1 (9:30 a.m.)

2 MR. NOSEWORTHY, CHAIRMAN: Good morning. Before 3 we get started, Mr. Kennedy, are there any preliminary

4 matters, please?

MR. KENNEDY: Yes, Chair, there's a preliminary matter, 5 and I noticed this this morning actually. There's a revised, 6 revisions have been made to a page of the December 3rd 7 transcript. Executech have, I believe, forwarded that by 8 email to all counsel, and it's on page one of the December 9 3rd transcript. The actual change that's made, it's in bold, 10 I believe, which is at line 23, and I believe that's the only 11 preliminary matter unless another counsel has something 12 they wish to raise. 13

MR. NOSEWORTHY, CHAIRMAN: Thank you. No other
items? Thank you very much. Good morning, Mr.
Bowman.

17 MR. BOWMAN: Good morning.

18 MR. NOSEWORTHY, CHAIRMAN: Good morning, Ms.

Butler. I wonder could I ask you to proceed with yourcross-examination, please?

21 MS. BUTLER, Q.C.: Thank you, Mr. Chair. Good morning,

22 Mr. Bowman. Mr. O'Rielly, I wonder if we can look at **Mr**.

23 Bowman's pre-filed, please, page five? Mr. Bowman, can I

start by asking you to read lines 21 to 22? Feel free to

finish the thought by going to page six, if you wish.

MR. BOWMAN: "The Board should eliminate the Rate
Stabilization Plan. The elimination of the RSP should be
gradual in order to spread the rate impact over time."

- MS. BUTLER, Q.C.: Now, you are one of two experts being called by the Consumer Advocate. The other was Dr.
- 31 Kalymon, the cost of capital expert.
- 32 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: Okay. And he testified last month, 33 and relevant to this I wonder if we can look, Mr. O'Rielly, 34 please, to the transcript of November 13th, page 29? Here 35 36 at lines 59 to 67 I was asking Dr. Kalymon about the Rate Stabilization Plan. You see I've asked him here, "If the Rate 37 Stabilization Plan was eliminated, would it impact your 38 recommendation for a return on equity?" His answer, if 39 you could read it for me, Mr. Bowman, from line 62 to 67? 40 MR. BOWMAN: "That depends on what exactly it is 41 replaced by. I mean, I have made, have not made 42 alternative assumptions. I can move one towards the 43 higher rather than the lower end of the spectrum, for 44 example, but it really does depend a lot on what it is 45 replaced with." 46

47 MS. BUTLER, Q.C.: Okay. And then I followed up and 48 suggested, "And if it's replaced with nothing?" And his 49 answer from line 69 to 74, if you could?

50 MR. BOWMAN: "Well it can't be replaced by, with

51 nothing because it has to do with how the forecasts are

52 treated, you know. Is there margins in forecast, etc., etc.?

53 So it can't be replaced by nothing, it has to be replaced by

something, but it would tend to increase the risk."

MS. BUTLER, Q.C.: Thank you. Now, Dr. Kalymon clearly, 55 as a cost of capital expert in any event for the Consumer 56 Advocate, had testified that if you eliminate the RSP it 57 would have to be replaced with something. When you filed 58 your original evidence on August the 17th, 2001, and we 59 60 saw a moment ago that you supported the abolition of the RSP, can you tell me whether there was anything in that 61 evidence, the full 23 pages of it, that suggested that it be 62 replaced with anything? 63

64 MR. BOWMAN: If it's eliminated, then it would be 65 replaced by simply the Board indicating what was an 66 appropriate revenue requirement.

MS. BUTLER, Q.C.: I'm sorry, perhaps you misunderstood
my question. I was asking you whether there was anything
in the pre-filed document, the 23 pages long, that you could
point me to in which you had suggested that the RSP rather
than simply being abolished be replaced with something?

MR. BOWMAN: Yes, and by being eliminated, that means
the Board would simply set the revenue requirement on the
basis of what it deemed was an appropriate revenue
requirement, so it would take into account the actual fuel
costs.

MS. BUTLER, Q.C.: Let's try it again. Can you point me to
anything in your 23 page pre-filed testimony that suggests
that other than the statement that we have on the screen
that the Board should eliminate the RSP?

MR. BOWMAN: I think ... well, it's inherent ... if you're
asking me have I said, if I said anything in my pre-filed
testimony that indicates what it should be replaced with,
the answer is no.

MS. BUTLER, Q.C.: Thank you. I'm also asking you have
you said anything in your 23 page pre-filed testimony of
August 17th that suggests that it should be replaced with
something?

MR. BOWMAN: And I thought that's the answer I justgave. I haven't said what it should be replaced with.

MS. BUTLER, Q.C.: Are you suggesting in your pre-filed
testimony that it has to be replaced with something, not
just what it might be replaced with, Dr., Mr. Bowman, that
it has to be replaced with something? Is there anything in
that pre-filed that suggests that to the Board?

