of the continuance of 69 70 Albright and Wilson and Royal Oak Mine loads in that plan 71 for the purpose of calculation of the RSP. I don't think we necessarily need to go to it, but it's around page 28, I think, 72 onwards, of the transcript of November 30th. You had 73 74 discussed with her the significance of the number which was included in your evidence, which was a number of 75 \$415,810 which she suggested, at page 31, around line 37, 76 was the amount that the industrial ... according to your 77 suggestion, that the industrial customers balance would be 78 79 worse off, and your answer there at line 39 goes on to say that was the number used as for an example on page 9 and 80 it appears to be incorrect. It doesn't go to the principle on 81 page 8. Can you explain for us the significance of that 82 number \$415,810 and how it comes to be calculated and 83 used for the purpose of the RSP? 84

85 MR. OSLER: I think there was an exhibit Ms. Butler ... or a 86 piece of paper that was put on the record that showed that this number reflected, \$451,810 reflected the loads that had 87 been forecast for Albright and Wilson and Royal Oak and 88 the rate that was assumed in the ... the rate that is charged, 89 sorry, today to industrial customers, 19.34 mills, so that the 90 application of the forecast and that rate lead to the 91 calculation of \$415,810, so that's clear. How it is applied in 92 the RSP is, I think, where it isn't clear. 93

MR. HUTCHINGS: So have you prepared a further
schedule to try to illustrate what happens with that number
under the provisions of the current RSP?

97 MR. OSLER: Yes.

5

- 1 MR. HUTCHINGS: Okay. I'd ask to have that circulated 2 now, Mr. Chair.
- 3 MR. KENNEDY: IC No. 6, Chair.
- 4 MR. NOSEWORTHY, CHAIRMAN: Thank you.

#### EXHIBIT IC-6 ENTERED

MR. HUTCHINGS: Perhaps you could just outline for us
the origin of this exhibit, IC-6, which is headed Impact of
Albright and Wilson and Royal Oak Mine on NP and IC
RSP and indicate how far beyond where we were on Friday
this particular exhibit takes us?

- MR. OSLER: Well, this exhibit compares with NP-11, and 11 12 NP-11 had put in the numbers and in columns one, two and three. It hadn't bothered to show total actual, but it doesn't 13 matter. It had showed the revenue mill rate and it showed 14 the revenue loss as totalling to \$415,810. It had showed the 15 last set of columns, the net mill rate and the numbers in the 16 17 last end of the page. It did not show the cost of Holyrood mill rate and the cost savings which totalled the \$442,466, 18 so that's sort of where we were on Friday. The point that 19 needs to be understood is that the RSP treats the revenue 20 amount, the \$415,810 differently than it treats the cost 21 savings amount, which is the \$442,466, as regards 22 allocation. The revenue loss is directly assigned to the 23 class that was forecast to have paid the revenue, in this 24 case, industrials, so it's our foot down below here in 25 26 amounts allocated, under the revenue column of \$415.810. all of it is allocated to IC and it's a charge to the RSP 27 because that's a deficiency in revenue from the point of 28 view of Hydro. 29
- 30 MR. HUTCHINGS: It might help us, I think, at this point, to
- look at IC-271, revised. Okay. The page 2 of that responseshows the summary plan balances?
- 33 MR. OSLER: Right.
- MR. HUTCHINGS: And I think this shows us an allocationboth of costs and revenues to the two plans?
- MR. OSLER: Right, and the point of this answer was to 36 explain the issue that goes beyond what we were talking 37 about on Friday, the allocation of these numbers, and it 38 shows you that the whole answer starts from the costs 39 versus the revenues. When we're talking about Albright 40 and Wilson and Royal Oak they are part of Column 2 here 41 under industrial island. They are part of the ... they went 42 into the calculation of the so-called revenues, and there's 43 a table that it refers to in here that does it in more detail, but 44 you wouldn't understand ... they don't show you the 45 individual customers in the table, but if you went back to all 46 the sources, the Albright and Wilson, Albright and Wilson 47 and Royal Oak numbers are in the calculation. 48
- 49 MR. HUTCHINGS: Okay.

MR. OSLER: Okay, so that's the first element, and it's also 50 shown, without having to jump back and forth to it, at page 51 A-2 of my final November testimony where the revenue 52 component is shown in one part of the page and the fuel 53 components, as they're so-called, are shown on the other, 54 and the breakdown that you see here, the 952,251 is shown 55 there and the 78,183 ... I showed 184, but it's shown there, 56 so I was using this exhibit 271 to document this stuff in the 57 58 appendix.

MR. HUTCHINGS: Okay, and while we're dealing with the
revenue question, if we could look at page 4 of 7 of 271.
This shows, I believe, how the revenue adjustment is
calculated?

- 63 MR. OSLER: Correct.
- 64 MR. HUTCHINGS: Okay.

MR. OSLER: And it shows that they are effectively 65 looking at the current year actual sales for industrial 66 67 customers 1,245,157 megawatt hours and they're comparing it to the 1992 test year sales, 1,249,200 megawatt hours. In 68 69 the test year sales will be the 21.5 ... 21,500 megawatt hours from Albright and Wilson and Royal Oak. Of course, they 70 will contribute zero to the current year sales. The variance 71 is then charged at the going current energy rate, which in 72 the current year we're talking about there is 1.934 cents or 73 74 19.34 mills, and that is then credited to or charged to the RSP for the industrial customers in one case and the NP in 75 the other. 76

- 77 MR. HUTCHINGS: Okay, so the one that we're looking at
- <sup>78</sup> here shows current year sales actually being below the test
- 79 year sales, correct?
- 80 MR. OSLER: Correct.
- 81 MR. HUTCHINGS: Okay, and that gives rise to a negative
- revenue variation, which means what in terms of the charge
- to the IC RSP?
- MR. OSLER: It means that it becomes a charge that buildsup the balance.
- 86 MR. HUTCHINGS: Okay.

MR. OSLER: And that's based on the rate that's in that
year. That isn't necessarily the rate that was in the test
year, for example.

MR. HUTCHINGS: Right, okay. If the test year's sales
shown on this page 4 were reduced by the 21.5 million
kilowatt hours that are assigned to Albright and Wilson
and Royal Oak Mines, what would that do to this
calculation?

- 95 MR. OSLER: It would reduce the ... it would take away from
- the variance 21,500 megawatts, 21,500 megawatts, so it
- 97 would lead to a positive variance, which means that the

- 1 actual test year sales would have been greater than the ...
- 2 sorry, the actual current year's sales would have been
- 3 greater than the test year, and that would have ended up
- 4 with some money being taken away from the fund, credited.
- 5 MR. HUTCHINGS: Okay, so instead of there being monies 6 charged against the industrial customers, there would, in
- fact, have been monies credited to the industrial customersin the RSP?
- 9 MR. OSLER: Right.

MR. HUTCHINGS: Okay. Alright, and that, to go back to
 page 2 then shows up on the summary, the negative 78,000
 increases the balance in the RSP, whereas without Albright
 and Wilson there'd be some positive number there and

14 reduce the balance, correct?

MR. OSLER: Yeah. To be very simple, you'd take Column 2 away from Column 1, but because Column 2 is negative it

- 17 actually means it's added.
- 18 MR. HUTCHINGS: Right.
- 19 MR. OSLER: Okay.

20 MR. HUTCHINGS: But without Albright and Wilson

- there'd be a positive number there so the balance would, infact, be lower?
- 23 MR. OSLER: Yeah.
- 24 MR. HUTCHINGS: Yeah, okay. Getting back then to IC-6.

We've looked at the revenue loss and how that is, in fact, assigned. Do you need to refer further to that for the

<sup>26</sup> assigned. Do you need to refer further to tr<sup>27</sup> purpose of **IC-6**?

- 28 MR. OSLER: No.
- 29 MR. HUTCHINGS: Okay. Now, let's look at the cost side.

MR. OSLER: The cost side, if you look at the IC-271, 30 you're seeing costs there. It doesn't tell you a great deal 31 about them. The costs, if you went to, I think, page 3 of IC-32 271 you'll see a bunch of complicated numbers. You see 33 Column 1, row 1 is your to date fuel cost, and you see a 34 35 number at the very end \$12,237,007 from the RSP report, okay, and maybe with your great technology, Mr. O'Rielly, 36 we can go to my November 25th testimony, page A-2. 37 Okay. Keep going. There. Do you see the number for fuel 38 components and you see the full year 2000, which would be 39 the December 31 time period that we were just talking 40 about, and you'll see hydraulic, fuel and load and you'll see 41 rural rate alteration. If you were to add back the negative 42 \$880,000 per rural rate alterations and the \$11,357 you'll 43 come to the total that we just discussed of about 44 \$12,237,000 that's in that IC-271, so when they talk about 45 a year to date fuel cost they are talking about the things 46 that people have asked me about that come out of the RSP 47 reports, the hydraulic, the fuel and the load variations as 48

they affect costs, all added up together. They are not
talking about yet the rural rate alteration. That's a separate
item, so you have to sort of see how the two relate to each
other. To get back to IC No. 6, the savings from not having
had Royal Oak and Albright and Wilson go into what
you're seeing here as cost, cost to IC savings for the year,

- 55 83,095 in my table at page A-2.
- 56 MR. HUTCHINGS: Uh hum.

MR. OSLER: They are part of all that calculation that went 57 in there because the load was less than forecast, we used 58 less energy than forecast, therefore we saved some 59 Holyrood fuel costs is the assumption, and they go into 60 that calculation there. The point is that when you study 61 the allocation mechanism in IC-271 all of these costs from 62 all of these sources and all of these different means are all 63 lumped together and treated as a lump. 64

- 65 MR. HUTCHINGS: So ...
- 66 (12:00 noon)

MR. OSLER: Maybe we should go back to IC-271 now, 67 page 3. Okay. Maybe go to page 5, Mr. O'Rielly. Page 5 ... 68 well let's just do these two steps. Go back, please, to page 69 70 3? At the very top there, the \$12,237,000 under Column 12, row 1, gets adjusted slightly by something to do with the 71 rural rate alteration, but that number is not what's going to 72 be carried forward, so go back to page 5 now. At the very 73 74 top of this page they are showing you, in terms of how you do a cost of service, the test year costs are broken out by 75 production demand, which you've just been talking to me 76 a great deal about, the costs that get allocated only on the 77 basis of demand. Production and transmission energy, 78 79 which gets allocated among customers only on the basis of energy. Transmission demand, which gets allocated only 80 on the basis of demand factors. Distribution and account 81 costs which are, frankly, not relevant to IC customers and 82 they're largely, I think, entirely to do with rural, and then 83 specifically assigned customer costs which are specifically 84 assigned to certain groups, particularly NP and industrials, 85 86 so that's how you'd come up with your cost of service. They have made a very small alteration to this in the 87 second line to do with, I gather, the Great Northern 88 Peninsula's impact. Look at the number on line 3 under 89 Column 2, there's your \$12,237 gain. That's all that fuel cost 90 absent the overall rate alteration, so that's where it comes 91 into the calculation, it's entirely assigned to production and 92 93 transmission energy and it is allocated out to the customer classes based on the rules used for allocating that, and if 94 you look down through lines 5 through 8 under Column 2 95 you see the allocators used. 72.23 percent is allocated to 96 Newfoundland Power, 21.188 percent is allocated to 97 industrial customers, .0658 is allocated to rural island 98 interconnected, and the rationales for those, as they say 99

- here, are translated to you on page 6, if you could just go 1
- there briefly, at the very top of the page, megawatt hours at 2
- generation. They've shown the sales forecasts for the three 3
- 4 customer groups, they've added on losses to do with
- getting it back to the generator, they give you megawatt 5
- hours of the generator and that's how those ... that's where 6
- those percentages come from. 7
- MR. HUTCHINGS: If we could just go back to page 5 for 8 a moment, and highlighting again the 12,237,000 under 9
- Column 2 at line 3. That number, if I'm understanding you,
- 10 has included within it, the value of the oil that was not
- 11 burned because the Albright and Wilson and Hopebrook 12
- loads didn't have to be met, is that correct? 13
- MR. OSLER: That's correct. 14
- MR. HUTCHINGS: Okay, so the savings from not having 15
- those customers on the system are embedded in that 16 number? 17
- MR. OSLER: Correct. 18
- MR. HUTCHINGS: Okay, and then that number gets 19 allocated in accordance with this page? 20
- MR. OSLER: Yes. Column, rows 5 through 8. 21
- MR. HUTCHINGS: Okay, and that, I think, brings us 22 directly back to **IC-6**, does it not? 23
- MR. OSLER: Correct. 24
- MR. HUTCHINGS: Okay. 25
- MR. OSLER: So you'll notice on IC-6 that we repeated the 26
- 72.231 and the 21.188, the numbers that come from page 5 27
- of IC-271, Column 2, rows 5 through 8. We've shown them 28
- alongside the NP, IC and rural, and then we've taken the 29
- \$442,466 worth of Holyrood cost savings and allocated 30
- them among the three customers classes using those 31
- percentages, so that \$319,597 is allocated to NP from the 32
- cost savings associated with Albright and Wilson and 33
- Royal Oak, 93,749.7 is allocated to the IC and 29,114 is 34 allocated to rural. 35
- MR. HUTCHINGS: Okay, so the bottom line here is that IC 36
- basically stands to all the revenue loss but receives only 37
- 21.1 percent of the cost savings, is that correct? 38
- MR. OSLER: That's correct. 39
- MR. HUTCHINGS: And your box on the lower right-hand 40 corner, what does that tell us? 41
- MR. OSLER: That's just netting it by class, everything 42 we've been talking about on both the revenue and the 43 costs, NP ends up with a benefit of 319,597.6, IC as a 44 reduction ... or come into its account in the RSP for 322,060 45
- and rural, as a reduction to the RSP amounts by 29,114, and 46
- that'll get allocated out through the rural deficit. 47

MR. HUTCHINGS: Okay, and this exhibit IC-6 is designed 48 solely to identify the effects of leaving Albright and 49 Wilson and Royal Oak Mines in the cost of service 50 51 numbers for 1992, assuming everything else remains equal?

- MR. OSLER: Correct, and it just is designed to try and 52 highlight the extent to which the RSP reports, which, in 53 fairness to Ms. Butler, do only show the sort of mill rate 54 type of assumption to the far right, do not give you a great 55 56 transparency as to what the allocation procedures are and 57 how they are different for the costs versus the revenues.
- 58 MR. HUTCHINGS: Okay, so that 1.01 mills that you and
- 59 Ms. Butler were discussing the other day goes directly into
- the summary sheet, but all these other costs, take a more 60
- circuitous route but come back to it in the end? 61
- MR. OSLER: Yeah, they do. 62
- MR. HUTCHINGS: Okay. Thank you. Now, you had a 63 brief discussion with Mr. Browne concerning the frequency 64 65 converters, and one question that he put to you was what would happen if the customer, and I think effectively we're 66 talking about Corner Brook Pulp and Paper, were to cease 67 operations. On the assumption that that were to happen 68 but the generating facilities continued to exist at Deer Lake 69 producing 50 cycle power, would you see a use for 70 frequency converters? 71
- MR. OSLER: Yes. 72
- MR. HUTCHINGS: And why would that be? 73
- MR. OSLER: I guess you'd like to make use of the power 74 that is available from Deer Lake, particularly since it isn't 75
- being used to feed the mill and the rest of the system of the 76
- converter would have a value. 77

MR. HUTCHINGS: Okay. Thank you, Mr. Osler. Those 78 are all my questions on redirect, Mr. Chair. 79

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. 80 Hutchings. Thank you, Mr. Osler. We'll move now to 81 Board questions. If I could ask Commissioner Powell to 82 begin, please? 83

COMMISSIONER POWELL: Thank you, Chair. Good 84 morning. I don't have a whole lot of questions. The notes 85 I had, I think they got covered pretty well. I just have a 86 couple of things I noted when I was reading your pre-filed 87 testimony the first time around, and on page 1 on line 31 to 88 35 you ... when you were doing your introduction you 89 talked about review. You made a reference to, "However, 90 given the volume of the responses and the limited amount 91 of time that has been available for us to review them, this 92 review has been severely restricted, and furthermore, 93 several key responses filed to date by Hydro failed to 94 produce sufficient information as yet to usefully answer the 95 questions poised." Is that a norm? I'm struck by that in the 96

- sense that I'm just wondering. I sort of got the impression
- 2 that this is not normal for an intervenor like yourself to be
- in a position not to be able to respond.