96 MR. BOWMAN: I think it's fair to say that I said it should

- 1 be eliminated and I'm not sure I understand exactly what
- 2 you're saying but I haven't given an actual replacement, if
- 3 that's what you're asking.
- 4 MS. BUTLER, Q.C.: I recognize that you haven't given an
- 5 actual replacement. Is there anything in your pre-filed that
- suggests that the RSP should be eliminated and replacedwith anything?
- 8 MR. BOWMAN: No. I've just said it should be eliminated.
- 9 MS. BUTLER, Q.C.: So since Mr. Kalymon gave his
- 10 testimony on November the 13th, you've now raised this
- 11 issue in the opening statement or opening remarks
- document that's now before the Board as **Exhibit CA-6**.
- 13 MR. BOWMAN: I'm not sure what Exhibit CA-6 is.
- 14 MS. BUTLER, Q.C.: Your opening remarks.
- MR. BOWMAN: Oh. I've given some guidelines as towhat I think it should be replaced with, yes.
- MS. BUTLER, Q.C.: In the document that was given to ustwo days ago.
- 19 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: And clearly the RSP is a large issue in this proceeding, would you agree?
- 22 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: And I wonder if we might go to page ten of the document which was referred to as CA-6 and which is on the screen. Have you got your hard copy
- there, Mr. Bowman? Okay. Now, the lines aren't numbered
- but there is a reference there and I counted down about
- nine or ten lines, a reference to the NRRI. Would you be
- 29 kind enough to read into the record for us, please, the
- 30 sentences that start with "We contacted the NRRI"?
- MR. BOWMAN: "We contacted the NRRI and they indicated that no US utility utilizes an RSP like that used in Newfoundland." Continue?
- MS. BUTLER, Q.C.: You can continue, yeah.
- MR. BOWMAN: "NRRI did indicate that fuel adjustment 35 clauses are common," and I think I indicated yesterday that 36 it was based on the literature that I reviewed later in the 37 1990s, fuel adjustment clauses were under fire in those 38 years. I'm not saying that I was bringing them under fire, 39 I'm saying they were under fire by various consumer 40 groups because they tended not to send efficient price 41 signals to the utilities. 42
- MS. BUTLER, Q.C.: Okay. Let's just read in the full
  paragraph so we can get the thought. You say, "NRRI did
  indicate." Can you just follow through there?
- 46 MR. BOWMAN: ... "did indicate that fuel adjustment

- clauses are common, although they have been under fire in
  recent years because fuel prices have tended to be more
  stable and because they provide little incentive for utilities
- 50 to do a good job managing fuel costs." Continue?
- 51 MS. BUTLER, Q.C.: Yes, please.
- MR. BOWMAN: "NRRI did indicate that all but one state 52 that had fuel adjustment clauses balanced its fuel 53 adjustment account either annually or semi-annually. 54 Connecticut uses a monthly balancing mechanism similar 55 to a fuel adjustment clause that preceded (phonetic) 56 Newfoundland's RSP. According to NRRI, no state utilized 57 the fuel adjustment clause that balances over a period 58 59 greater than one year."
- MS. BUTLER, Q.C.: Thank you. Now, looking up in that 60 paragraph, I know you indicated in your answer to Mr. 61 Young's question yesterday that really if there was a quote 62 here from the NRRI, in that sentence, "We contacted the 63 NRRI," I'm sorry, the sentence following, you indicated that 64 NRRI did indicate that fuel adjustment clauses are common. 65 That's the end of what you took from NRRI, and the 66 balance of that thought was your own. 67
- 68 MR. BOWMAN: Yes.
- 69 MS. BUTLER, Q.C.: Correct, okay.
- 70 MR. BOWMAN: I think it's fair to ... this was not meant to
- <sup>71</sup> be testimony. This is meant to be opening remarks and it
- 72 has since been filed as testimony and I wasn't given the
- 73 opportunity to make any changes to it.
- MS. BUTLER, Q.C.: Okay, but with that understanding, Iknow now what you're ...
- 76 MR. BOWMAN: Yes, I'm saying that ...
- 77 MS. BUTLER, Q.C.: ... to what you're ascribing.
- 78 MR. BOWMAN: ... quote there did not come from NRRI79 itself.
- MS. BUTLER, Q.C.: No, except that they did indicate to you that fuel adjustment clauses are common.
- 82 MR. BOWMAN: Yes. Everything else that I read there is 83 attributable to NRRI.
- 84 MS. BUTLER, Q.C.: Everything else ...
- MR. BOWMAN: That I just read to you can be attributedto NRRI.
- 87 MS. BUTLER, Q.C.: Can be attributed to them?
- MR. BOWMAN: Can be with the exception of thatstatement that although they've been under fire in recentyears.
- 91 MS. BUTLER, Q.C.: Okay, yes, that's fine. My question

- 1 though relative to the NRRI is when you contacted them.
- 2 MR. BOWMAN: It was in the last three or four weeks.
- 3 MS. BUTLER, Q.C.: I'm sorry?
- 4 MR. BOWMAN: It was in the last three or four weeks and
- 5 I didn't contact them myself, one of my staff did.
- 6 MS. BUTLER, Q.C.: Okay. And this was obviously 7 subsequent to the filing of your pre-filed testimony, which
- 8 was August 17th.
- 9 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. And the information that we
  have here was not contained in your pre-filed testimony
  clearly in relation to the information you took from the
  NRRI.
- 14 MR. BOWMAN: That's right.
- MS. BUTLER, Q.C.: But did you not know that fueladjustment clauses were common prior to contacting theNRRI?
- 18 MR. BOWMAN: Yes.
- 19 MS. BUTLER, Q.C.: And you knew that anyway.
- 20 MR. BOWMAN: I knew that fuel adjustment clauses were 21 common.
- 22 MS. BUTLER, Q.C.: Sure. If you knew that fuel adjustment
- clauses were common, I'm just wondering why that wasn't
- 24 pursued in your original pre-filed testimony.
- MR. BOWMAN: Because I prefer not to have fuel adjustment clauses either. I prefer to just have the utility set their rates on the basis of the revenue requirement.
- MS. BUTLER, Q.C.: And you are maintaining of course,
  notwithstanding the document filed yesterday, that the
  RSP should be abolished.
- 31 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. Now, can I turn to a second point, and that is made reference to at **page 19 of your original evidence**, and this is in association with competition in the Province of Newfoundland, and perhaps for the benefit of the record, Mr. Bowman, you could read in lines 12 to 17 for us.
- MR. BOWMAN: "Competition. Newfoundland's power
  sector lacks competition all over the world. Countries are
  moving towards more competitive power market structures
  in order to raise private sector capital, reduce subsidies,
  reduce cost to consumers, transfer risk for consumers to
  investors, and increase service offerings to consumers."
- MS. BUTLER, Q.C.: Thank you. Now, how many multiple
  distribution ... oh, I'm sorry, I need you to continue that

- thought down a little, a few more lines.
- 47 MR. BOWMAN: "Although Newfoundland is an isolated
  48 system, there are elements of competition that could be
  49 introduced to the benefit of consumers. For example,
  50 multiple distribution companies could be formed and forced
  51 to compete against each other."
- 52 (9:45 a.m.)

MS. BUTLER, Q.C.: Okay, thank you. "Multiple
distribution companies could be formed and forced to
compete against each other." Can you tell us how many
multiple distribution companies exist in North America?

- MR. BOWMAN: Ontario has something in the order of 90
  to 100 right now, in that jurisdiction. They started out, I
  think, two years ago. Well, when I was there there was
  something in the order of 230 or thereabouts, it may have
  been. The intent there is to encourage mergers and
  acquisitions and the number now, as I understand it, is
  down to about 90 to 100.
- 64 MS. BUTLER, Q.C.: And how many distribution systems 65 are there in North America?
- 66 MR. BOWMAN: I don't know.
- 67 MS. BUTLER, Q.C.: Somewhere around 2,000?
- 68 MR. BOWMAN: I don't know.
- 69 MS. BUTLER, Q.C.: Well, you must know approximately.
- 70 I mean, is it 90 to 100 or is it 100,000?
- MR. BOWMAN: I know there's 90 to 100 in Ontario. I
  don't know how many there are in North America.
- MS. BUTLER, Q.C.: Well, that's multiple distribution
  companies. I was asking you how many distribution
  systems there are in North America.
- 76 MR. BOWMAN: I don't know how many distribution77 systems there are in North America.
- MS. BUTLER, Q.C.: Alright. Relative to the thought that
  multiple distribution companies could be formed and forced
  to compete against each other, do you agree that in some
  jurisdictions with multiple distribution companies,
  regulatory commissions such as ours have assigned
  territories to each utility to prevent duplication of service?
- MR. BOWMAN: That's the way it is in pretty much, wellin most jurisdictions I'm aware of.
- 86 MS. BUTLER, Q.C.: Even Ontario, Mr. Bowman?
- 87 MR. BOWMAN: Yes.
- 88 MS. BUTLER, Q.C.: Okay.
- 89 MR. BOWMAN: Now that's the wires part of the business.
- 90 Supply can transgress boundaries.

1 MS. BUTLER, Q.C.: Mr. Bowman, supply is not 2 distribution, is it?

MR. BOWMAN: Well, depends how you define
distribution. Newfoundland Power does both supply and
wires business.

MS. BUTLER, Q.C.: Well, when you were using the term as
in the answer that you gave me, was supply distribution?
Did you mean it in that sense?

MR. BOWMAN: When I'm saying you can force
competition amongst distribution companies, I was
referring to the wire companies, but you can also do it on
the supply side as well.

MS. BUTLER, Q.C.: Can you provide any examples for this
board where the existence of multiple distribution
companies has improved efficiencies and reduced costs for
customers?

MR. BOWMAN: I would say in the UK with their ... I don't remember how many distribution companies they have there now. They have 12 to 14, as I recall, and the information I've got on my pre-filed there shows that they

have brought costs down under performance-basedregulation.

MS. BUTLER, Q.C.: Can you refer to me an example inNorth America?

MR. BOWMAN: Well, Ontario has just implemented thereso it's still too early to tell.