MR. OSLER: I came into this exercise maybe later than 4 some when I was retained, just before the first information 5 requests were put in, so I didn't have ... coming in with no 6 background at all, particularly subjected here, but there's a 7 8 lot more information here in this hearing, I think is fair to say, than one would normally see, because of the history, 9 I suspect. The only case I've been personally involved in 10 which had more than this, I think it has ... I was trying to 11 say the day, I think it's 120 hearing days, was the electricity 12 costing and pricing hearing of Ontario Hydro in the late 13 14 `70s, and that was a generic hearing on costing and pricing and it went on for a long time. Most hearings, a week to 15 three weeks, two to three weeks and the volume of 16 information wouldn't build up like this, but then the 17 hearings tend to occur more closely together so the parties 18 19 get more familiar with what's going on and they're not involved in going back over the history, so there are some 20 unique features, perhaps, to this hearing and its 21 circumstance and to my involvement. As to lack of 22 responsiveness, I think intervenors the world over 23 complain from time to time, about lack of responsiveness. 24 I don't think I would say that's unique. I think in general 25 the Applicant has been ... probably feels they've been more 26 than responsive and they've answered an awful lot of 27 questions and wish these silly intervenors wouldn't ask 28 them any, and that's, since I work for utilities from time to 29 time that's also not unusual in terms of a perspective on 30 that. I think each hearing and each process has to sort of 31 figure its own water level on this. 32

COMMISSIONER POWELL: Okay, so I just ... this is 33 everybody's responsibility, okay. Excuse me, I'm just going 34 through my notes here. I just ... one of the other questions, 35 since you've been involved in a number of hearings, the 36 process in which Hydro has gone through to prepare their 37 cost of service, the evidence was that there's a cost of 38 service model that is separate from their financial data 39 model. Is that standard? 40

41 MR. OSLER: Yes, I noticed your question of them on it. It tends to be standard. I guess the only explanation I can 42 give, to keep it at a very simple level, is that it really is a one 43 off exercise that's done for a rate hearing more than for 44 normal day-to-day business, and it has a whole bunch of 45 rules and stuff that only a handful of people usually in a 46 utility understand, and so it tends to be a custodian of a 47 few people and it's run on a separate model, and that 48 happens, everywhere I've been that tends to be the case. 49 It takes all the costs and pulls them together in a very 50 specific way that doesn't fit into the normal, everyday 51 thinking of the company. If you have cost accounts of the 52

old days, rather than business units, I guess there's a little
bit more interrelationship between the two. Business unit
accounting seems to raise another level of issues, but I'm
not ...

57 COMMISSIONER POWELL: Do you have problems with 58 that?

MR. OSLER: No, I don't have it, per se. I mean, it's ... in my
personal life it's not uncommon that when you start to get
into certain type of thing you only do occasionally you
tend to create a one of system. You always like not to
every time you have to go through it, but, the effort to try
and design the perfect interface seems to more trouble than
it's worth.

66 COMMISSIONER POWELL: No fear of loss of data?

MR. OSLER: Oh yeah, yeah, there's lots of risks that go 67 with it, and it may be that, you know, somebody comes 68 along 20 years from now will say that what I'm saying right 69 70 now is ridiculous, we've all found a way to do it, and with modern technology and modern computing, somebody has 71 found a way to make it simpler. I'm just saying over my 72 career it's been the other way around, and they haven't 73 done it yet in any place that I've been dealing with so far, 74 and they're, you know, with the deregulation, they're 75 tending to move away from doing this. I can think of a few 76 77 cases where I'm wondering what's going to happen the next time I see a hearing in the Yukon, when people used to rely 78 upon Alberta Power in Edmonton to do this type of stuff, 79 80 and I don't think Alberta Power has got people around who are doing cost of service. It's a different environment, so I 81 mean this may become a dying art. 82

83 UNIDENTIFIED SPEAKER: You wish.

COMMISSIONER POWELL: So are you familiar with thefinancial system that Hydro has now, the JE Edwards?

86 MR. OSLER: I am not intimately, no, at all.

87 COMMISSIONER POWELL: So you don't have any views
88 on whether that's, other utilities use it or ...

MR. OSLER: I've heard of others using it but I'm not sure,but I don't have anything useful to offer you.

COMMISSIONER POWELL: And so you think there are
some merits to doing some sort of (inaudible) resolution
mechanism in terms of since we have a small customer
base?

MR. OSLER: I'm not sure whether it specifically relates to
whether you've got small or large. Other jurisdictions in
British Columbia and Alberta and places have used, have
had settlements in hearing processes. I think the BC
Utilities Commission does a lot of it. In Yukon they did it
once and they're not sure they're going to do it again.

- 1 Sometimes in smaller jurisdictions the intensity of some of
- 2 the disputes are more intense than they are in larger ones,
- $\ensuremath{\scriptscriptstyle 3}$   $\ensuremath{\quad so}$  I think it merits serious consideration. I can see the
- 4 need to get beyond this hearing before people would ...
- 5 we'd want to see what the Board's rules are and then work
- 6 within them rather than trying to sit around the table trying
- 7 to figure out what the rules in the system are.
- 8 COMMISSIONER POWELL: Okay, that's all my questions,9 Chair.
- 10 MR. NOSEWORTHY, CHAIRMAN: Thank you,
- 11 Commissioner Powell. Commissioner Saunders?
- 12 COMMISSIONER SAUNDERS: I have no questions.
- MR. NOSEWORTHY, CHAIRMAN: No questions.Commissioner Whalen please?

COMMISSIONER WHALEN: Thank you. Good afternoon, 15 Mr. Osler. I just have one question that really follows up 16 17 from Mr. Hutchings taking you through your evidence on Friday when you first took the stand and when you were 18 talking about the Rate Stabilization Plan, and the options 19 and implications of. You mentioned that in terms of the 20 recovery mechanisms for the balances in the RSP, and that 21 22 there might be other options we could look at in place of the ... I think the declining balance method was the way 23 you categorized the existing recovery method, but I wonder 24 if you could expand on that for me a little bit in terms of 25 26 what other options might be there?

27 MR. OSLER: Well, the most straightforward options would be ones that don't let it decline, the declining charge 28 through decline necessarily, but try and clear the account 29 off, so that if you went over a certain level, they sort of lock 30 in a minimum amount to be recovered, and don't let it 31 32 decline so that you really bring the thing down over time more quickly. Those are techniques that you would use for 33 an account of a type that you have here. If you were doing 34 a fuel adjustment type of approach, it could be quite a 35 different approach to start with. It could be one of setting 36 37 a number that the utility thinks will recover the fuel cost 38 over, that's been built up to date, and where they think the fuel price is over a period of time, and then reassessing it to 39 see where they were going every two years, or a year, or 40 something like that, and in some cases the fuel rider may 41 vanish completely for a while, and other times it may be on, 42 or ... and if the fuel rider stays around for too long, at least 43 it's passing through what they think to be the current fuel 44 price, thus recovering some of the background (phonetic). 45 But if they went to a general rate application, typically that 46 account would be severely affected because you would 47 adjust all of the rates in the rate application to reflect the 48 current fuel price in the normal situation, and then you'd 49 just worry about getting rid of the balance, and it might be 50 in the account over a short time period, and the rider would 51

vanish when you get rid of the account. That's sort of theAlberta/Yukon type of approach.

The water stabilization accounts that I've seen 54 don't tend to pass through rate charges to customers. 55 56 They tend to be between the utility and the account, so they simply keep the utility whole, and if the account goes 57 outside a certain range, then you might have to put a rider 58 59 on either to rebate or to collect in order to put the account back. I think you had that experience with your water 60 account back in the eighties. So I mean there are different 61 approaches you would use that seemed to work that don't 62 build up an account quite of the magnitude we've seen 63 here. But there's, you have to do various things to tackle 64 65 it, and not just what you've recovered through recovery charges, but how you set those charges ... the different 66 examples I gave get to setting the charge based on where 67 the price of oil is now rather than something else. 68

COMMISSIONER WHALEN: So in terms of the separate
from a fuel rider charge, and those kinds of mechanisms, if
we look at the existing plan with existing balances, your
suggestion would be that we look at recovering those
balances quicker?

74 MR. OSLER: Or let's put it this way, let's say recovering them quicker, but perhaps not through taking out one third, 75 more than one third, but making sure that that amount 76 doesn't keep declining as you go forward so that you get 77 somewhere quicker, do you know what I mean. I'm not 78 necessarily ... there's a lot of different judgements go in to 79 how fast you should try and get from where we are today 80 to where you should be, but the declining balance 81 technique has a tendency to make sure you never get there, 82 83 just by definition. It keeps going down, sorry, as you move forward, so it seems to me the key would be to say I want 84 to get there in five years or something like that and set a 85 number that is likely to get the account down to close to 86 zero in that time period. 87

88 COMMISSIONER WHALEN: So instead of looking at the
89 balance and just dividing this year by one third and then
90 continuing on, you look at your end point and then back
91 up.

92 MR. OSLER: Right.

93 COMMISSIONER WHALEN: And what do we have to do
94 to get to that point, so it's a different, just a different
95 approach.

96 MR. OSLER: It's a different approach.

97 COMMISSIONER WHALEN: The mechanics might not be98 very much different, I guess.

99 MR. OSLER: Right, but it's, if you were trying to amortize 100 an amount over a period of time you'd approach it very 1 simply that way and say I want to amortize it over five

2 years. If I've got a problem with the account growing or

3 shrinking during that time period then you add that to your

4 thought process, but you sure as heck have an incentive to

5 not have the account growing while you're trying to get rid

6 of it in five years, you know, that type of thing.

7 COMMISSIONER WHALEN: Okay, thank you, that's all I8 have, Chair. Thank you, Mr. Osler.

MR. NOSEWORTHY, CHAIRMAN: Thank you, 9 Commissioner Whalen. Good morning, Mr. Osler, thank 10 you very much for your evidence and your testimony and 11 I just have, I have three questions, and actually 12 Commissioner Whalen just asked one, so I'm down to two 13 now. You spent quite a bit of time having a discussion 14 with Mr. Young around the whole notion, I guess, of 15 generation and transmission facilities and the basis on 16 which you would look at an economic evaluation of those, 17 and I think you testified in a couple of areas, and I won't 18 refer to the testimony, or the transcript but you do say not 19 just the estimate of the net present value over the life of the 20 project (inaudible) some alternatives. We should look at, 21 among other things, rate impacts and how long the adverse 22 ... and indeed, I believe you commented on a specific 23 example of maybe in the Yukon where indeed the utility 24 decided to absorb some short-term costs and charge them 25 out later on a particular project, and I guess I just heard 26 prior to listening to the cost of service variety of experts 27 comment on the cost of capital whereby I believe they're 28 almost with out exception that certainly they were all of the 29 view that Hydro should over time move to an investor-30 owned utility type of business certainly, based on 31 appropriate return on investment and return on equity, and 32 that sort of thing. I see ... and you would think in terms of 33 34 an investor-owned utility with a view to looking at sort of the economic analysis and the payback, if one were to look 35 at it on that basis, I would think the shareholder in certainly 36 a private company in any event, an investor-owned 37 business would want that return as quickly as possible 38 39 based on what the market would bear. How do you, from 40 where I understand you're coming from here, how do you reconcile those two perspectives? 41

MR. OSLER: With care. The tendency from an investor-42 owned utility perspective would not be to undertake certain 43 types of investments for the reasons you and I are talking 44 about it. They wouldn't just look to an analysis of net 45 present value. They'd look to making sure they got it back 46 soon enough, and they wouldn't want to get into a big fight 47 with a whole bunch of ratepayers in order to do some noble 48 social purpose, okay? Particularly with, it would take a 49 long time to get their money back ... 50

51 MR. NOSEWORTHY, CHAIRMAN: Uh hum.

MR. OSLER: So some would argue, therefore, that a utility 52 such as Newfoundland Hydro or Yukon Energy 53 Corporation, which are Crown-owned, whether they are 54 55 investor-based, whether it be run by investor-based rules or not, have to find a way to meet their broader social 56 purposes, while at the same time still, for rate purposes, 57 58 being run like an investor-owned utility, and Yukon energy has 60 percent debt, 40 percent equity. It was set up that 59 60 way. It didn't have to build it up through the backs of the ratepayers, it was set up at the initial time period that way. 61 It is the direction of the utility board, is to give it a normal 62 commercial type of rate of return less a half a point or 63 something, so it has all the rules that somebody would like 64 to get to here, and for those types of reasons it found itself 65 looking at the world not dissimilarly from what an investor-66 owned utility would do for a while, and it got into some 67 heat as to when are you going to do some of these other 68 things. We've had no development of new facilities under 69 this new ownership, even though we've had for ten years. 70 71 What's wrong? And one of the ways of grappling, kind of grappling with those two things was what we call the 72 flexible term financing type of instrument where the owner 73 of the utility, which was the Yukon Development 74 Corporation and could arrange to finance some of the debt 75 for those transmission lines in such a way that it could hold 76 out that the utility's ratepayers would be no worse off at 77 78 any one time period, and it would recover the balances later down the road, and it had to convince itself that that was 79 a reasonable investment and it was meeting its broader 80 social objectives while maintaining the rate base approach 81 to regulation and doing things that no private utility would 82 normally do, and its board of directors and people had to 83 be convinced this wasn't a stupid idea, it was a good 84 prudent investment doing what their mandate was to do. 85 It took a while, and we'll see ten years from now whether it's 86 87 ...

MR. NOSEWORTHY, CHAIRMAN: Certainly they were
foregoing up front an element of revenue that, that no, I
guess, private investor utility would generally speaking be
prepared to ...

MR. OSLER: Well the Whitehorse No. 4, that I was talking 92 about with Mr. Kennedy, had the (inaudible) reputation of 93 being built at exactly the wrong moment. They put the 94 95 shovel in the ground at the time the mine shut down, and my first experience in the Yukon was to testify before the 96 National Energy Board on this facility among other things, 97 and it's the only case in my life where I've seen an asset 98 that had absolutely no value for \$60 million out of a rate 99 base of say, \$100 million, because the load wasn't there for 100 which it was built, and so the concept of a flexible term, the 101 National Energy Board took some advice and said well we 102 think this should be put off the balance sheet for the time 103 being for rate making purposes, and now when Yukon 104

- 1 bought all the facilities and assets of the Northern Canada
- Power Commission, it negotiated with Canada (*phonetic*),
  what we call a flexible term debt, which you probably
- what we call a flexible term debt, which you probablywouldn't see in very many places, but it effectively said
- we're only going to pay the interest on that portion of the
- 5 we're only going to pay the interest on that portion of the 6 purchase, thank you very much, when the facility is being
- <sup>7</sup> used, because you built it, you continue to bear the risk.

MR. NOSEWORTHY, CHAIRMAN: You said you
wouldn't see it in very many other places, but would you
see it in any?