MS. BUTLER, Q.C.: Can we look at the same, on the same topic, to page seven of your pre-filed, lines one to five?
Perhaps we'll just go back to the bottom of page six so you can see what we're talking about there. Thank you.
Starting at line 23, "Competition should," can you just read that for me, please?

MR. BOWMAN: "Competition should be assessed at the generation procurement level and at the distribution level and the Board should move to a more light-handed form of regulation based on performance with incentives. The current mechanism is too heavy-handed and not consistent with today's competitive market. The roles of government,

the Board and utilities need to be reviewed and clarified."

MS. BUTLER, Q.C.: What occurred to me when I read this, the earlier portion that you just read into the record and this portion at pages six to seven, is that on the one hand you were suggesting that the Board should force the creation of multiple distribution companies to create competition, which I would take to be a heavy-handed form of regulation?

- 47 MR. BOWMAN: I did not say that.
- 48 MS. BUTLER, Q.C.: Okay. Do you ...

49 MR. BOWMAN: I said that's one thing they should look50 at.

MS. BUTLER, Q.C.: Alright. That's one thing they shouldlook at, that's fine.

53 MR. BOWMAN: It's a study ...

54 MS. BUTLER, Q.C.: I'll accept that.

55 MR. BOWMAN: ... and that's one thing that should be 56 considered. I'm not saying that should be done.

MS. BUTLER, Q.C.: Okay. But on the other hand ... well,
let me just go back there for a second. As a
recommendation or as something that could be looked at,
it would form, from my perspective in any event, heavyhanded form of regulation to force competition by the
creation of companies to compete against a power
distribution company. Would you agree with that?

MR. BOWMAN: That's, when I say light-handed
regulation I'm referring to the ongoing operations of the
utilities. I'm talking about performance-based regulation
mechanism.

MS. BUTLER, Q.C.: I understand. Now you're on page six
of seven. I'm back to where we were for a moment where
you talked about "Multiple distribution companies could
be formed and forced to compete against each other."
Would that be a heavy-handed form of regulation?

MR. BOWMAN: No, I wouldn't say that, no. I would say 73 they're being forced to compete against one another under 74 a performance-based regulatory mechanism. I'm also 75 saying that's, on the ... I'll clarify that again. I'm saying that 76 they should look at this, a study should look at various 77 means of encouraging competition amongst utilities. I'm 78 not saying they should do this; I'm saying they should 79 consider that as one of the options. 80

MS. BUTLER, Q.C.: If they did do it, if one of the options
they considered and followed through with was the
creation of multiple distribution companies to force
competition, would you see that as being a heavy-handed
form of regulation?

86 MR. BOWMAN: No.

87 MS. BUTLER, Q.C.: How would you describe that?

MR. BOWMAN: I would describe that as one of the
alternatives. The regulatory mechanism would still be lighthanded if you went to performance-based regulation. The
two are two different things.

92 MS. BUTLER, Q.C.: So you don't see potential 93 inconsistency with recommending on the one hand that 94 one of the things this board consider is the creation of 95 multiple distribution companies to be forced to compete 1 against each other, and as we see on the screen, on the

2 other hand, suggest the current mechanism, I'm sorry, that

the Board should move to a more light-handed form of regulation. You don't see an inconsistency between those

4 regulation. You don't see an inconsistency between thos5 two statements?

6 MR. BOWMAN: No.

7 MS. BUTLER, Q.C.: Okay. Let's look now to the issue of

8 rates at page three of your original pre-filed testimony,

9 **please, lines 20 to 22**. Okay. On the screen it's 21 to 23,

10 Mr. Bowman, and feel free to go on to page four to finish

the thought. Can you start reading for me, "In spite of the Board's efforts"?

13 MR. BOWMAN: "In spite of the Board's efforts over the years, Hydro's proposed rates fail to meet its design 14 criteria, particularly with regard to market efficiency and 15 cost-based rates. In this regard I recommend that the Board 16 hire an independent consultant to review the recommended 17 rate designs for customers in Newfoundland. The Board 18 should table the independent consultant's report at a public 19 hearing and make this recommendation on the basis of the 20 following." 21

MS. BUTLER, Q.C.: Thank you. There was a question put
to you yesterday by Mr. Young relative to this point. I
wonder if we could look at the transcript from yesterday at
page 12? Okay. Try line 25. You can go back to line 21
and you'll see Mr. Young asked you here, "This is a rather
important, potentially at least, point you're raising here

about having another report or perhaps another inquiry.I'm not sure exactly what's being recommended." And your

answer was, "I would have them look at all the rates andnot just the rural rate subsidy," to which Mr. Young said,

not just the rural rate subsidy," to which Mr. Young said,
"Don't you think that's what we've been doing here for a
number of months, looking at all the rates of Hydro?" And

you go on to say ... would you mind, Mr. Bowman, readinglines 30 to 35?

MR. BOWMAN: "I'd say you've got, well you've got rate design experts from all the stakeholder groups here and not one of them has proposed an actual rate design and the reason they haven't is because they don't have the information necessary to do that, and I'll point to Dr. Wilson's evidence."

MS. BUTLER, Q.C.: Thank you. Isn't it a fair statement to
say that all the cost of service experts who participated in
these hearings would review the rates?

- 45 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. And you would have done thesame.
- 48 MR. BOWMAN: Yes.
- 49 MS. BUTLER, Q.C.: And what does a cost of service expert

such as yourself need to design or recommend rates to aboard like this?

52 MR. BOWMAN: I would have preferred to see some 53 marginal costs.

54 MS. BUTLER, Q.C.: Well, I know that's what you would

55 have preferred, but what do you need to design or 56 recommend rates to a board?

57 MR. BOWMAN: For me to design rates I need to see the 58 marginal costs.

59 MS. BUTLER, Q.C.: And why is that?

60 MR. BOWMAN: Because I feel marginal costs should be 61 reflected in the rate designs.

MS. BUTLER, Q.C.: Now let's assume that you were not making a recommendation of marginal costs to be embedded in the rate design but instead were using the embedded cost method, then what would a cost of service expert such as yourself need to recommend rates?

67 MR. BOWMAN: You would need the cost of service 68 study and the billing determinants.

MS. BUTLER, Q.C.: Right. So you'd need number of
customers by class, which is information contained in the
cost of service study, and you'd need the cost of service
by class, which of course is the cost of service study.

73 MR. BOWMAN: Uh hum.

MS. BUTLER, Q.C.: And the bill frequency distribution byclass.

76 MR. BOWMAN: Bill frequency distribution by class.

77 MS. BUTLER, Q.C.: Yes. What was the term that you

vsed, I'm sorry, when I asked you, billing determinants?

79 MR. BOWMAN: Billing determinants, yeah.

MS. BUTLER, Q.C.: Okay. I think we're saying the same
thing. And that information is before the Board, is it not,
Mr. Bowman?

83 MR. BOWMAN: That's right.

MS. BUTLER, Q.C.: And specifically you are
recommending a demand energy rate for Newfoundland
Power, and I think we can see that at page four, lines 12 to
22 of your original evidence. Again on the screen it's just
slightly off, Mr. Bowman. Could you read lines 13 to 23,
please?

MR. BOWMAN: "Hydro has not submitted for the Board's
review a revised wholesale rate design for sales to
Newfoundland Power in spite of the Board's order to do so
back, as far, so far back, so as far back as 1992. The current
design with only five per kilowatt hour energy charge

- 1 sends incorrect price signals to Newfoundland Power and
- 2 is not reflective of the cost it imposes on the system. There
- are many benefits to be gained from a rate design
  (inaudible) time varying demand energy charges, as well as
- 5 (inaudible) rate option. Newfoundland Power represents
- 6 over 60 percent of Hydro's sales in the test year and over
- 200 million in annual revenues at current rates. This clearly
- 8 justifies a more complex rate structure."
- 9 MS. BUTLER, Q.C.: Okay. Now, what does an expert such 10 as yourself require in order to recommend to this board a
- 11 demand energy rate for Newfoundland Power?
- MR. BOWMAN: In order to design a, what I would judge to be an effective rate design, you would need marginal cost information.
- MS. BUTLER, Q.C.: So are we back to the same exchange you and I had a moment ago, that that is because you are
- 17 supporting marginal cost issue design?
- 18 MR. BOWMAN: I'm supporting marginal cost issues 19 design, yes.
- MS. BUTLER, Q.C.: And were you not recommending marginal cost issues, then is it fair to say that the information you would need to make the rate recommendation to this board, demand energy rate, is before the Board in the formal cost of service study?
- MR. BOWMAN: Let me go back here for a minute. I haven't recommended that a demand energy charge rate, wholesale rate, be adopted. That's not one of my recommendations.
- 29 MS. BUTLER, Q.C.: Okay.
- MR. BOWMAN: I say I'm the only rate design expert in 30 this hearing who hasn't recommended that before the Board 31 at some point in time. Dr. Wilson has made that 32 recommendation, Mr. Osler has made that recommendation, 33 Mr. Brockman has made that recommendation back in 1990, 34 Dr. Surekais (phonetic), representing Mr. Brickhill's firm, 35 made that recommendation, and I believe Mr. Hamilton 36 37 made that recommendation. I'm recommending that an independent consultant look at it and propose a rate design 38 and I'm recommending that because in spite of Board 39 direction as far back as 1992, a rate design has not been 40 submitted, so it seems to me that for whatever reason 41 Hydro is not going to make a recommendation in this 42 regard, so an independent consultant should be hired to 43 make such a recommendation. 44
- 45 MS. BUTLER, Q.C.: But, Mr. Bowman, you are 46 independent, are you not?
- 47 MR. BOWMAN: Yes.
- 48 MS. BUTLER, Q.C.: And you are an expert.

# 49 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: So you could have taken the
opportunity on this occasion to make a recommendation on
a rate design instead of recommending that an independent
consultant come back next year and do it, couldn't you?

54 MR. BOWMAN: I could have but I don't have marginal 55 cost information to make an appropriate recommendation.

### 56 (10:00 a.m.)

MS. BUTLER, Q.C.: Now, on the same page, lines 4 to 10,
there's a different issue being addressed. It's actually
electronically 5 to 10. I wonder could you read in what
you've indicated there from lines 5 to 12, please?