MR. OSLER: I don't think you'd normally see it at all, and 11 I think you'd ... but it's ... when you try to balance 12 government objectives in the long run, and short-term rate 13 making, there are techniques that I think you can use that 14 can keep everybody wearing their hat properly, the board 15 of directors of the utility, the board of directors of the 16 owner, and the utility board, and I think we're learning a few 17 things over the years as to how to do that, and that's all I'm 18 really getting at, and it takes a bit of creativity, and that 19 didn't happen overnight. 20

MR. NOSEWORTHY, CHAIRMAN: Uh hum. Okay, thank 21 you. The second question, and I won't be long, and I 22 realize it's a little bit after lunch and I'll just conclude. It 23 relates actually to the whole sort of cost benefit economic 24 analysis, and we saw a capital budget which I think is \$26 25 million this year from Hydro with, for the most part I think 26 27 it's fair to say, a very limited cost benefit analysis in respect of the projects, and I believe there was a couple, and this 28 came up earlier with Hydro witnesses, and there's a variety 29 of, if we could ... in the application, Mr. O'Rielly, I think it's 30 B-6, the capital budget application, there's ... just scroll up 31 a little bit. Yeah, these projects are required for one or more 32 of the following reasons, and these would be the criteria 33 admittedly not quantitative in certain instances that would 34 be used by Hydro to judge a go versus no go on certain 35 capital investments, and some of these capital investments 36 would be fairly small, I guess, anything below \$50,000 is 37 not really reported other than in a collective sense, but 38 there are projects in here, distribution projects, upgrade 39 distribution system, central, northern Newfoundland, which 40 41 would be 1.3. Provide service extensions, \$981,000, \$1 million, now it seems to me on a cumulative basis year after 42 year, certainly that would have a significant impact in 43 looking at, in looking at comparable to a transmission or 44 generation to a degree, especially small scale, significant 45 impact as far as looking at the cost benefit aspects are 46 concerned. Would you have any observation to make? Is 47 the type of approach, and you are familiar with utilities 48 elsewhere, is the type of approach employed here by Hydro 49 generally speaking the practice, if you will, in relation to 50 other utilities as it relates to limited cost benefit analysis in 51 this, with regard to these projects? 52

MR. OSLER: Let me say I have not reviewed the capital 53 budget or the methods of the cost benefit assessment so I 54 55 can't give you an overall report, but I think the language 56 that you're showing me here is not uncommon. I have seen the justification for capital projects often involving non-57 quantifiable items, safety, human life, etcetera, and to try 58 and review that externally is difficult because they are 59 presumably based on things that we have to do and it's 60 61 hard to translate them into a type of language that an outside reviewer could understand, unless you're a 62 technician saying, yeah, I agree with you, you've got to 63 replace that piece of equipment, it's faulty or it's unsafe, or 64 it's unreliable. Cost benefit assessment is a lot more 65 66 straightforward, if you like, if you're trying to meet projected customer loads and what alternative methods of 67 doing generation is something that we can all understand, 68 we've got some options here. We don't have one 69 compelling approach. That's more the issue of assessing 70 A versus B, and I think in general there is concern from 71 72 utility boards, whether I'm working for the utility or the intervenors, as to the extent to which full justification is 73 given for some fairly major projects from all the points of 74 view that seem to be relevant. There have been some 75 prudency decisions, I guess, in Yukon where certain costs 76 have a lot of expenditures on investigations were 77 disallowed and not put into rate base because the Board 78 79 didn't think after review that they were justifiable costs. I think when we're doing cost benefit from a ... if I can just 80 close it on a very broad level, there is cost benefit 81 assessment as to whether you should "go" or "no go". 82 There's a cost benefit assessment as to whether you should 83 take this alternative or that one, and there's also, in my 84 history of cost benefit, you also look at distributional 85 effects, and I'm talking now not just for utilities but 86 elsewhere. I mean it's been accepted for almost my entire 87 88 career that you don't just look at the aggregate net benefit, you look at the distribution effects or you might get in 89 trouble, and I think a lot of my comments about rate 90 impacts refer to in this bailiwick, that type of issue. You've 91 got to look at who is going to get hurt and who is going to 92 93 get helped and how the benefits are distributed or you'll be in trouble. It's just a practical comment, and that is not 94 typically addressed easily. There's capital planners just 95 looking at whether the darned costs make sense or not, and 96 97 that's the rate department or some other group, and they haven't traditionally, haven't always had to go forward and 98 justify it, so if you go through a transition from not having 99 to justify in a public forum, particularly the forum where 100 your rates are set, to having to do that, you will go through 101 a transition and you'll have to figure out what level of detail 102 you want to get in. Right now Manitoba Hydro is having 103 an interesting debate with its regulator on, and the 104 government on this matter because it purchased Sentra 105 106 (phonetic) which was subject to the same rules you're

- 1 talking about. Manitoba Hydro as a utility is not subject to
- 2 capital approval decisions by the Public Utilities Board. It
- 3 only approves its rates.
- 4 MR. NOSEWORTHY, CHAIRMAN: That is a dilemma, it's
- 5 not an easy situation either, I'm sure, from the utility's
- perspective or ours, but I was just inquiring as to basicallywhat you know from your experience.
- 7 what you know from your experience.
- MR. OSLER: What level of expenditure ... I mean boards of
  directors worry about this, what level of expenditure should
- we be making on capital to keep the system whole. It's not
- one that there are easy guidelines on, and they do have ...
- as you increase your rate of return requirement on your rate
- base, the implications of spending will become bigger in
- 14 terms of rates.
- 15 MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr. Osler,
- 16 that's all I have. Questions on matters arising, are there
- substantive questions? We could indeed concludepossibly, I don't know.
- MS. BUTLER, Q.C.: Mr. Chairman, in fairness, I'd like to
  have a discussion with my colleagues in relation to
  pursuing questions?
- MR. NOSEWORTHY, CHAIRMAN: That's fine. We'll ... would anybody have any objection, we're running a little bit late, to reconvening at 2:00 or is there somebody who requires some more time over lunch? Okay, if not, we'll reconvene at 2:00, thank you very much.
- 27

#### (break)

- 28 (2:00 p.m.)
- MR. NOSEWORTHY, CHAIRMAN: Thank you and goodafternoon. Before we get started, Mr. Kennedy, are there
- any preliminary matters?
- MR. KENNEDY: Yes, Chair, I believe has a preliminarymatter to report on.
- 34 MR. NOSEWORTHY, CHAIRMAN: Mr. Young, good35 afternoon.
- MR. YOUNG: I'm pleased to say we're winding down on 36 our undertakings and we're running out of witnesses, so 37 there's not many of these left. There were a couple that 38 came up the other day though and I've distributed them. 39 The first one that I'd like to refer to, the document which is 40 "Government Agencies and Departments, called 41 Interconnected System", and it answers questions that 42 arose from examination, I believe, by Mr. Saunders. It 43 relates to the preferential rates in the (inaudible) system. 44 The other document is the rural customer power service 45 disconnection for nonpayment of account, and I'm not sure 46 what the numbers are up to. 47

- 49 MR. ALTEEN: Which one is 32.
- 50 MR. YOUNG: That would be the first one, Government 51 Agencies and Departments.
- 52 MR. KENNEDY: The Government Agencies and 53 Departments.
- 54 MS. HENLEY ANDREWS, Q.C.: It was what number?
- 55 MR. KENNEDY: U-Hydro No. 32.

## 56 EXHIBIT U-HYDRO NO. 32 ENTERED

- MR. YOUNG: So the disconnect payment, the servicedisconnection for nonpayment of account document wouldbe 33?
- 60 MR. KENNEDY: That's correct.

## 61 EXHIBIT U-HYDRO NO. 33 ENTERED

MR. YOUNG: Those are all the preliminary matters, Mr.Chair.

- MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
  Young. We'll move now to questions on matters arising
  and I'll ask Ms. Butler and Newfoundland Power.
- 67 MR. YOUNG: We don't have any, no, that's fine.
- MR. NOSEWORTHY, CHAIRMAN: I apologize, we'll getthis sorted out one of these days. Ms. Butler, do you haveany?
- MS. BUTLER, Q.C.: Thank you, Mr. Chairman, we havenothing arising either.
- 73 MR. NOSEWORTHY, CHAIRMAN: Thank you very much.74 Mr. Browne?
- 75 MR. BROWNE, Q.C.: No questions.

76 MR. NOSEWORTHY, CHAIRMAN: Counsel, do you have77 any questions?

MR. KENNEDY: I just have one question, Chair, and it 78 arises from a question by Commissioner Whalen, Mr. Osler, 79 and specifically in response to some questions you were 80 asked concerning the RSP and the alternatives employed. 81 The terms that's often used in this field is the term 82 "intergenerational", and I guess, again, from the 83 layperson's perspective, when you're talking about 84 generations, you would be, it's sort of loosely defined as 85 periods of at least 20 or 25 years in length, and a full 86 generation of individuals, and I'm wondering, for the 87 88 purposes of the RSP sometimes the word "intergenerational" is raised as an issue of concern with the 89 RSP, and I'm wondering if you could just give me your view 90 on what period of time you would consider to be 91 problematic in spraying out the collection of deferred costs 92 as the RSP does, keeping all that in mind? 93

48 MR. KENNEDY: U-Hydro No. 32.

MR. OSLER: Okay, the term "intergenerational", which I've 1 tried to avoid using in an electricity hearing, I don't think is 2 usually as literally taken in rate hearings as the definition 3 4 you gave, and I think people have quite frequently used that term for concern about passing costs from one time 5 period to another time period in a material way such that 6 you're asking future customers, or people who happen to 7 be on the system in the future, or their loads that happen to 8 9 be on the system in the future to pick up costs that arose today. In that context, I think I would agree with Mr. 10 Brickhill that when looking at fuel adjustment riders, six 11 months to a year is a good long time period before you 12 start to act on them and address them in the manner I talked 13 about. It would be another issue entirely when you start 14 delaying it a long time period beyond that. In the case of 15 water accounts, I think there is a view behind the creation 16 of such hydraulic stabilization accounts, that we are really 17 looking, if you want, at a very long run, that it's not the 18 fault of the people today that the water was low or the 19 water was high, and that we are trying to see something 20 that could balance out in a very long-run sense, whatever 21 the long-run time period is for the average, and I think in 22 that context, my experience is we are not typically worried 23 about the timing issues at all. I have never come across in 24 my experience a case where we have a load account 25 stabilizing and that raises another whole set of issues, so 26 I don't have a sense of timing, but if I did I suppose it 27 would be closer to that for fuel than it would be for water 28 by a very considerable degree. I think if we try ... if costs 29 start to shift from today to a future, my experience is five 30 years is a fairly long time period when people start talking 31 about amortizing certain amounts that were incurred and 32 we're going to try to write them off over a reasonable time 33 period. They'd really have to have a long-term benefit to be 34 justified to write off over a much longer time period and 35 typically a bunch of costs that were incurred for fuel last 36 year don't have a long-term benefit, we're just trying to 37 smooth them out. It's not like an investment. 38

- MR. KENNEDY: Thank you, Mr. Osler, that's all thequestions I have, Chair.
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
  Kennedy. I'll move now to Mr. Hutchings on re-direct
  please?
- 44 MR. HUTCHINGS: We have nothing further arising, thank45 you, Mr. Chair.
- 46 MR. NOSEWORTHY, CHAIRMAN: Thank you, and that
- 47 would conclude Mr. Osler's testimony. Thank you very
- 48 much, Mr. Osler, I appreciate it and found it very useful,
- 49 thank you. We'll move on, I guess ... Ms. Butler, are you in
- a position to call Mr. Brockman please?
- 51 MS. BUTLER, Q.C.: Thank you, Mr. Noseworthy. Mr.

52 Brockman, whenever you're ready.

- 53 MR. NOSEWORTHY, CHAIRMAN: Good day, Mr.
- 54 Brockman. Do you swear on this Bible that the evidence to
- 55 be given by you shall be the truth, the whole truth, and
- 56 nothing but the truth, so help you God?

57 MR. BROCKMAN: I do.

MR. NOSEWORTHY, CHAIRMAN: Thank you sir, very
much, please be seated. Good afternoon, and once again,
welcome. May I ask, Ms. Butler, if you could proceed
please?

MS. BUTLER, Q.C.: Thank you. Mr. Brockman, I wonder
before we go through your resume because it's attached to
your evidence, if I might ask you, you filed pre-filed
testimony from August 2001, September 2001, and again in
November 2001?

#### 67 MR. BROCKMAN: Yes.

MS. BUTLER, Q.C.: And are there any changes orcorrections that you wish to make to either of your pre-filed?

71 MR. BROCKMAN: Yes.

72 MS. BUTLER, Q.C.: Can you tell us where to find the 73 page?

74 MR. BROCKMAN: On page 12 of my first supplemental,

75 the title of the column where it says "Newfoundland Power

Peak in Megawatts, MW", that should read KW and notMW.

MS. BUTLER, Q.C.: Can you just give Mr. O'Rielly a
moment to get that on the screen. In the actual table, Mr.
O'Rielly, it's at the top, thanks, so in the shaded yellow
portion, it should say KW?

82 MR. BROCKMAN: That's correct.

MS. BUTLER, Q.C.: Mr. Brockman, with that correction, do
you adopt your August, September, and November 2001
pre-filed testimony as your sworn evidence in this
proceeding?

87 MR. BROCKMAN: Yes.

MS. BUTLER, Q.C.: Mr. O'Rielly, can we go first to the
index to Mr. Brockman's original testimony please? Mr.
Brockman, before we go through the summary section of
the original testimony, can you tell the panel please, your
history and experience, education included?

MR. BROCKMAN: Yes, I have a Bachelor's Degree in
Engineering, partial completion of a Master's in Engineering
and Economics. I have about, a little over 25 years of
experience in utility planning, rate making, consulting, and
some educational and teaching experience. I plan

- transmission, distribution, and generation systems. I have
   designed rates, done cost of service, I was a regulatory ...
- an assistant director for regulatory staff in Florida for about
- 4 five years directing rate cases and least cost planning, and
- 5 safety issues, and several others, you know, regulatory
- 6 policy type questions that the commission had to deal with.
- 7 I have also taught courses for public utilities reports, Public
- 8 Utilities Fortnightly, on rate design and cost of service as
- 9 well as least cost planning, and I think my first appearance
- 10 here in Newfoundland was in 1990, but I'm starting to forget
- 11 how many times I've testified here on various issues.
- MS. BUTLER, Q.C.: Okay, thank you. The index to your 12 original testimony indicates the topics that you were 13 14 addressing, and we can see that they were the Rate Stabilization Plan, the test year forecast including hydraulic 15 production, and the cost of service issues including the 16 rural rate subsidy and rate design. Can I turn first to the 17 RSP generally and ask you if you could just summarize for 18 19 the Board your principal recommendation on the plan and indicate whether either of these recommendations have 20
- changed with your supplementary pre-filed evidence?

MR. BROCKMAN: My principal recommendation was that 22 the cap on the residential part of the RSP not be raised 23 above \$50 million. Hydro is asking for it to be raised to 24 \$100 million, of course ... without some sort of review and, 25 I guess I suggested at various times, although I didn't fully 26 develop the thought that there be some sort of possibly a 27 mini-hearing and a filing before that overage would be 28 allowed to be recovered. I recommend that Hydro be 29 allowed to book the numbers in their accounting books so 30 that they could be, you know, recovered if they were 31 shown to be prudent and, you know, advisable to the 32 Board. I don't think I've changed that recommendation in 33 34 my subsequent filings.

MS. BUTLER, Q.C.: Now, Mr. Cameron Osler has most
recently given oral evidence on the RSP since you've filed
your second supplementary evidence. Have you had a
chance to review the transcript from Friday, November
30th?

40 MR. BROCKMAN: Yes.

MS. BUTLER, Q.C.: And are you aware of Mr. Osler's
interpretation of the term "load" as it relates to the Rate
Stabilization Plan?

- 44 MR. BROCKMAN: Yes.
- 45 MS. BUTLER, Q.C.: And can you provide the panel with 46 your comments on that please?

47 MR. BROCKMAN: In my experience, the word "load"
48 generally includes both demand and energy. Generally
49 when someone asks me a question or asks me to do
50 something with load I would try to clarify that. Do they

- 51 mean demand, do they mean energy, or do they mean both,
- <sup>52</sup> and so I think to me it was quite clear as well as, you know,
- reading some of the letters that were put forward as well on
- 54 what exactly that meant, but I won't say that it was crystal
- 55 clear because there is some confusion as to some of this,
- 56 but I think that it's fairly clear what's meant by load.

MS. BUTLER, Q.C.: In the second section, which is
actually Section 4 in the index to your original testimony,
you addressed the test year forecast, and can you
summarize for the panel, please, your evidence on Hydro's
hydraulic forecast which we know, excuse me, was also
addressed in your first and second supplemental
testimony?

MR. BROCKMAN: Yes, what I found was in my 64 investigation of the hydraulic forecast that Hydro put 65 forward in the test year is, first of all, I guess there was at 66 least an implication that there was some sort of Canadian 67 standard on this. While there may be a Canadian standard 68 in terms of planning and what the hydraulic planners use, 69 I certainly didn't find in my investigation that there was any 70 71 sort of regulatory test year standard on what should be used for the hydraulic forecast in terms of number of years 72 or how it should be calculated. We talked to some of the 73 people that Hydro talked to as well as some of Hydro's own 74 witnesses, Mr. Henderson talked about whether or not his 75 76 survey that he did showed that everybody had a standard and that they used this standard in terms of test year. We 77 just didn't find the standard, I don't believe there is a 78 79 Canadian standard in my opinion. Hydro calculates their test year forecast for hydraulic generation based upon the 80 full historical record and some of that is even historical 81 before the plants even go into service, and I just don't think 82 that is appropriate. I think that something better would be 83 84 to use, say, the last 30 years of data, because it appears to 85 me that the numbers do change quite a bit. There appear to be wet years or wet periods and dry periods and so on and 86 so forth. I know that Environment Canada uses only 30 87 years in their climatological questioning, so as far as I can 88 see, 30 years would be more appropriate. I also looked at 89 90 several of the utilities and their responses if they used median rather than simple averages. A median calculation 91 would give you an answer if you looked at the day where 92 you were right half the time and wrong half the time. I think 93 94 that's a better way of calculating the number than using just a simple mean, so that was my recommendation. 95

MS. BUTLER, Q.C.: Now, subsequent to the filing of your
principal evidence on this point and, in fact, I think
subsequent to the filing of your first supplementary, have
we forwarded to you a copy of an exhibit referred to as UHydro 17.