MR. BOWMAN: "Hydro believes it is unable to meet its 61 rate design criteria owing to historical linkages between 62 Newfoundland Power and island interconnected system 63 and isolated rural system rates. However, test year sales to 64 customers with rates linked to Newfoundland Power rates 65 66 represent less than six percent of Hydro's total estimated test year sales. There's a great deal that Hydro can do with 67 the rates covering the other 94 percent of sales and much 68 that can be done to improve rural rate design in spite of 69 70 historical linkages."

MS. BUTLER, Q.C.: Alright. The point I want to address
is your statement that, "There is a great deal that Hydro can
do with the rates covering the other 94 percent of sales."
Now, what specific proposals can you suggest?

MR. BOWMAN: Demand energy rate, wholesale rate with
time varying charges, and the industrial customers have
indicated a desire to see more rate options. I think you can
see time varying rates for them, also perhaps interruptible
options that better fit their operations.

MS. BUTLER, Q.C.: But I had just understood you to say
that you weren't recommending a demand energy rate.

82 MR. BOWMAN: I'm recommending that ... this is part of 83 my justification for an independent consultant looking at 84 the rates.

MS. BUTLER, Q.C.: Okay, but let's look at what you've
said. "There's a great deal that Hydro can do with the rates
covering the other 94 percent of sales and much that can be
done to improve rural rate design in spite of historical
linkages." And when I asked you what specific proposals
you can suggest, the first one you mentioned was a
demand energy rate.

92 MR. BOWMAN: I can specifically recommend that an 93 independent consultant look at that and come up with a 94 demand energy charge with time varying charges. I don't 95 have the marginal cost information that would allow me to 96 do that.

- 1 MS. BUTLER, Q.C.: So we're back to the lack of the 2 marginal cost information again.
- 3 MR. BOWMAN: Yes, it appears that way.
- 4 MS. BUTLER, Q.C.: Beyond what you've indicated, are 5 there any other specific proposals?
- 6 MR. BOWMAN: I think an independent consultant might
- 7 propose a five-year plan as recommended by the Board to
- 8 the bringing up of government rates to full cost of service
- ${\mathfrak 9}$   $\$  in isolated areas. On the other hand, I think the Board
- 10 could probably do that itself.
- 11 MS. BUTLER, Q.C.: And you're aware of course that other 12 experts have recommended that at this time.
- MR. BOWMAN: Have recommended that the governmentrates be ... sorry, what have other experts recommended?
- MS. BUTLER, Q.C.: Other cost of service experts have
- recommended that the rate over, rate of time or the rate by
- 17 which the government rates be eliminated be sped up, I
- suppose, to use my term. You're aware that that's arecommendation.
- 20 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: So given that that's already before the 21 Board and that other experts at this time have also 22 recommended demand energy rate, back to your statement, 23 there is a great deal that Hydro can do with the rates 24 covering the other 94 percent of the sales, is there anything 25 else that you can suggest beyond what you told me, 26 industrial customers want more rate options, perhaps 27 interruptible options? 28
- MR. BOWMAN: The interruptible and I think they indicated some other preferences like real time pricing.
- 31 MS. BUTLER, Q.C.: Sorry, real time ...
- 32 MR. BOWMAN: Real time pricing.
- MS. BUTLER, Q.C.: Have you completed your answernow?
- MR. BOWMAN: Can you remind me what the question was?
- 37 MS. BUTLER, Q.C.: Yeah. There is a great deal that Hydro
- can do with the rates covering the other 94 percent of sales,etc., etc. What is the great deal that Hydro can do with the
- 40 rates?
- MR. BOWMAN: The great deal has to do with the 94
  percent of their sales, and that would be a demand energy
  charge, the time varying charges on the wholesale rate, and
  then more in the way of options for the industrial
- 45 customers.
- 46 MS. BUTLER, Q.C.: And your specific recommendation is

- that an independent consultant come back at a later time toreview that issue and report to the Board.
- 49 MR. BOWMAN: Review those issues and other issues50 relating to the rate designs in ...
- 51 MS. BUTLER, Q.C.: And report to the Board.
- 52 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. Can I move now to page 12,
  Item 6 of the opening remarks filed yesterday, CA-6? Mr.
  Bowman, I think for the benefit of all of us, maybe you
  could read in the full, this point, number six?
- MR. BOWMAN: "All cost of capital experts testified that 57 the RSP offers protection from variations in forecast load, 58 generation mix and fuel prices. They indicated that this 59 protection enables a reduction in the rate of return required 60 by Hydro. I totally agree with this assessment but must 61 point out that protection is offered by the fuel adjustment 62 component of the RSP alone, not the balancing account. 63 64 Only one rate of return expert testified concerning the effects of the balancing account and that was Dr. Kalymon. 65 He testified under cross-examination if the outstanding 66 balance in the RSP becomes too large, the financial 67 68 community may view this negatively, resulting in an increase in required rate of return, therefore, Hydro and NP 69 by endorsing the RSP in its present form are promoting 70 higher rates for consumers." 71
- MS. BUTLER, Q.C.: Thank you. What I want to pursue 72 here is what you say about four or five lines down, "I 73 totally agree with this assessment, that the RSP offers 74 protection from variations in forecast load, generation mix 75 and fuel prices," etc. "but must point out that the 76 protection is offered by the fuel adjustment component of 77 the RSP alone, not the balancing account." Did any of the 78 cost of capital experts, from your review of their pre-filed 79 testimony or the transcript of their evidence, make this 80 qualification in their evidence? 81
- MR. BOWMAN: If we go to the November 19th
  transcript, page 17, lines 5 to 15.
- MS. BUTLER, Q.C.: And whose testimony is this, Mr.Osmond?
- 86 MR. BOWMAN: I have to take a look at it here first.
- 87 MS. BUTLER, Q.C.: Sure.

MR. BOWMAN: Here it's ... I think he indicates as a
strength that the RSP offers protection from variations in
forecast load, generation mix and fuel prices. Mr. Osmond
says, yes, he does, so ... who is that attributable to? I'm not
sure who they're talking about there but this particular
expert has said forecast load, generation mix and fuel
prices, that's the fuel adjustment component of the RSP.

- MS. BUTLER, Q.C.: Okay, hold on now. The point that 1
- we're pursuing in this portion of my cross-examination 2
- relates to the qualification that you've put on the 3 4
- conclusions of the cost of capital experts. You had said at your testimony that they indicated the RSP gives, enables
- 5
- a reduction in the rate of return. 6
- MR. BOWMAN: My understanding is that the fuel 7 adjustment component of the RSP enables a reduction in 8 the rate of return. 9
- MS. BUTLER, Q.C.: Okay. Let's go back to what you said. 10
- Number six, "All cost of capital experts testified the RSP 11
- offers protection from variations in load, generation mix and 12 fuel prices." 13
- MR. BOWMAN: Yes, and that's how I had understood 14 this transcript, which isn't there now. 15
- MS. BUTLER, Q.C.: And then you go on to say two lines 16
- down, "I agree with this assessment but must point out 17
- that the protection is offered by the fuel adjustment 18
- component of the RSP alone." Now, I'm asking you 19
- whether that qualification was made by any of the cost of 20 capital experts in their pre-filed or their sworn testimony. 21
- MR. BOWMAN: Okay. I'm making that qualification. 22
- MS. BUTLER, Q.C.: I'm aware you are. 23
- MR. BOWMAN: That's how I understand their testimony. 24
- MS. BUTLER, Q.C.: Yes, I'm aware you are, Mr. Bowman. 25
- I'm asking you whether you are aware whether any of the 26
- cost of capital experts made that qualification in their 27 testimony. 28
- MR. BOWMAN: I'm not aware that they did, no. 29
- MS. BUTLER, Q.C.: And specifically let's go back to that 30
- transcript that you were referring to, which was in reference 31
- to my cross-examination of Mr. Osmond. Does he not 32
- confirm here that Ms. McShane indicates as a strength that 33
- the RSP offers protection from variations in load, 34
- generation mix and fuel prices? 35
- MR. BOWMAN: Yes, and he's saying those components 36
- relate to the fuel adjustment components of the RSP, not 37 the balancing account. 38
- MS. BUTLER, Q.C.: That's your opinion. 39
- MR. BOWMAN: Yes. 40
- MS. BUTLER, Q.C.: Okay. Let's go to what Ms. McShane 41
- said herself in her pre-filed testimony, please, at page 17, 42
- line 12. The question put to Ms. McShane in her pre-filed 43
- was, "(inaudible) the key business risk elements that would 44 determine a reasonable capital structure for Hydro on a
- 45 stand-alone basis." And her answer was given in terms of 46
- strength and challenges, and the first strength, at line 14, 47

- can you read it, please, Mr. Bowman? 48
- MR. BOWMAN: "RSP offers protection from variations in 49
- forecast load, generation mix and fuel prices." 50
- MS. BUTLER, Q.C.: Okay. So this cost of capital expert 51
- makes no qualification as to which component of the RSP 52
- offers the protection. She deals with the RSP itself. 53
- MR. BOWMAN: She certainly does. She's saying forecast 54 55 load, generation mix and fuel prices, that's fuel adjustment 56 clause component.
- MS. BUTLER, Q.C.: So you feel that this is a qualification 57 58 on the RSP in terms of it being a strength as a, in terms of determining a reasonable capital structure for Hydro? 59
- MR. BOWMAN: I note under challenges she's saying the 60 RSP defers recovery of actual costs. 61
- MS. BUTLER, Q.C.: It does. 62
- MR. BOWMAN: Yes. 63
- MS. BUTLER, Q.C.: Let's look at Dr. Kalymon, who is the 64 cost of capital expert for the Consumer Advocate, at page 65 eight of his pre-filed, lines five to six. Sorry, Kalymon, pre-66 filed, page eight. Thank you. Lines five and six. He says, 67 "In terms of forecasting risk, Hydro essentially avoids most 68 of the short-term risks associated with input fuel costs, 69 70 water levels and demand volumes through the operation of the Rate Stabilization Plan." Does he make the 71 qualification? 72
- MR. BOWMAN: Yes. 73
- MS. BUTLER, Q.C.: Where? 74
- MR. BOWMAN: Fuel costs, water levels and demand 75 volumes. 76
- MS. BUTLER, Q.C.: So you take that as a qualification on 77
- the portion of the RSP that assists in forecasting risk, I'm 78 sorry, of avoiding short-term risks. 79
- MR. BOWMAN: That is the component of the RSP that 80 relates to the fuel adjustment clause. 81
- MS. BUTLER, Q.C.: Did you see any reference in the 82 evidence of Dr. Vilbert? 83
- MR. BOWMAN: I don't recall offhand what ... I believe I 84 read the transcripts, if that's what you're asking. 85
- MS. BUTLER, Q.C.: And what about Mr. Hall, Doug Hall? 86
- MR. BOWMAN: I may have read his transcripts, I don't 87 recall. 88
- MS. BUTLER, Q.C.: Can we look, Mr. O'Rielly, please, to 89
- **DH-1**? This is the DBRS report that Doug Hall filed with 90
- his, I'm sorry, presented as an exhibit when he was on the 91 Under "Considerations," there, stand, page two. 92