101 MR. BROCKMAN: Yes, that's correct.

1 MS. BUTLER, Q.C.: And I wonder, Mr. O'Rielly, if we might

2 just see that exhibit. This was provided by Hydro in3 response to an undertaking they had given relevant to a

response to an undertaking they had given relevant to aquestion by Commissioner Whalen. In reviewing this ... is

that the revised one Terry?

6 MR. O'RIELLY: Yes, it is.

MS. BUTLER, Q.C.: Okay, in reviewing this document can
you tell us please whether this document from your review
addresses Commissioner Whalen's question, and what
results you take from it?

MR. BROCKMAN: I guess I'll have to let Commissioner 11 Whalen decide whether it completely addressed the 12 question. There were no word conclusions, I guess, if you 13 would ... that perhaps went to her question, although there 14 was a word conclusion in the document. I think Table 4 of 15 that document, if we could go to that, shows what I think 16 the conclusions from it are, and if you'll look at Table 4, 17 over in the last three columns there are calculations of the 18 30 year average, rolling average, which is my 19 recommendation. Then there's one called reduced full 20 average, which really isn't, no one is proposing that. That's 21 Hydro's full historic average minus some years that they 22 took out where some of the things don't exist, and then that 23 last column is sort of Hydro's full historical average 24 calculation, and then if you look at the ... we can only 25 calculate the 30 year average based on this data from, I 26 guess it's 1979 onward, and if you look at those 22 years of 27 data beginning in 1979, you find that in some years Hydro's 28 calculation would have been better, and in some years the 29 30 year rolling average would have been better, but the 30 bottom line for me is that for 13 of those last 22 years, our 31 method would have been on, or have been closer to the 32 actuals than Hydro's method. For nine of the last 11 years, 33 our method would have been better, so in the 22 years we 34 were about 60 percent, you know, accurate, versus Hydro, 35 and in the last 11 years we were, I think it's about 82 36 percent, if my calculations are correct. So that's the 37 conclusion to me, but again, I don't know whether that 38 answers Commissioner Whalen's questions or not. 39

MS. BUTLER, Q.C.: Mr. O'Rielly, can we go back now
please to the index to Mr. Brockman's original testimony,
and the final issue addressed back in August was the cost
of service, rural rate subsidy, and rate design.

# 44 MR. BROCKMAN: Yes.

45 MS. BUTLER, Q.C.: As it relates to the rural deficit, and the

- abolition or reduction of government and preferential rates,
- are you aware of Hydro's position on that issue?
- 48 MR. BROCKMAN: I think so, and I say I think so because

49 after reading Mr. Hamilton's, the transcript of Mr. Hamilton

50 on November 27th, it appeared to me anyway that Hydro is

currently saying that perhaps the restrictions on them are
not quite as severe as I thought they were, that the Orders
in Council perhaps don't still apply to all these rates, so I
think I'm aware of their current position, but I'm not a
lawyer so I can't interpret all of those issues, but ...

MS. BUTLER, Q.C.: And what is your recommendation forthe reduction of the subsidies, Mr. Brockman?

MR. BROCKMAN: Well, as always, I recommend that 58 Hydro continue, or continues to do all they can to reduce 59 those subsidies. I think I've testified several times in past 60 proceedings that I would like to see some sort of schedule 61 filed, some sort of definite plan to eliminate the subsidies, 62 63 as much as ... well not eliminate, because I don't think we can completely eliminate them, but to reduce the subsidies 64 as much as reasonable and possible. I would like to see 65 Hydro, you know, actually have to file something that says 66 here's our plan and here's what we're going to do, rather 67 than saying we'll wait until the next rate case every time, 68 and they have made some progress in this proceeding, by 69 the way, on that issue, on government subsidies in some of 70 71 the rural areas, but I would like to say, and I'm a little impatient, so ... 72

## 73 (2:15 p.m.)

MS. BUTLER, Q.C.: Okay, thank you, and can I go now,
Mr. O'Rielly please, to the index to Mr. Brockman's first
supplemental filed in September? Now as we can see here,
Mr. Brockman, you readdress the issue of the hydraulic
generation forecast.

#### 79 MR. BROCKMAN: Yes.

MS. BUTLER, Q.C.: Which we've addressed already now
this afternoon, and then you gave comments on Mr.
Bowman's evidence on behalf of the Consumer Advocate,
and Dr. Wilson on behalf of the Board. Looking at Dr.,
your comments on Dr. Bowman's evidence, this concerned
the demand energy rate?

86 MR. BROCKMAN: Yes.

MS. BUTLER, Q.C.: And in that sense, so did Dr. Wilson's,
so could you just summarize for the Board please, your
position on the demand energy rate currently in place
between Hydro and Newfoundland Power?

MR. BROCKMAN: Yes, as is on the record, I testified 91 before, at least once or twice before this Board that all other 92 93 things being equal, a good regulatory procedure would be 94 to have demand energy rates on customers who can afford the meters. I think Mr. Osler just repeated that statement 95 himself just a few hours ago, or an hour or so ago. I guess 96 the problem with that is in the all other things being equal. 97 Normally we do that as a matter of course, but once we 98 recommended that that proceed and the Board went 99

forward with that particular recommendation, I think I 1 recommended it, and I think Mr. Paul Hamilton 2 3 recommended it, and perhaps several others, we found that it would create a lot of volatility in Newfoundland Power's 4 revenues, and their financial people, and their accounting 5 people didn't particularly like that volatility, so all things 6 7 considered, we decided that perhaps it wasn't as great an idea as it seemed like at first. It did have some advantages 8 9 and that it perhaps better would signal the costs in the short run, and I say the short run because Newfoundland 10 Power does pay their costs, their demand costs and their 11 energy costs are reflected in the cost of service study and 12 get flowed through each time we have a cost of service 13 study, and any time we have a rate hearing, they get all 14 their costs. It's just whether or not they have a separate 15 demand energy charge. The other thing was is the time 16 that we were particularly concerned about this, 17 Newfoundland Power was particularly concerned because 18 people were really more concerned at that time about 19 reducing demand. Demand side management was probably 20 a bigger issue than it is today, although it's still an 21 important issue. Newfoundland Power simply hasn't had a 22 lot of demand growth in the last ten years. In fact, I think 23 in one of the tables in my evidence shows is their demand 24 has, in fact, fallen, so it's not as important of an issue, I 25 26 don't think, as it was at the time we first pushed for it, and because there are some negatives at least from the financial 27 perspective, of the financial planners at Newfoundland 28 Power, we're no longer recommending it as necessarily an 29 option to pursue. One other point on that is that I think it's 30 also important to remember that to some degree rate making 31 is sort of like squeezing a balloon. You have a set revenue 32 requirement in these cases, and you can charge customer 33 charges, you can charge energy charges, you can charge 34 35 demand charges, but if you reduce one, the other two have to go up, and vice versa, so if you squeeze the balloon in 36 one place, it may pop out somewhere else. Newfoundland 37 Power currently has energy growth, but they don't have 38 demand growth, so if we do something that will reduce ... if 39 40 we put demand charges in and then reduce the energy charges, we may have a different problem. We may create 41 the need for base load plant, for instance, on the system. 42 So you have to, we have to carefully design the rates to 43 44 make sure that you can still keep your tail blocks where you need them, and you don't overly encourage energy growth 45 when you put in demand charges. Sorry. 46

MS. BUTLER, Q.C.: No, that's fine. And the final point
you make in the first supplemental evidence, Mr. Brockman
is in relation to Dr. Wilson's evidence, not only on the
demand energy rate, but also on his position which
supports the abolishment of the RSP, and can you tell us
your recommendation to the Board, or position to the
Board, on that point?

MR. BROCKMAN: Well, I don't think that the RSP should 54 be completely abolished. I think that the customers like 55 56 having the, some of the stability that the RSP gives them. 57 I think that, as well, Hydro probably enjoys the stability on revenues that the RSP gives them, so I don't think it should 58 be completely abolished. However, I would like to see more 59 60 incentive put on Hydro to control fuel costs and be more efficient with their hydraulic generation as well as their 61 62 thermal generation. I'm not saying they're inefficient, but there's sort of an economic perspective of can we give them 63 more incentive than we have now, so that the Board 64 65 doesn't have to look as hard all the time and maybe Hydro goes on their own and tries to become efficient. They do 66 that now but it's just an economic idea that we like to give 67 utilities as much incentive as we can. So for that reason I 68 wouldn't abolish it, but as I said, I would not set the cap to 69 \$100 million, and I said \$50 in my evidence, but I think this 70 is something that probably would be discussed as this 71 proceeding goes on. I mean \$50 million is not a magic 72 73 number, but it certainly, you know, we can talk more about that later, but you know, I don't want to see it go too high. 74 I don't want Hydro to hit \$100 million because I don't think 75 it gives them any incentive in that respect. 76

MS. BUTLER, Q.C.: So the practical effect of capping theretail RSP at \$50 million would be what?

79 MR. BROCKMAN: Well, the practical effect would be that if Hydro's fuel costs went over \$50 million are there extra 80 costs ... it wouldn't just have to be fuel costs, it's fuel costs, 81 you know, created by hydraulic production as well as load, 82 changes in load, but it's mostly thermal production costs. 83 If they went over \$50 million, as I said, I think Hydro should 84 be allowed to book the overage and then come to the Board 85 for a short limited proceeding which would really be just on 86 87 the, why is the fuel cost, you know, more than we thought it was going to be, why is the hydraulic production less 88 than we thought it was going to be, or why has the load 89 changed, and it would be limited to those fairly limited 90 issues, and it would probably be a one or two, a three day 91 92 hearing, perhaps, and it's not unlike the hearings that the 93 utilities that I'm familiar with, regulated in Florida had on fuel adjustment. We brought them in for a one or two day 94 hearing every year, or every six months, depending on 95 96 what timeframe you're talking about, and we looked at their 97 cost and it gives everyone a chance to sort of see what's happening. It doesn't allow us to get into the situation that 98 we're in now where we have fuel costs based on \$12.50 a 99 barrel of oil, because we haven't reviewed, you know, in 100 101 that context for a long, long time, so I think it would create that sort of an incentive to have the Board get a regular 102 review of this important cost of Hydro. The details again 103 of that I think would have to be worked out. 104

105 MS. BUTLER, Q.C.: Okay, thank you, and Mr. O'Rielly, can

we go finally now to the annex to Mr. Brockman's second 1 supplemental filed in November? Thank you, and again, 2 you would readdress the hydraulic generation forecast 3 4 which you've already told us about. The third item on your index here relates to relative allocation proposed rate 5 increases. This is in response to Mr. Osler's position on 6 the relative rate increases between Newfoundland Power 7 and the industrial customers? 8

9 MR. BROCKMAN: Correct.

MS. BUTLER, Q.C.: And can you give us your conclusionplease?

MR. BROCKMAN: Yes, I looked at Mr. Osler's issue and, 12 13 you know, I thought it was an interesting question, one which deserved an answer, and so I did go back and look 14 at what has happened to the rates of both Newfoundland 15 Power and the industrials since 1992, because I think he did 16 have a good point. There should have been some 17 increasing spread between the industrials and 18 Newfoundland Power, and in fact, what I found was the 19 industrials had had three rate decreases during that time 20 and Newfoundland Power had had an increase, and so that 21 in the bottom line, as I present in my supplemental, my 22 second supplemental evidence, is that the spread has 23 widened to about 16.2 percent between the ICs and 24 Newfoundland Power since 1992. Now the other issue that 25 came up was that some of these increases are created by 26 27 fuel. The price of energy is going up because fuel is going up, and insofar as the industrials use more energy relative 28 to their demand than Newfoundland Power does, which 29 they do, you would also expect there'd be more of an 30 increase from that effect on them, so I found that, you 31 know, I was satisfied that the indication was that we were 32 moving in the right direction. Mr. Osler didn't really 33 provide us with any, at least not that I could find, any great 34 amount of detail that, you know, this is wrong or that's 35 wrong, to give us much to work with in terms of, okay, what 36 should we do with this issue other than to try and answer 37 it as I have here. 38

MS. BUTLER, Q.C.: And finally, the issue that's number
four on the table of contents, the allocation of generation
costs, this addresses the allocation of generation demand
costs based on coincident peak?

43 MR. BROCKMAN: Correct.

MS. BUTLER, Q.C.: And what are your conclusions onthat point, Mr. Brockman?

MR. BROCKMAN: Well, as I've said, I support a multiple
CP for the allocation of demand costs for generation
demand on the system, and the reason I support that is
because, my understanding from the evidence is that
Hydro currently uses essentially two generation planning

criteria. One is a farmed energy criteria so that they have to 51 make sure that in the dry years they have enough energy 52 from their thermal plants as well as all their plants to make 53 54 sure that the lights don't go out, and that's a common planning criteria used by hydraulic utilities. The other 55 criteria that they use is something called a loss of load 56 criteria, LOLH, you'll see it in the evidence, and the LOLH 57 is calculated for every year, every hour of the year and the 58 59 numbers that are in the filings of Hydro show that for the peak month that they chose, which was January, about 60 60 percent, I believe, of those hours ... about 60 percent of the 61 total yearly LOLH was contributed in January, and I think 62 63 another 23 percent was contributed in February and then March and December pretty much contributed the rest, so 64 that clearly at least two of those months are, seem to be 65 very important. I mean one is clearly more important than 66 the other, but only 60 percent. The other issue that I find 67 with that is that there is always a chance, and if we look at 68 recent history, we find that the peaks have occurred in 69 March, they have occurred in December. They don't 70 always occur in January or February, so I think for all those 71 reasons, I don't support a 1-CP, I certainly would ... I prefer 72 a 4-CP, but I think a 2-CP is better than one, so that's my 73 position. 74

MS. BUTLER, Q.C.: Okay, thank you, Mr. Brockman, thoseare my questions, Mr. Chairman.

- 77 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
- 78 Butler. Thank you, Mr. Brockman. We'll move now to
- 79 Hydro please, Mr. Young, for your cross?
- MR. YOUNG: Thank you, Chair. Good afternoon, Mr.
  Brockman. It's always a pleasure.
- 82 MR. BROCKMAN: Good afternoon.
- 83 (2:30 p.m.)

MR. YOUNG: Mr. Brockman, I didn't hear that you 84 discussed in either your recapping of your pre-filed 85 testimony, and I didn't see it in your pre-filed testimony, 86 any discussion about common and specifically assigned 87 88 plant allocations, and it's an issue that's been in this hearing, and it's one that I think we've discussed before. 89 I'm just wondering if, generally speaking, before we get into 90 this in some detail, I notice on page 22 you indicated that 91 there was some sound reasons, and I don't think you need 92 to refer to it. 93

94 MR. BROCKMAN: Okay.

MR. YOUNG: To keep to the regulatory principles that
were decided following the 1993 generic cost of service
hearing. Is that still your position here?

98 MR. BROCKMAN: I'm sorry, would you repeat the 99 question? 1 MR. YOUNG: Yeah, I'm just wondering, I mean you ... it's 2 just sort of a lead-in to the issue, that you had mentioned 3 that on page 22 of your testimony that the 1993 report of 4 the Board following the generic cost of hearing, generic 5 cost of service hearing, sorry, you indicated, as I 6 understand it, that you prefer not to throw the baby out 7 with the bath water and move on from there, is that correct?

8 MR. BROCKMAN: Yes, I can't remember how many weeks we spent on that generic proceeding, but you know, there 9 were some hard fought battles. I think the Board made a 10 wise compromise between all the issues, and so the tack 11 that I took with respect to most of these issues was rather 12 than trying to sort of repeat my old, where I lie on some of 13 these things, you know, what were my leanings on them, 14 was to go with what the Board said. I think the Board did 15 make a wise compromise in that order, and so insofar as 16 Hydro has followed the Board order, and I did check, you 17 know, the issues to see whether they had in fact complied 18 19 with the Board's order, and I think for the most part they did. There were several other issues that came up later, I 20 guess, that some of the other witnesses have raised, where 21 I didn't take great issue with them, I haven't talked a lot 22 about them, and while I think in general you have followed 23 that order, and that's appropriate. Did I answer your 24 question? 25

MR. YOUNG: Yeah, I think you did, yeah. Mr. O'Rielly, I 26 wonder if you could bring us to page 15 of Mr. Budgell's 27 pre-filed evidence please. Thank you, can we se lines 24 to 28 29 on that page, on the bottom. This relates to, as you can 29 see here, and I have no doubt you've read it, a change 30 that's occurred since then, a rural inquiry, and you have 31 some knowledge of that also. Perhaps I'll just read the part 32 that's been contentious here, and it says at that time the 33 34 Board recommended both generation assets and the 138 kV transmission line on the Great Northern Peninsula, be 35 assigned on a provisional basis being of common benefits 36 to all interconnected customers, and that's a 37 subtransmission cost for lines whose voltage is below 138 38 kV be specifically assigned. You've got it so we can see 39 40 the rest of this, great, Mr. O'Rielly. The Board further recommends re-examination of these cost assignment 41 decisions and rules for cost assignment at a future hearing. 42

43 MR. BROCKMAN: That's correct.

MR. YOUNG: Have you been reading the transcripts in
relation, and I'm trying to see how much time we can save
here, as to the issues that have come up on this matter,
about the GNP?

- 48 MR. BROCKMAN: I have been reading the transcripts and
- 49 trying of all the issues, I will admit I haven't done a great

50 study of it, but I have been following along.

51 MR. YOUNG: The point that Mr. Budgell is making further

in his evidence, which I'll ask you to comment on, is that
now that the GNP is connected that his position, Hydro's
position in fact, is that the generation which is now
interconnected should all be assigned to common, do you
agree with that position?

MR. BROCKMAN: Well, I agree with the position. I agree 57 with the position, I agree with the Board's position, let me 58 put it that way, in the '93 cost of service hearing, which said 59 60 that where a line or a generator was shown to be of 61 substantial benefit to the rest of the ratepayers, it should be classified as common, and I think that's what Mr. 62 Budgell was currently trying to say, trying to follow the 63 issue with what he says, he says that in dry years, for 64 instance, the generation could be of benefit to the rest of 65 the island, and he makes a couple of other comments as to 66 times when it could be used, so I have no reason to doubt, 67 you know, he knows the system and he's, you know, 68 familiar with what's going on and I'd have no reason to 69 70 doubt that that's true, so I don't take issue with that. I think I'm agreeing with it. 71

72 MR. YOUNG: Okay, the bottom of page 16, could you just scroll down a bit further, Mr. O'Rielly, please? We find at 73 the bottom of this page under the heading of common plant 74 there, thank you, that Mr. Budgell has set out the principles 75 as to the assignment of plant as either common or 76 77 specifically assigned, and at this point he's talking about in (b) and in (d) there about transmission plant in particular. 78 I wonder if you could just scroll down to (d) please, Mr. 79 O'Rielly? Thank you. Perhaps, Mr. Brockman, it might be 80 easiest if you could just read that in starting with line five, 81 and I'll ask you to comment about it after. 82

83 MR. BROCKMAN: It says, all of Hydro's transmission and terminal station plant that connects a single customer and 84 remote generation or voltage support equipment that is of 85 substantial benefit to all customers on the grid, for the 86 purposes of this guideline under any normal operating 87 scenario, the output of remote generation can be levered 88 (phonetic) to the 230 grid, that is in excess of radial load 89 and then the remote generation is considered to be of 90 substantial benefit to all customers and as such the 91 transmission and terminal plant, terminals plant connecting 92 it to the grid would be assigned common. 93

94 MR. YOUNG: Do you have any comment about that?

95 MR. BROCKMAN: No, I think I agree with it.

MR. YOUNG: There has been another assignment change
which doesn't relate to the GNP directly, but it's to the
Doyle's-Port Aux Basques system, and Mr. Budgell speaks
about that also. The transmission and terminal plant was
previously assigned to Newfoundland Power and it's now
assigned common, do you agree with that change also,
(inaudible) it's the same principle, I believe.

- 1 MR. BROCKMAN: I'm sorry, I'm not following your 2 question.
- MR. YOUNG: Okay, this relates to the line going to Port aux Basques, in that area.
- 5 MR. BROCKMAN: Uh hum.
- 6 MR. YOUNG: Do you understand that the same principle 7 was applied there as was applied for the GNP, or ..
- 8 MR. BROCKMAN: Yes.
- 9 MR. YOUNG: Okay.
- MR. BROCKMAN: And I agree with the principle, no matter where it is applied.
- MR. YOUNG: And this test, is this test one that would be used elsewhere, or one similar to one that would be used
- 14 elsewhere for interconnecting systems?
- 15 MR. BROCKMAN: Do you mean in other jurisdictions?
- MR. YOUNG: Other jurisdictions that you're familiar with,yes.
- MR. BROCKMAN: Yes, I believe it's an appropriate onethat would be used elsewhere.
- 20 MR. YOUNG: Still with assignment to plant, but looking at
- 21 a different beast, have you been familiar with the issue of
- 22 the frequency converters at Corner Brook and Grand Falls?
- MR. BROCKMAN: I'm familiar with the issue. I don't thinkI took a position on it.
- 25 MR. YOUNG: I don't think you did either, and I'm going to
- ask you do that I suppose, and see where you stand on it.
- 27 You may be aware, and tell me if you're not, that your client,
- 28 Newfoundland Power, once had a customer in the vicinity
- of Corner Brook, were you aware of that, who receivedpower at 60 hertz?
- 31 MR. BROCKMAN: No.
- MR. YOUNG: You weren't aware of that, okay. I think the 32 evidence is that, and which I'll ask you to respond to, and 33 if you're not familiar with the facts here, of course, you can 34 respond to this as if it were a hypothetical, but the 35 evidence is that there were no other customers served at 50 36 hertz left in Newfoundland except for the two paper mills 37 which have frequency converters, they in a sense serve 38 themselves at 50 and themselves at 60 through the 39 frequency converters, were you aware of that generally? 40
- 41 MR. BROCKMAN: Yes.
- 42 MR. YOUNG: What is your position on the proper 43 assignment of those frequency converters?
- 44 MR. BROCKMAN: I think what we're talking about there 45 perhaps is, are facilities whose sort of essential character

has changed over the years. The reason they were put in 46 may be different than the reason they are currently being 47 used, and I think when that happens oftentimes we have to 48 49 make some adjustments. In fact, I think that was the Board's reasoning in the cost of service, in the '93 order, 50 where they talked about using things like load factor to 51 classify plant, and they said things change, you know, over 52 time, and so I think the Board is cognizant that we can't just 53 say this was built for this reason and forever and ever just 54 forget about it. Usually we can but where the essential 55 character changes, so that I think if you have a situation, 56 and again, I haven't studied that issue in great detail, but, 57 58 you know, I don't know all of the history of that whole area but if, in fact, only the industrials are benefitting, or these 59 two industrial customers are benefiting from those 60 frequency converters, and they're the ones who really need 61 them and benefit from them, then it seems to me fair for 62 them to pay for the, and so probably they would be 63 classified as specifically assigned. 64

MR. YOUNG: Can I ask you if that would be consistentwith the way regulators treat these kinds of issues in otherjurisdictions in your experience?

MR. BROCKMAN: Yes, I think it is, but different 68 regulators do different things. I mean oftentimes in a 69 situation like this we don't necessarily want to have to 70 71 examine every single piece of equipment on the system in great detail, so sometimes regulators just make up rules, like 72 is it 230 kV or above, or something, and if it is let's classify 73 it as common. I mean but in general I think that's 74 consistent with good regulatory principles. 75

76 MR. YOUNG: I wonder if I can turn now to the RSP issue.

77 MR. BROCKMAN: Okay.

MR. YOUNG: And could I direct you to page 11 of your
pre-filed testimony please, at the bottom of the page, or
near the bottom, at line 23. I wonder if I could ask you to
read in, starting at line 23, that sentence there, please.

MR. BROCKMAN: In the circumstances of this
proceeding, Hydro's proposal to incorporate a \$20.00 per
barrel fuel cost in base rates is a reasonable enough
balance of the need to improve fuel cost recovery and
provide rate stability.

MR. YOUNG: Now, I take it from that obviously that the 87 \$20.00 a barrel base rate is not a problem. I'm wondering if 88 you could respond to this point. The RSP, I think, and it's 89 been said enough times here in this hearing that we're 90 getting almost bored to hear it, but it's intended to protect 91 Hydro from the matters that are outside its control ... fuel 92 prices, variations in load, and variations in hydrology, is 93 that your understanding? 94

95 MR. BROCKMAN: With the possible exception, and it's

1 relatively minor, but not completely minor, that not all those

2 things are outside of Hydro's control. I'll give you an

3 example, I mean fuel costs, certainly Hydro doesn't control

the price of fuel oil in the world, but they do control whatthey purchase, and they do control how they operate their

they purchase, and they do control how they operate thhydraulic generation so with that possible caveat, yes.

MR. YOUNG: Yeah, I mean Hydro can react to some of
those things, and I suppose over a longer period of time,
Hydro ... it could shape the load, but within any sort of
short period of time, essentially it gets what it sees from its
customers, is that correct?

12 MR. BROCKMAN: That's correct in terms of the load.

13 (2:45 p.m.)

MR. YOUNG: You reiterated today your point about the \$50 million cap, and you talked about the possibility of having a short proceeding to deal with that. Hydro's testimony on the matter is to the effect that the fuel price forecast of \$28.00 per barrel, all things being equal, and if that turns out to be reasonably accurate, the balance is going to be exceeded.

21 MR. BROCKMAN: That's correct.

22 MR. YOUNG: Pretty soon, isn't that correct?

23 MR. BROCKMAN: That's correct.

MR. YOUNG: And in fact we can see some of this, even though this is for 2003 and 2004, the numbers on the screen from page 11 suggest that that's the case. I'm wondering why you think it's something to be deferred and to be looked at at that point and don't you think this is the hearing now when we should consider this issue about going over the \$50 million cap?

MR. BROCKMAN: Well, yes and no. I think it's probably 31 now perhaps is the time to look at this year, or the test year, 32 but I think the Board also has the opportunity to set up a 33 procedure for looking at this in the future, and if you look 34 at the numbers on the screen you'll see that in 2003 there's 35 62 and then there's 37, and I guess that's based on the 36 \$28.00 barrel for oil which we're nowhere near today, but I 37 think the Board has the opportunity to set up a procedure 38 whereby this thing can go out into the future and be a way 39 that the Board can exercise its regulatory review of Hydro, 40 perhaps on a yearly basis if the costs get out of control and 41 the cost of oil gets out of whack in the RSP, so I'm not 42 saying that Hydro, if they do hit the 62, let's say that 62 is 43 for 2002 ... I don't know what the number is for 2002 in the 44 test year anymore, there's been so many changes, including 45 the cost of oil and how Hydro is ... you know, the hydraulic 46 generation is actually coming on. But I don't see any 47 problem with having them in a hearing even in next year to 48 see where things are, to see if we need to reset this thing 49

and see if we need to rethink this thing. We're not talking 50 about a big hearing, we're only talking about a limited 51 scope hearing to see whether or not we should want to 52 53 pass these things along, do we want to amortize them all over three years, do we want to perhaps take the amount 54 over 50 and apply that to only one year, or just write it off 55 in a month, or what have you. I don't see that that's 56 necessarily a problem. In fact, I think it's an opportunity. 57

MR. YOUNG: Are there not enough pieces of information
available now to the Board to make its determinations as to
what it can do on that point?

MR. BROCKMAN: Well, these things are certainly filed 61 62 with the Board. It's my understanding, I guess the RSP balances are filed every month with the Board, but there 63 doesn't seem to be a hearing on it and no one seems to call 64 it, object to it, or make very many questions about it, and 65 maybe no one has questions about it, but somehow or 66 some way we got to \$12.50 a barrel of oil in the RSP over 67 68 this period of time, so that tells me there hasn't really been a lot of necessarily public review if you will, I mean these 69 70 are certainly public documents, I'm not trying to say that any of this has been done under the table or anything, but 71 there is a big difference between people knowing that 72 there's going to be a hearing, knowing that they're going to 73 have to talk about these issues, knowing they're going to 74 75 have to justify these things, and just having it sort of become automatic almost by default, and I'm not a lawyer 76 so I don't know ... I'm sure the Board probably has a legal 77 78 authority now to pull Hydro in every year if they want to ask them about these things, but it's not expected, I don't 79 think. 80

MR. YOUNG: You mentioned at one point, and I don't
know if you need to go to the reference, perhaps you can
just respond to my question, but I believe you mentioned
at one point that given Hydro's history as being away from
the Board for a period of time that it may be some reason to
bring it back sooner rather than later. Is that something
you feel is true in this connection also?

88 MR. BROCKMAN: It's something ...

MR. YOUNG: Is that an issue or an element that caused
you concern in relation to not having a hearing next year
on the RSP in particular?

MR. BROCKMAN: Yes, it is with respect to the issues in
the RSP. I don't necessarily want to have a hearing every
year on Hydro's cost of capital, or their labour costs, or any
of that. I'm really only talking about fuel costs, hydraulic
production, you know, the things that are in the RSP, a
limited scope hearing.

MR. YOUNG: The evidence of Mr. Wells, which you're
probably familiar with, indicates that Hydro will be, and I

December 3, 2001

- know you're familiar with this fact, will be commissioning
   Granite Canal in 2003.
- 3 MR. BROCKMAN: That's correct.

4 MR. YOUNG: And you may also know that Hydro has 5 negotiated contracts for two non-utility generating 6 sources. These things are going to have an impact on 7 Hydro's circumstances, would you suspect that to be the 8 case?

9 MR. BROCKMAN: I think it will be.

10 MR. YOUNG: So I mean given the fact that the last ten years has been relatively stable as to the developments of 11 this sort, and that in the near future, if I can call it that, is 12 less so, do you think that we really have the kind of 13 concern that you've stated about the longer periods of time 14 before the next hearing ... and my suggestion to you is that 15 Hydro's position is that we're going to be before the Board 16 again within a couple of years at any rate. 17

MR. BROCKMAN: Well, again, I think there is value in the 18 Board establishing a certain regulatory framework, a certain 19 procedure that's a regular procedure, rather than sort of, 20 well maybe we come in, maybe we don't. I mean these are 21 22 not things, these are things that are done in other jurisdictions, fuel adjustment reviews, for instance, are 23 done periodically, every year, every six months, and that's 24 all we're really suggesting here. I know that Hydro has 25 these things coming online, and that they say they're 26 coming back in 2002. I'm not sure whether they'll be back 27 in 2002 or not. I mean things change sometimes, and so I 28 don't think that necessarily because of that I would 29 withdraw my recommendation that I'd like to see some sort 30 of regular review of what's currently an automatic 31 (inaudible). 32

MR. YOUNG: I wonder if I could turn our attention now to 33 the issue of coincident peak allocators, and you've brought 34 that out again in your summation today of your testimony 35 that's been pre-filed. The issue that we've discussed a fair 36 bit up to date in relation to this is cost causality, and I'll ask 37 you to respond to this ... there was one witness, and I can't 38 remember which one said it, that the issue is who is taking 39 large amounts of load at the time that the system peaks, 40 and that's the issue, is it not? 41

MR. BROCKMAN: Well, no, it's two issues. There are 42 really two issues involved in cost of service. We always 43 sort of blend this marginal with the embedded, in the 44 embedded sense that is true. We sort of look backward 45 and say, you know, who was on the system today, or who 46 was on the system yesterday. In the marginal sense we 47 also look forward and we talked a little about that, I guess, 48 with respect to the frequency converters, and we try to sort 49 of blend those two issues, so when the Board makes 50

51 decisions about how to design rates and how to do cost of 52 service, and so on, they're always looking towards, not

only backwards but forwards as well, and it's a balance.

54 MR. YOUNG: I'm wondering what looking forward does as 55 to the choice of 1-CP, 2-CP, 4-CP, how does that change the 56 approach the Board takes?

MR. BROCKMAN: Well, I think, as I said, that we have to 57 58 look at what's causing Hydro to add generators to the system and as I testified, they seem to have two criteria. 59 Number one is this firm energy criteria which would mean 60 that each class's energy contribution, which could 61 probably be said to have caused that percentage of that, 62 you know, addition. And the other one is the loss of load 63 hours, and you could say that each class's contribution for 64 loss of load hours was responsible for adding generation 65 to meet that criteria. And ... 66

67 MR. YOUNG: This is the generation demand allocator 68 we're talking about, is it?

69 MR. BROCKMAN: Yes, the generator demand allocator.

MR. YOUNG: I'm wondering if that's really an important
issue, the one you just raised, in relation to this issue, I
mean the fact that you bill for ... I mean generally speaking,
unless you're billing strictly at peak, you're going to get a
fair bit of energy, and you would expect to with any kind of
a base load plan, correct? You may build it for demand,
your energy ...

77 MR. BROCKMAN: Well, you build it for both.

78 MR. YOUNG: You build it for both, and that's my point.
79 You could get both, but if you're looking at allocating the
80 system based on demand related costs, this is the thing
81 you look to is the 1-CP, 2-CP, 4-CP, and that's on the
82 generation side.

MR. BROCKMAN: Well, using the 1-CP, 2-CP, you know,
whatever, multiple CP's ...

85 MR. YOUNG: Yes.

86 MR. BROCKMAN: As a, I think in Hydro's case now because you're doing it as a loss of load hours criteria to do 87 your planning, we're using it as a proxy for causality. We're 88 saying what causes these generators to be built and 89 therefore who should pay for them, and according to your 90 witnesses, you're building them for those two reasons I 91 mentioned ... one, loss of load hours, and one, firm energy, 92 and we're only trying to pick a proxy of 1-CP, 2-CP, 3-CP, as 93 a way to sort of reflect that LOLH, and I think the 4 does it 94 better than the 1. 95

MR. YOUNG: I wonder if I could refer you, Mr. O'Rielly
please, to NP-157. Can we see the tables there, attached
there please, and there's been enough said about this table,

- 1 I'm not going to go into it further, just for the visual impact,
- 2 but I wonder if you can point to any years in which there
- 3 were four months with relatively equal system peaks?
- 4 MR. BROCKMAN: All four months?
- 5 MR. YOUNG: Yeah.
- 6 MR. BROCKMAN: I don't see any.
- 7 MR. YOUNG: No, the ...

8 MR. BROCKMAN: Well, no, with the possible exception

9 of perhaps '89, I mean it depends on what you mean by

relatively equal, but they're not always very close for all

- four months, or in this table I guess they're never real close
- 12 for all four months.

MR. YOUNG: Right, I wonder now if I could refer you to

14 **NP-125** please, and my understanding of this table is that

15 it was provided, or the data was provided from the

- 16 Newfoundland Power demand forecasts, that's what it says
- 17 here. I note that there's two peaks in these years which are
- identical in the forecast, is that your understanding of this?
- MR. BROCKMAN: That's what this table seems to show,
  although I guess there's an eight kilowatt difference there
  in that first line, but ...
- 22 MR. YOUNG: Yeah, that's right, but it looks to me though,

that ... you're right, there is an eight kilowatt difference, but

essentially this is two identical peaks for all intents and

25 purposes, or very close to it, is that not correct?

MR. BROCKMAN: It seems to be correct, yes.

MR. YOUNG: So, I'm wondering based on the table we saw a moment ago, and based on this, whether 2-CP might be the position that Newfoundland Power ought to be supporting. I mean 2-CP seems to be the pattern we see, more than 4-CP.

MR. BROCKMAN: Well, the problem that I have with that 32 is, as I've said, is that none of these tables address loss of 33 load hours, first of all, which is what you use for planning 34 your, essentially as your peak demand, if you will, when 35 you're going to have to add something because of loss of 36 load hours. None of these tables reflect that, and secondly 37 of all, the months in which these things occur are always 38 the same two months, so I don't know which two months 39 you would pick and be fair about it. 40

MR. YOUNG: Well, you're on your own a little bit on that
point. I think it's fair to say that all the other experts have
said that that's not a relevant question.

- 44 MR. BROCKMAN: I don't agree.
- 45 MR. YOUNG: The other point I wanted to follow up on on
- this though, you had mentioned this loss of load hours
- 47 thing, and you mentioned today a little earlier in direct, that

48 when you do that study you get usually 60 percent from

- 49 one winter month, January typically, probably 20 percent
- 50 from February, so in that scenario you have two months
- 51 which gives us 80 percent of the load.

52 MR. BROCKMAN: That's correct.

MR. YOUNG: Going further than that, I mean the numbersstart to diminish.

55 MR. BROCKMAN: Yes.

MR. YOUNG: Fairly quickly, but it's your judgement that
4-CP is supported by the numbers that Mr. Budgell has
used in his study, the same numbers that he's used for 2CP, and I think others have suggested it could also support
1-CP, in fact Mr. Brickhill has said that.

MR. BROCKMAN: Well, again, I guess my principle 61 reason for liking four is because I don't know which of 62 those two months it's going to be, as well as, I guess in, I 63 think it was Mr. Brickhill's original evidence, he was looking 64 65 for stability, and when I looked at his table I saw the four being more stable, but to tell the truth, I guess I'm not really 66 enamoured with either, between four and two, but I think 67 because of the fact that I don't know which peak, which 68 69 month it's going to occur in, I like the four better than the two, and I know that all the hours are important, but I don't 70 see any justification for one, to follow up on that question 71 you just asked. 72

MR. YOUNG: Okay, I think the best I can say about that is 73 74 that the issue seems to be joined in seeing the data. You touched upon the rural subsidy issue. Now Mr. Brockman, 75 you're a veteran, as you mentioned, of Hydro's rate 76 applications, rate referrals, and other kinds of proceedings 77 before this Board, and I'm trying to think of any since 78 you've been around that hasn't discussed the issue of the 79 rural subsidy, and I don't imagine there were any. 80

81 MR. BROCKMAN: I can't think of any.

MR. YOUNG: No, now you made a qualification today in
your evidence which I thought was instructive because
your pre-filed evidence at page 25 uses the words
"eliminating the rural subsidy", but I think today you're
talking about reducing it, is that correct?

87 (*3:00 p.m.*)

MR. BROCKMAN: Yeah, I think the word "eliminating"
was perhaps too strong, because I don't know that we can
completely eliminate it. I don't know that that's realistic in
our lifetimes. Perhaps it is but it may be too ... I'm after a
reduction as opposed to necessarily a complete elimination
in my lifetime, or at least in my professional consulting
lifetime.

95 MR. YOUNG: I'm not going to ask you when you're going

to retire, I guess that wouldn't be fair. Is it the ... and I

know you've looked at this before, but I don't know how
much evidence you've given in this time, or that which

much evidence you've given in this time, or that which
really is intended to address this point, but I can't but ask

you, is it your understanding that it's the lifeline rate in the

isolated rural structure which largely contributes to thedeficit?

MR. BROCKMAN: I don't know that I, at one time I 8 probably knew the answer to that, but I haven't looked at 9 the components of the subsidy lately, so I'm not sure I can 10 answer that. It's certainly ... the lifeline rate is probably one 11 of the last things we could eliminate if we decided to do 12 that, to be realistic about it. We may never want to 13 eliminate that, I don't know. That's something we'd have to 14 look at down the road, but I don't know what it's 15 percentage component is of the total subsidy anymore. 16

MR. YOUNG: Okay, I was going to suggest to you that
that would have to be the first thing that you would have
to deal with if you were really going to take a serious,
serious change in the size of the subsidy, but ...

MR. BROCKMAN: Well, perhaps in the size, I agree with you, in the size, if you're correct that it is the most sizeable component, and I have no reason to doubt you. I just haven't looked at the numbers lately. That's probably where you get the most bang for the buck, but politically and realistically it may also be the hardest one to eliminate.

MR. YOUNG: Mr. Chairman, I wonder if this might be agood time to break.

MR. NOSEWORTHY, CHAIRMAN: Sure, we can if you
wish, yeah. We'll break now until 20 after. Thank you.

(break)

32 (*3*:20 p.m.)

31

MR. NOSEWORTHY, CHAIRMAN: Thank you. Can I ask
you to continue, Mr. Young, please.

MR. YOUNG: Thank you Chair. Mr. Brockman, in the context of hydrology you made reference to Granite Canal coming, being a known event the next number of years, I'm just wondering how it is that Hydro uses something in its test year which is not going to occur within the test year when we do hydraulic forecasts. I would have thought that posed a problem.

MR. BROCKMAN: Well, it's not completely outside, I 42 guess, my experience where test years have been, I guess, 43 the word is pro forma that the accountants use there, so if 44 you think the rates are going to be in effect for a long time 45 ... now if we come back for a rate hearing in, I guess I said 46 2002 earlier, but 2003, I guess, was the proper year, then 47 perhaps it doesn't make as much difference, but if we 48 thought the rates were going to be in effect eight more 49

years, then we might try to make certain adjustments, and 50 Granite Canal may not be the only one. There may be 51 others that I haven't mentioned, and haven't looked, you 52 53 know, looked at, where we might pro forma the test year, so I don't think it's that uncommon to do something like that 54 if you're trying to make rates for long term, a long number 55 of future years that you might try to bring something into 56 the test year that you know is going to happen, very 57 recent, you know in the very near future. 58

MR. YOUNG: I don't have a real clear handle on what you
are proposing, I wonder do you know of any other
Canadian jurisdictions that use hydroelectric production
information for test years which include increases that
won't occur in that year?

64 MR. BROCKMAN: I haven't specifically looked at that, no.

MR. YOUNG: Some of your testimony relates to weather
normalization used by Newfoundland Power, and I
understand that they use 30 years of data in relation to
that. How is that applicable to the issue of hydrology, and
is there any connection at all?

MR. BROCKMAN: Well yes, I think weather creates
hydrology. You know, hydraulic generation is caused from
rainfall and snowfall and precipitation in general, so that it's
clearly driven by the weather so I think, you know, insofar
as we looked at Newfoundland Power's number of years
they use for weather related things, or Environment Canada
or somebody else, it clearly drives hydrology.

MR. YOUNG: But the purpose for which Newfoundland
Power uses weather normalization is quite different, would
you agree than what we're using hydrology for in this
case?

81 MR. BROCKMAN: Well, it's different, yes.

82 MR. YOUNG: So the Board having approved that that's in 83 fact exactly what's occurred, the 30 year weather 84 normalization record which may, in fact, be all they could 85 get, all that Newfoundland Power could get, are you 86 suggesting that it should be some sort of constraint on 87 Hydro, since all Newfoundland Power uses for their 88 normalization ...

MR. BROCKMAN: No, I'm not suggesting it be a 89 constraint on Hydro, I'm just suggesting that where we're, 90 91 what we're trying to do in the test year is decide what we think the expected hydraulic generation is going to be, and 92 in order to do that we, I think it's useful to look at other 93 places where we try to predict what we think long-run 94 weather is going to be, and that's just one of the places 95 where there, that we look. 96

MR. YOUNG: Looking in other places for things you canuse and can sometimes be useful, I'm wondering if you can

- tell us which other Canadian electric utility uses a 30 year
- 2 rolling average to forecast hydraulic production for rates or
- 3 for any other purposes?
- 4 MR. BROCKMAN: I don't know that we found any that 5 use a 30 year rolling average.
- MR. YOUNG: You provided information in your most
  recent submission, written submission of evidence, as to
  the 35 year average as it is used by Newfoundland (sic),
  New Brunswick Power, pardon me. Do you understand
- that there was a particular reason that 35 years was picked.
- 11 It strikes me as sort of an odd number.
- MR. BROCKMAN: I don't know why they use 35, no. I mean I don't know how they picked that exact number as opposed to 30, or 25, or 45.
- MR. YOUNG: So I can assume though it wasn't based on
- 16 weather normalization or any other sort of issue, like the 35
- number doesn't match that, is that correct?
- MR. BROCKMAN: I don't think it was based on weathernormalization. I don't know why they picked 35.
- 20 MR. YOUNG: Okay, so you wouldn't know, for example, if
- that might have been the only, or the longest record that
  they had that was of useful information, that may or may
  not have been it, or ...
- MR. BROCKMAN: It's possible. I mean, I doubt it, but Idon't know for a fact.
- MR. YOUNG: I'm just wondering if you knew that Hydro, when it used 50 years, if you thought that Hydro using 50 years was using it because it was a 50 year period or for some other reason that related to its record? What's your understanding of that choice, of the 50 year hydraulic
- record that Hydro uses?
- MR. BROCKMAN: I'm not really sure I understand yourquestion.
- MY. YOUNG: Well, are you aware that the hydraulic record that it turns out that Hydro is using now is about 50 years?
- 36 MR. BROCKMAN: Yes.
- MR. YOUNG: Did you understand that to be because
  we've chosen 50 years of the record or is that the full
  hydraulic record, or what's your understanding of it?
- MR. BROCKMAN: My understanding is is that some of 40 your records go, I think I saw some that go back into the 41 twenties, which would be about 80 years I suppose, and 42 some don't go quite back that far, so you know, I don't 43 know why you cut it off at 50, I suppose there were 44 reasons, but I don't really remember what the reason was. 45 If even known why you cut it off at 50, I don't remember 46 what it was. 47

- 48 MR. YOUNG: Okay. If I was to suggest to you that it was
  49 done because that's the period of time for which Bay
  50 d'Espoir has reliable records, would that match your
  51 understanding of that?
- 52 MR. BROCKMAN: That sounds like it, it sounds familiar.
- MR. YOUNG: I suggest to you if you come back later it's
  going to be a longer period. It's going to go back to that
  date.
- MR. BROCKMAN: Yes, if that's what it's tied to then it will
  certainly get longer as we go out in time.
- MR. YOUNG: I wonder if I could ask Mr. O'Rielly to go to
  page 2 of your first supplementary evidence, please. Just
  go down the page a little bit please.
- 61 MR. BROCKMAN: Did you want page 2, I'm sorry, or page 62 ...
- 63 MR. YOUNG: That's fine there, yeah.
- 64 MR. BROCKMAN: Okay, yeah.
- 65 MR. YOUNG: Would you start reading the first few 66 sentences there on line 19, please.
- MR. BROCKMAN: It says, "I recommend that the Board
  use the 30 year moving average. A 30 year period is long
  enough to minimize volatility in the average, but recent
  enough to reflect changes in inflow patterns".
- MR. YOUNG: Okay, that's fine for the purposes of my
  question. Later in the next supplementary, you've
  discussed setting a median as a possibility. I'm just trying
  to get some sense of what timeframe you'd use for a
  median. If you're going to use median, would it be the full
  record or would it still be 30 years?
- 77 MR. BROCKMAN: I would still use 30 years.
- MR. YOUNG: So let's say, I'm just wondering if you can
  respond to what other jurisdictions might do when they
  use median. Would they use a rolling period or would they
  use the longest available amount of data? Can you
  suggest any that use a short period of time, like 30 years
  and still use a median?
- MR. BROCKMAN: I don't recall how those two tied
  together off the top of my head. I might have to get back
  with you on a response to that.
- MR. YOUNG: Okay. If I was going to suggest to you,
  generally speaking, that median is a better tool to use when
  you have a larger data set, would that be a generally correct
  statement?
- 91 MR. BROCKMAN: I don't know that it's tied to the size of 92 your data set, the median is simply a number if that you, if 93 you want to be right half the time and wrong half the time,

1 you pick. I don't know, that would be true whether you

2 had, you know, 100 years or probably 60 years. Obviously

the more years you have the more things are smoothed out.

4 So, you know, if you roll the dice 100 times you're probably

going to get closer to 50/50 than if you only roll them threetimes.

MR. YOUNG: Have you considered how useful the 7 methods that you've proposed would have been in 8 forecasting the 2001 hydrology. Have you looked at that 9 issue? I wonder if I can refer you in answer to this 10 question to undertaking, or U-Hydro No. 17, please, page 11 2. Perhaps I got the wrong page reference. Could you 12 scroll down to the table please. There we go. No, I don't 13 14 believe that's the table I was looking for. Just bear with me for a second. I'm using the hard copy. 15

- MR. BROCKMAN: I think it is the table, I may be wrong,but ...
- 18 MR. YOUNG: If you could just bear with me for a second,
- I'll make ... I haven't been using the electronic copy for thispurpose.

21 MR. BROCKMAN: Right. I think I could have answered 22 your question from that table.

MR. YOUNG: Perhaps we can go back to the table if you 23 think you can answer the question. There we go. Yeah, 24 the numbers at the bottom of the page, I'm sorry at the 25 bottom of that table, I think you would agree with me that 26 they are fairly significantly under what you'd expect as an 27 average, or a median that you've chosen from the 30 years, 28 do you agree ... and your number is lower still than is the 29 case? 30

MR. BROCKMAN: Well, the full average is certainly higher than the number that the 30 year average gives us in this particular year. We aren't finished with the year yet, but, yeah, the 30, the full historic average gives us a higher number in that year.

MR. YOUNG: Because we have ten months of actuals herethough, correct?

38 MR. BROCKMAN: Right.

MR. YOUNG: And then for November and December we've
used either method and what we've come up with though
are numbers which are relatively low, so just looking at this
one I think you'd have to agree that the full average would
provide a more accurate or at least a number which is more
like you'd expect to see for test year purpose.

45 (3:30 p.m.)

MR. BROCKMAN: I'm looking for the projection and I
don't see it on this table of the actual, so that I can compare
those last two numbers, you know the 3,540 is what the 30

49 year average would give me and 3,573 is what the full

- $_{\rm 50}$   $\,$  average would give me but I don't know what the projected  $\,$
- 51 actual is so it's a little hard to answer from just this table.

MR. YOUNG: My understanding of the table, and perhapsyou can ...

MR. BROCKMAN: Maybe I mis-spoke that is the table Icould use to answer your question.

56 MR. YOUNG: Yeah, no, that table, it looks a little different 57 on the screen, and I looked in my hard copy and I thought it might because I got scribbles on mine, but the middle two 58 columns there say estimated inflows from November and 59 December, so that shows what's happened in those months 60 61 for those reservoirs, and on the right hand side it says estimated annual and I take it that the last two months have 62 been done according to the two methods, one being the 30 63 year average which has been proposed by you and the 64 other being the full hydraulic average and if those two 65 months, because obviously we don't have actuals, would 66 show that this is our best guess based on those two 67 methods, but in any event for the year 2001, I think you'd 68 agree with me that we're looking at a fairly low number for 69 70 hydrology.

71 MR. BROCKMAN: Oh yes, this shows a lower number.72 There's no question about that.

MR. YOUNG: And also that in a year of this sort, the full
average would come closer to the sort of number you'd
expect for a test year.

MR. BROCKMAN: Yeah, there are years even in the other
table that's in here where I said the 20, whatever it was 16,
or 13 out of the 22 years, that 30 was closer. There are
certainly years where the full average is closer. Just not as
many years. But this is one of the years where the full
average appears to be closer.

MR. YOUNG: In your most recent evidence you made a
point that Nova Scotia Power uses only 5 years of
hydraulic data, for business planning and rate making
purposes.

86 MR. BROCKMAN: That's right, according to their rate 87 department.

MR. YOUNG: On the, you also indicate that the hydraulic
generation in Nova Scotia is only about 8 percent total, is
that correct?

MR. BROCKMAN: I don't remember the percentage. That
sounds a little low, but it might be right.

93 MR. YOUNG: Okay, well ...

94 MR. BROCKMAN: Subject to check.

95 MR. YOUNG: Perhaps we can do that, because I want to

- 1 make sure we're right on that one. I'm not sure of the page
- 2 references offhand, but I could find the page. Page 3, thank
- 3 you.
- 4 MR. BROCKMAN: That looks like it's right. Eight percent5 on that page.

MR. YOUNG: Yeah, now simple math tells me that if they're 6 off by 20 percent, just say they're under by 20 percent, 7 you're looking at two percent on total, so if you were 8 looking at a, if you were a utility planner I understand your 9 point you're making about it not being stabilized, but if 10 you're a utility planner looking at realistically a swing of 11 two percent, I mean would that cause you to have a 12 rigorous and highly analytical look at your reservoirs or 13 would you basically just use numbers that are going to get 14 close. Does it matter as much? 15

MR. BROCKMAN: Well it certainly doesn't matter as much
but as a planner and rate maker I want to get as close as I
can. It doesn't cost me anything extra to use a 30 year
average, or a 30 year rolling average versus full historic, so
I would use the best number I could get my hands on. I
wouldn't just say it's two percent so I'm not going to worry
about it.

MY. YOUNG: I note on that same page, in line 15, it says, I'll just read this out. It says, "the evidence stated", this is from New Brunswick Power '93 report from the Public Utilities Commission, "it says the evidence stated that the average water conditions were determined on the basis of a 35 year historical period", a computation which is reviewed periodically, so it looks like in New Brunswick

they use 35 years and I think the record is unclear here as to why it's 35 years, but it looks pretty clear that it not a

32 median that they use, it's an average, correct?

MR. BROCKMAN: Yes, it's a simple mean, which is the average in common terms.

- MR. YOUNG: I'm just wondering, on the following page, 35 page 4, you've indicated that when you looked at the 36 information you couldn't see a Canadian standard for any 37 particular number of years. I put it to you that, aside from 38 Nova Scotia Power, and I don't know about New Brunswick 39 Power, I think the evidence here is unclear about that, but 40 are you aware of any other Canadian utility that relies 41 heavily on hydraulic generation. How would you make that 42 determination as to what that means, because I never 43 realized that's been a matter of some debate, but can you 44 confirm that there are any other Canadian utilities that rely 45 heavily on hydraulic generation that use some number of 46 years for determining what they ought to use for a test 47 year, and different from their full reliable record? 48
- 49 MR. BROCKMAN: I don't know that I know the answer to50 that from the evidence that's in this record. It appears to

me to be somewhat inconclusive. You know, there seems 51 52 to be a lot of different years used. I don't think that some of the evidence that we got back, either from your survey 53 54 or from some of the calling we did, gave me enough confidence to believe that I know what they all do in rate 55 56 making. With respect to planning I think it's a slightly a different question. I think Mr. Henderson, you know, 57 specifically asked that question and but I don't know that 58 I believe I know, I don't think there is a Canadian standard 59 that I was able to discern from the records in all of those 60 other utilities. That's just my take on the survey. 61

62 MR. YOUNG: That's all my questions. Thank you.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
Young. Thank you very much, Mr. Brockman. We'll move
now to industrial customers. Welcome back, Ms. Henley
Andrews.

67 MS. HENLEY ANDREWS, Q.C.: Thank you, Mr. Chairman.

MR. NOSEWORTHY, CHAIRMAN: You look like you're inthe batter's box on this one, are you?

70 MS. HENLEY ANDREWS, Q.C.: Apparently so.

71 MR. NOSEWORTHY, CHAIRMAN: If you could proceed.

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, earlier this 72 afternoon Mr. Young asked you some questions about 73 assignment, and in particular he asked you questions on 74 assignment with respect to the Great Northern Peninsula, 75 and first of all, I'd like to go back to Mr. Budgell's testimony 76 at pages 16 and 17. That's it right there. I can see that 77 Newfoundland Hydro has defined common plant as plant 78 that is of substantial benefit to two or more firm customers. 79

80 (*3:45 p.m.*)

81 MR. BROCKMAN: Correct.

MS. HENLEY ANDREWS, Q.C.: And you would agree that
that is the standard definition of common plant. The
generally accepted ...

MR. BROCKMAN: I think it's generally accepted as well as
I believe it's the standard that the Board established in their
generic cost of service proceeding.

MS. HENLEY ANDREWS, Q.C.: Have you reviewed the
rules that start at line 26 on page 16 and go over onto page
17 to see to what extent the rules currently proposed by
Hydro match the rules that were proposed at the time of the
cost of service methodology hearing in 1992?

MR. BROCKMAN: I don't know if we can scroll down to,
I'll have to look at the rules. I don't remember what's on
lines 26, or what line did you say they started?

MS. HENLEY ANDREWS, Q.C.: Starting there on line 26
on page 16 and going over to the end of sub-paragraph (d)

1 on page 17. Take your time to read through them.

2 MR. BROCKMAN: Is there more below line 10? Can you

3 scroll down just a little bit more, thank you. Okay, I think

4 I agree with those in generally accepted the terms.

5 MS. HENLEY ANDREWS, Q.C.: My question was not 6 whether you agreed with them but whether you have 7 compared these which are ones proposed now to those 8 which were proposed at the time of the cost of service 9 methodology hearing?

MR. BROCKMAN: I don't know that I recall specifically 10 going through these two pages saying let me check all of 11 these against the Board's cost of service, you know, order 12 in that proceeding, but I did in general try to make sure that 13 Hydro did what the order said in terms of if the facilities 14 were of substantial benefit to more than one customer class 15 they were common, and if not they were assigned a 16 specific. I think that's what all of these really go to. There 17 18 are some more details in here but than that.

MS. HENLEY ANDREWS, Q.C.: Would you agree that based upon the definition of common plant, which has

been accepted by the Board, the issue for the Board iswhether any individual plant is of substantial benefit to twoor more customers?

MR. BROCKMAN: I think that's the overriding principlethat the Board has tried to establish, yes.

MS. HENLEY ANDREWS, Q.C.: Mr. Young asked you some questions with respect to both the Great Northern Peninsula production plant and the Great Northern Peninsula transmission plant, and you indicated that you agreed that they should be treated as common. Is that correct?

32 MR. BROCKMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: And that is contrary to your recommendation to the Board at the time of the isolated rate hearing?

36 MR. BROCKMAN: I don't think it's contrary, I think certain things have changed since that time, i.e., there's been some 37 upgrade of the transmission system, changing the character 38 of how those facilities can be used as well as we have 39 additional evidence from, in this record, about whether or 40 not those facilities are of substantial benefit. I think it's in 41 line with the principles we established in that particular 42 case, but I think the specifics may have changed. 43

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, perhaps
you could be shown the answer to CA No. 2, and I believe
that's actually available, which is the 1995 Report of the
Board, and go to page 42, and the page numbers, I
recognize, are going to be a little bit different. Keep going,
actually you should go backwards a little bit, back a little

further. Just one second. Now you need to go forward a 50 little bit. The paragraph is "The Board believes". Keep 51 going. I know, go back again. It's hard to, one more and 52 53 one more paragraph. Here it is. It's the bottom of page 39 on the screen. You will see that the discussion relates, in 54 fact, to the results of the 1995 methodology report and the 55 Board said it is noted that more than one customer will be 56 served by the transmission line to the Great Northern 57 Peninsula. Newfoundland and Labrador Hydro argues that 58 the interconnection is of benefit in three ways. It provides 59 additional generation reliability to all customers, now that 60 is Hydro's position here, correct? 61

62 MR. BROCKMAN: Correct.

MS. HENLEY ANDREWS, Q.C.: The plant provides
emergency backup and energy to the Great Northern
Peninsula area, so that is the same as Hydro's position
here?

MR. BROCKMAN: I think Hydro's position here is that it's
a little more than number 2 at this point, they feel like that
there's, and again I didn't really testify to this issue, but ...

- 70 or at least I didn't in my pre-filed, but that they feel like
- $^{71}$   $\,$  there's more benefit than just the customers on the Great  $\,$
- 72 Northern Peninsula at this time.

MS. HENLEY ANDREWS, Q.C.: Yes, but if you look at
item one, it says it provides additional generation reliability
to all customers.

76 MR. BROCKMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: And item two deals with
the Great Northern Peninsula and item three says the
capacity of the plant defers future peaking capacity
additions, so presumably Hydro was arguing at that time as
well that item three related to all of the customers, do you
agree, because future peaking capacity additions would be
for the benefit of all the customers?

MR. BROCKMAN: I don't remember what exactly Hydro
was arguing with respect to the details of all of that, but
that sounds like it's reasonable.

MS. HENLEY ANDREWS, Q.C.: And you can see the next 87 sentence, the Board said therefore, this is summarizing 88 Hydro's position, the generation assets will benefit all 89 customers and should be treated as common, Mr. Brockman 90 91 contends otherwise, stating Newfoundland Power's requirements did not cause the St. Anthony/Roddickton 92 system to be interconnected nor do Newfoundland Power's 93 customers receive any benefit from the interconnection. So 94 your argument at the time was that it should be specifically 95 assigned? 96

MR. BROCKMAN: That's correct, at that time but as I saythere have been some changes since that time to the

1 system.

MS. HENLEY ANDREWS, Q.C.: What changes have theybeen?

- 4 MR. BROCKMAN: I believe there have been some 5 transmission upgrades.
- 6 MS. HENLEY ANDREWS, Q.C.: In what respect?

7 MR. BROCKMAN: I don't know where, I don't recall the

8 exact details of those but I believe that's my understanding.

9 MS. HENLEY ANDREWS, Q.C.: Are you, or have you

forgotten that at the time of the hearing in 1995, the GreatNorthern Peninsula interconnection had not yet been

12 done?

13 MR. BROCKMAN: I don't remember a whole lot about 1992

to tell you the truth, but it's possible that I've forgotten

that. I don't know the answer to your question.

16 MS. HENLEY ANDREWS, Q.C.: If you look at the next paragraph which says the basis for assigning the 17 generation plant and transmission assets in the Great 18 Northern Peninsula interconnection is whether the assets 19 are serving more than one customer. If the answer is that 20 21 they serve only the rural classes on the Great Northern Peninsula, then they should be specifically assigned, this 22 is the opinion of Mr. Brockman and the industrial 23 customers. However, if the assets jointly serve the 24 common grid, then they are considered to be common and 25 thereby generation plant is properly assigned as common. 26 Would you agree with me that that summary does not 27 reflect the definition of common plant which has been 28 accepted by the Board which is that it's not a question of 29 whether it benefits more than one customer, but whether it 30 substantially benefits more than one customer? 31

MR. BROCKMAN: I think it does, I think it substantiallyis part of the requirement.

34 MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, you've

indicated in your testimony that at previous other hearingsbefore this Board you have also proposed a demand

- energy rate for Newfoundland Power, is that correct?
- 38 MR. BROCKMAN: That's correct.
- MS. HENLEY ANDREWS, Q.C.: But at this hearing you are proposing that a demand energy rate is not appropriate?
- 41 MR. BROCKMAN: That's correct.

42 MS. HENLEY ANDREWS, Q.C.: And can you indicate for

- 43 me what has changed since 1992, that would change your44 opinion?
- 45 MR. BROCKMAN: Well, as I indicated in my summary, I

46 guess, and my evidence, after Newfoundland Power and

47 Hydro began to discuss the issue amongst themselves the

issue of revenue volatility came up and it troubled the 48 financial planners, at least in Newfoundland Power, and I 49 think as well in Hydro, that there was going to be extra 50 51 volatility if we came up with a demand charge. So because of that reared its head that gave us pause as to whether or 52 not this was something we really wanted to do. The other 53 thing has changed, as I indicated, is that we haven't had an 54 awful lot of load, demand growth in, from Newfoundland 55 Power anyway, in the last ten years, in fact I think it's 56 decreased, and so the reason for having a demand rate 57 which is to try to some extent reflect the cost of demand, 58 and perhaps control demand, doesn't seem to be quite as 59 important as well as the fact that at the time we really 60 wanted to have it, it looked like we needed it in order to be 61 able to do a lot of demand side management and that issue 62 has become less important than it was at the time. So those 63 are the reasons that we've moderated our position on that. 64

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, you are
aware that Hydro is currently undertaking the construction
of new hydroelectric facilities to come on stream in 2003 in
order to meet increases in demand on its system?

69 MR. BROCKMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: And are you aware that
Hydro is planning additional increases to its system for
2007 in order to meet projected increased demand?

MR. BROCKMAN: I know that they're planning on addinggeneration to the system, yes.

75 MS. HENLEY ANDREWS, Q.C.: Okay, and are you aware

whether that, that Hydro is in fact predicting a 20 percentgrowth in demand over the next ten years?

MR. BROCKMAN: That's subject to check. I would accept
that, I don't think it's because of Newfoundland Power's
necessarily load growth, but ...

MS. HENLEY ANDREWS, Q.C.: Would you agree that
regardless if whether Newfoundland Power's load grows,
that anything that any of the customers do to keep the load
stable on the system benefits all of the other customers in
terms of potentially deferring capital cost?

86 MR. BROCKMAN: By stable, you mean no growth?

MS. HENLEY ANDREWS, Q.C.: No, what I'm saying is that
if Newfoundland Power initiates a demand side
management initiative which reduces its demand below
what it is today, then not only will it benefit, but all the
customers and the system will benefit from the deferral, the
potential deferral of capital costs?

MR. BROCKMAN: If that demand side management
program is cost effective, I think that's true in general.

MS. HENLEY ANDREWS, Q.C.: So that the, while you're

- 1 correct that Newfoundland Power is not currently looking
- 2 at, or is not projecting any great increase in its demand in

3 the short term, that Newfoundland Power's control of a

reduction of its demand can still have benefits for thesystem as a whole?

5 MR. BROCKMAN: Well again, I think, that those benefits 6 would have to be weighed against the revenue volatility 7 that they're worried about, as well as what does it do to the 8 energy consumption, as I testified earlier, if we reduce, if we 9 put in a demand charge and don't appropriately, and reduce 10 the energy charge and don't do that appropriately we may 11 create a different problem. We may find out we need base 12 load plant because our energy is growing more than it 13 would have otherwise. So I think you have to weigh all of 14

those factors. It's not a simple question.

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, I'd like you
to take a look at the evidence which, the pre-filed evidence

18 which you submitted in, at the 1990 rate hearing.

19 MR. KENNEDY: This would be IC No. 7, Chair.

# EXHIBIT IC-7 ENTERED

20

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, at time of 21 the 1990 hearing, you can see at the bottom of page 13 that 22 you were asked if you have any concerns about the rate 23 structure proposed by Hydro in the proceeding, and you 24 answered, yes, that Hydro proposes to continue its 25 practice of serving industrial customers with a rate 26 containing both a demand and an energy component, while 27 offering an energy charge only rate to NLP and you say 28 that this is done in spite of the fact that the cost of service 29 study contains sufficient information to provide a demand 30 and energy rate structure to NLP. Could you read the 31 paragraph at lines 5 through 10. 32

MR. BROCKMAN: As I previously touched upon and is 33 a well known principle of good rate making practice, the 34 costs imposed on an electric system are primarily functions 35 of three variables, number of customers, energy taken, 36 kilowatt hours, and the demand kilowatts imposed on the 37 system is also widely accepted practice consistent with the 38 principle of ensuring rates reflect cost to therefore signal 39 these three costs separately in customer energy and 40 demand charges where it is practical to do so. 41

MS. HENLEY ANDREWS, Q.C.: Would you agree that it
is still a widely accepted practice to signal these costs in
separately in customer energy and demand charges where
it is practical to do so?

- 46 MR. BROCKMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: And you say at lines 12
  through 15, that Newfoundland Power can impose any sort
- 49 of load pattern on Hydro and so long as the total energy

50 use is the same under the various load patterns, the price

51 NLP pays Hydro is the same until Hydro has a rate referral

52 to propose a rate change, and in the next paragraph you

indicate that this is an indication of a lack of proper ratedesign?

55 MR. BROCKMAN: Yes, in the context as I'm using it.

MS. HENLEY ANDREWS, Q.C.: So when you said in 1990
that with an energy only rate there are no immediate
savings to NLP and its customers for reducing its demand
on the hydro system, that is equally true today, correct?

MR. BROCKMAN: No immEdiate savings. It would be as
it says here through the cost of service study when you
have a rate case.

MS. HENLEY ANDREWS, Q.C.: And at the time you said
that, because Newfoundland Power applies demand
charges to its large customers to control their demands, it
would actually lose money if the customers responded
properly?

68 MR. BROCKMAN: That's correct.

MS. HENLEY ANDREWS, Q.C.: And that's equally true today?

71 MR. BROCKMAN: That's correct.

MS. HENLEY ANDREWS, Q.C.: And then you indicated that another thing that the Board should consider is the effect of the hydro energy only rate on Newfoundland Power rates, which forces Newfoundland Power to have energy rates that are too high and demand rates that are too low, that is also true today, correct?

MR. BROCKMAN: I'm not sure it's true today. The forces 78 may have been a little strong, even when I filed this 79 It certainly, there's a tendency there for evidence. 80 Newfoundland Power, an economic tendency for them to 81 want to have higher energy rates because of the way, 82 nothing forces them to do anything, I suppose. But, yeah, 83 I still agree with the symptom. If you can caveat the forces 84 a little bit. 85

MS. HENLEY ANDREWS, Q.C.: Okay, and the next sentence which says that "if Newfoundland Power is to achieve proper matching between the distinct cost causation effect of demand and energy the Board should recommend that Hydro develop a rate structure that includes these important components", you would agree that that is still true?

MR. BROCKMAN: Yes, and I think the Board did that, atleast asked them to develop one.

- 95 (4:00 p.m.)
- 96 MS. HENLEY ANDREWS, Q.C.: Now at the time of the

- 1 1990 rate hearing you were also asked to deal with issues of
- 2 rate design and ratcheting. Do you recall that?
- MR. BROCKMAN: I don't recall it, but I wouldn't besurprised.
- 5 MS. HENLEY ANDREWS, Q.C.: In 1992, do you recall that,
- 6 or would you disagree with me if I suggested to you that as
- 7 a result of the 1990 hearing the Board recommended that
- 8 Newfoundland Power and Newfoundland Hydro develop
- 9 a proposal for a new rate structure for Newfoundland
- 10 Power?
- MR. BROCKMAN: I do recall. I don't recall the exact
  wording of the order that the Board issued on that, but I do
  recall that there was some sort of order that asked
  Newfoundland Power and Hydro to get together and come
  up with some sort of mutually acceptable form of demand
- 16 energy rate.
- MS. HENLEY ANDREWS, Q.C.: And that has not been accomplished, correct?
- 19 MR. BROCKMAN: Well they did get together.
- 20 MS. HENLEY ANDREWS, Q.C.: But they didn't come up 21 with a mutually acceptable form?
- MR. BROCKMAN: They did not come up with a mutuallyacceptable rate.
- 24 MS. HENLEY ANDREWS, Q.C.: I'd like you to take a look
- at your testimony from the 1992 rate hearing.
- 26 MR. KENNEDY: IC-8, Chair.

27

# EXHIBIT IC-8 ENTERED

- 28 MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, when you
- look at the bottom of page 21, the question that's posed is
- 30 "Do you agree with Hydro's proposal to adopt a three part
- Newfoundland Power rate, with the energy charges set at marginal energy costs and the demand charge calculated as
- a residual?" Could you read your answer?
- MR. BROCKMAN: It says "In concept I do. The details may need some fine tuning, however. I think the proposed rate gives the movement to a demand energy rate that NP argued was important in the last Hydro referral. In addition energy is given a high weight in this rate design. It should enable NP to get a good balance of peak shaving and conservation oriented DSM programs".
- 41 MS. HENLEY ANDREWS, Q.C.: So you would agree that 42 your position at the time of the 1992 rate hearing was that 43 there should be a three part NP rate?
- 44 MR. BROCKMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: And that at that time you
   were satisfied that Hydro's proposal for energy charges set

47 at marginal energy costs and demand charge calculated as48 a residual was generally acceptable, With some fine49 tuning?

50 MR. BROCKMAN: With some fine tuning, it says I was 51 satisfied.

MS. HENLEY ANDREWS, Q.C.: I'd like you to refer to page 25 of that evidence. In particular starting at line 13, and I take it from the evidence at the time that Hydro had proposed a 12 month ratchet and that you can see from your answer that you preferred a non-ratcheted demand charge. First of all, can you explain what a 12 month ratchet is?

59 MR. BROCKMAN: Sure. A 12 month, a demand ratchet in general, especially a 12 month, as you've asked is a rate 60 form whereby if a customer sets a certain demand, we're 61 talking about demand now, you know not energy, but 62 demand, if they set a certain demand of say 50 kilowatts in 63 64 some month and that's the highest demand that they ever set during the year, then they're charged some percentage 65 of that demand for the entire year and that's call a 12 month 66 demand ratchet. Sometimes it's 100 percent of that demand, 67 sometimes it's 80 percent, it depends on the rate design. 68

MS. HENLEY ANDREWS, Q.C.: Now in the case of the
industrial customers, are you aware that their demand
charge is based upon their amount of power on order and
that it is based upon their maximum amount of power on
order throughout the entire 12 months?

74 MR. BROCKMAN: I'm not sure what you mean by the term75 "on order".

- 76 MS. HENLEY ANDREWS, Q.C.: Well my understanding is
- 77 that the industrial customers advise Hydro by October 1st
- 78 of each year what their expected maximum demand is going
- 79 to be for the following calender year.

MR. BROCKMAN: So it's a contract demand essentially,
maybe there's no contract.

MS. HENLEY ANDREWS, Q.C.: Exactly, and they pay for
that demand throughout the entire 12 months, whether they
use it or not.

85 MR. BROCKMAN: Okay.

MS. HENLEY ANDREWS, Q.C.: What is the difference
between that and the 12 month ratchet that you've just
discussed?

MR. BROCKMAN: Well the difference is that would be a
contract, if you will, contracted 12 month ratchet whereas
opposed to where you're actually measuring the demand
and then ratcheting it. You don't set a contract for it. It's
whatever it is, and even in the sense of where there's
contracted demand, I don't know what happens if the

- industrials go over that amount. I assume they have to
   pay.
- 3 MS. HENLEY ANDREWS, Q.C.: That's right.
- 4 MR. BROCKMAN: So one's contracted for, one's actually 5 measured at a meter.
- 6 MS. HENLEY ANDREWS, Q.C.: Now in this particular 7 evidence which you had filed in 1992, you were objecting 8 to the demand ratchet saying it caused a mismatch between 9 the revenues Newfoundland Power receives from its 10 demand metered customers who were not on ratchets and 11 the revenues they would have to forward to Hydro each
- 12 month.

MR. BROCKMAN: That's correct, if there were a demandcharge, a non-ratcheted demand charge to Newfoundland

- 15 Power.
- MS. HENLEY ANDREWS, Q.C.: And if their demand metered customers were not on ratchets.
- 18 MR. BROCKMAN: Right.
- 19 MS. HENLEY ANDREWS, Q.C.: One of the things that it
- 20 appears that you were recommending if you look at page 26
- is to move away from the 12 month ratchet to monthly
- 22 demands?
- 23 MR. BROCKMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: Without any floor on demand billing. Am I correct that the result of that would be to smooth out the volatility for Newfoundland Power in terms of revenue?
- MR. BROCKMAN: Well, it wouldn't smooth out revenue,it would smooth out costs.
- 30 MS. HENLEY ANDREWS, Q.C.: Yeah, costs, okay.
- 31 MR. BROCKMAN: Actually, it wouldn't ... you say if you
- remove the floor then it wouldn't smooth anything, you
- know, it would be what it was, whatever it was in every
- 34 month would be what the bill was.
- MS. HENLEY ANDREWS, Q.C.: But then Hydro would be taking more of the risk.
- 37 MR. BROCKMAN: Right.
- MS. HENLEY ANDREWS, Q.C.: So that what you
  recommended at the time would be something that would
  decrease the risk for Newfoundland Power but increase the
  risk for Hydro from a revenue volatility perspective.
- 42 MR. BROCKMAN: Insofar as it wasn't recovered through43 the RSP.
- 44 MS. HENLEY ANDREWS, Q.C.: And am I correct that the 45 only explanation that you have for the change in your

opinion today compared to the evidence that you gave at
both the 1990 and 1992 rate hearings is related to whether
or not Newfoundland Power forecasts increases in demand.

MR. BROCKMAN: No, it's two things. It's that plus the 49 50 volatility that they would see under the current ... it really depends on the question of whether if they were to put in 51 a demand charge would we modify the RSP. If we didn't 52 modify the RSP then Newfoundland Power would also see 53 more volatility, so it's those two things. It's the lack of 54 55 demand growth for NP plus the extra volatility in NP's earnings. 56

57 MS. HENLEY ANDREWS, Q.C.: But you would agree with 58 me and I think you did just a few moments ago, that the 59 issue of revenue volatility can be dealt with to one degree 60 or another in terms of the design.

- MR. BROCKMAN: If we change something else then I
  think you're right, that it could be dealt with. If we change
  the RSP or change the way things are working in the RSP,
  then yes, we can deal with the revenue volatility.
- MS. HENLEY ANDREWS, Q.C.: And clearly from your
  evidence at the time of the 1992 rate hearing, the fact that
  the issue of ratchets was, or different forms of ratchets was
  being discussed is an indication that the issue of volatility
  was being dealt with, at least discussed at that time?
- 70 MR. BROCKMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: Mr. Brockman, I presume
that you are familiar with the Newfoundland Power
generation credit?

74 MR. BROCKMAN: Yes, in general.

MS. HENLEY ANDREWS, Q.C.: Okay, and I presume that
you are aware that Newfoundland Power gets a reduction
in its billed peak and in the peak that's used for the purpose
of CP factors and also for load factor for all of the
generation which it makes available to Newfoundland
Hydro to meet peak demands?

81 MR. BROCKMAN: Yes.

82 MS. HENLEY ANDREWS, Q.C.: Do you agree that that is 83 something that is very difficult to isolate in looking at the 84 cost of service studies?

MR. BROCKMAN: No, I don't think it's difficult. I mean
the demand in the cost of service study is reduced by the
amount of generation that Newfoundland Power makes
available, and that's not difficult to see.

MS. HENLEY ANDREWS, Q.C.: The dollar value of thecredit is difficult to see looking at the current cost ofservice study, wouldn't you agree?

92 MR. BROCKMAN: Not necessarily. I believe the cost of

- 1 service study reports the, what we call the unit cost in cost
- 2 of service study parlance which is the unit demand energy
- 3 and customer related costs by class, so it's a simple matter
- 4 to multiply that number times the amount of generation, so
- 5 I mean it's not a recorded number right up there but it's not
- 6 difficult to see either for someone who knows what they're7 looking for.
- 8 MS. HENLEY ANDREWS, Q.C.: That being the point, isn't
- 9 it, whether somebody knows what they're looking for and
- 10 knows how to go about making the calculations that you've
- 11 just described?

MR. BROCKMAN: Well, I wouldn't recommend that any layperson do much poking around in a cost of service study anyway, but ... because they may not know what they're looking at, but I don't think it's hidden in any way, if that's the implication.

- MS. HENLEY ANDREWS, Q.C.: And nor is it readilyavailable?
- MR. BROCKMAN: No, I think it is readily available to anexpert.
- 21 MS. HENLEY ANDREWS, Q.C.: In order to determine what
- the amount is, don't you have to re-run the study using the other, using the actual demand numbers?
- MR. BROCKMAN: In order to ... I'm trying to think whether there might be some secondary effects that wouldn't be picked up by just multiplying that unit demand cost by the amount of generation. It's possible there are some minor, and I don't know how minor they are, but I ...
- 29 MS. HENLEY ANDREWS, Q.C.: It also affects 30 transmission demand costs, wouldn't you agree?
- MR. BROCKMAN: Yes, I mean but I ... you can get close, whether you get it exactly because of all, you know, other little things, you may be right, there may not be a way to get it exactly without re-running it.
- MS. HENLEY ANDREWS, Q.C.: And would you agree that taking a generation credit approach where the amount of the available peaking capacity is deducted from Newfoundland Power's actual peak, whether or not it's used, means that Newfoundland Power gets the full benefit of the generation credit, of the generation which it has made available?
- 42 MR. BROCKMAN: Yes, I think they get the full benefit.

MS. HENLEY ANDREWS, Q.C.: I'd like you to take a look at **NP-133**, and I realize, Mr. Chairman, that it's on the screen, but it's easier for me to work from the hard copy on this one. And you can see from page 1 of 4 that question (a) is to provide the detailed calculations of the interruptible rate credit provided to participating

- 49 industrials?
- 50 MR. BROCKMAN: Yes.
- 51 MS. HENLEY ANDREWS, Q.C.: And if you look at page 2
- of 4, you can see at line 6 to 7 that converting the annual
- 53 estimate to a monthly rate ...
- 54 MR. BROCKMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: ... it would be 14.1 dollarsper kilowatt?
- 57 MR. BROCKMAN: Correct.
- 58 MS. HENLEY ANDREWS, Q.C.: But that if you look down
- at lines 20 to 21, the demand credit that is actually offeredis \$7.05 per kilowatt?
- 61 MR. BROCKMAN: Right, negotiated, some negotiated 62 demand credit.

MS. HENLEY ANDREWS, Q.C.: Yeah, which is half of thevalue.

65 MR. BROCKMAN: It's half of the marginal cost value.

MS. HENLEY ANDREWS, Q.C.: So for its credit, the
industrial customers are not getting the full value of the
energy, of the demand that they are making available?

MR. BROCKMAN: Well, no, I don't think you can phrase 69 it that way given the way you phrased your last question, 70 because your last question was did Newfoundland Power 71 get full credit for an embedded, from an embedded rate, and 72 the answer was yes, but here we're talking about a marginal 73 rate and they're not getting all of the marginal cost savings 74 but then again, neither is Newfoundland Power. They're 75 getting all of the embedded savings, so I think the two are 76 apples and oranges. 77

MS. HENLEY ANDREWS, Q.C.: So you, and so you agree
that the methodology for compensating Newfoundland
Power is significantly different than the methodology
utilized for compensating the industrial customers?

MR. BROCKMAN: Yes, one is based on an embedded cost
of service study and the other one is based on a marginal
cost of service study, plus a negotiation.

MS. HENLEY ANDREWS, Q.C.: Are you aware that at the
time that the negotiation took place rates charged by
Newfoundland and Labrador Hydro to the industrial
customers were not regulated?

MR. BROCKMAN: I've never been completely sure of how
the rates were set at that time because I wasn't privy to that,
but I would accept that subject to check. I know they
weren't regulated by this Board, or I don't believe they
were.

94 MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, that would

- 1 be a good place to break.
- 2 MR. NOSEWORTHY, CHAIRMAN: Okay, thank you, and
- 3 we'll ... thank you, Ms. Henley Andrews. Thank you, Mr.
- 4 Brockman. We'll break then for, until 9:30 tomorrow
- 5 morning. Thank you.
- 6 (hearing adjourned to December 4, 2001)