- "Strengths," to the left, thank you. Can you just read innumber five, please?
- 3 MR. BOWMAN: "The Rate Stabilization Plan contributes
- 4 to earning stability over the longer term. The RSP provides
- 5 for the deferral of cost variances resulting from changes in
- 6 fuel price, levels of precipitation and load. Customer rates
- 7 are adjusted every 12 months to recover outstanding
- 8 balances in the RSP over the following three years."
- MS. BUTLER, Q.C.: Okay. Does Mr. Hall, I'm sorry, does
  this exhibit, referred to or relied upon by Mr. Hall, make the
  qualification that you have made?
- MR. BOWMAN: When he says, "Customer rates are 12 adjusted every 12 months to recover outstanding balances 13 in the RSP over the following three years," he's talking 14 about the balancing account, but otherwise he's talking 15 about cost variances resulting from the changes in fuel 16 prices, levels of precipitation and load, he's referring to the 17 fuel adjustment clause. I think if we ... although any cost 18 variances under challenges, although any cost variances 19 from changes in fuel prices and water levels are deferred to 20 the Rate Stabilization Plan and recovered over time, and 21 therefore do not impact earnings, they can cause 22 23 significant changes in cash flows from one year to the next, I'd say he's saying the balancing account is actually 24 increasing the risk. 25
- 26 MS. BUTLER, Q.C.: Mr. Bowman ...
- MR. BOWMAN: You really need to look at the entire report if you're going to see both sides of it.
- MS. BUTLER, Q.C.: Sure, no problem. I want to go back 29 though to where we were. The statement that you had 30 made, and we can keep this on the screen, but the 31 statement that you had made at page 12, Item 6 of the 32 testimony of December 4th, of the opening remarks of 33 December 4th, was, "I agree with this assessment" ... that's 34 the assessment of the cost of capital experts ... "but point 35 out that the protection is offered by the fuel adjustment 36 component of the RSP alone, not the balancing account." 37
- 38 (*10:15 a.m.*)
- MR. BOWMAN: Yes, and I simply, what we've just gonethrough verifies that.
- 41 MS. BUTLER, Q.C.: Do you feel that this report we're 42 looking at, the DBRS report, makes that same qualification?
- 43 MR. BOWMAN: Yes.
- 44 MS. BUTLER, Q.C.: You do. Can you go back to where we
- 45 were on page 12, Item 6 of the December 4th testimony,
- 46 please? And generally in that paragraph number six where
- 47 you refer to the evidence of the cost of capital experts and
- 48 their assessments, notwithstanding the debate that you

- 49 and I have in relation to what they say ...
- 50 MR. BOWMAN: I wasn't aware we were having a debate.
- 51 MS. BUTLER, Q.C.: Okay. Well, sorry, my word, not
- 52 yours. Can I ask you as a cost of service expert how you
- feel qualified to assess the conclusions reached by the costof capital experts?
- 55 MR. BOWMAN: I feel fairly qualified after we just went 56 through what we ... I'm not a cost of service expert. I do
- 57 believe that each one of these cost of service experts were
- talking about the Rate Stabilization Plan.
- MS. BUTLER, Q.C.: I'll correct you before you go anyfurther. You said I'm not a cost of service expert but I'm
- 61 sure that's not correct.
- 62 MR. BOWMAN: Cost of capital.
- MS. BUTLER, Q.C.: You are not a cost of capital expert,right?
- 65 MR. BOWMAN: Right.
- 66 MS. BUTLER, Q.C.: Right. But you are a cost of service 67 expert.
- 68 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. Go ahead then, just finish yourthought.
- 71 MR. BOWMAN: In my read of this, all of them are saying
- 72 that it's the fuel adjustment clause component that is
- reducing the actual risk that Hydro takes on.
- MS. BUTLER, Q.C.: And do you feel qualified as a cost ofservice expert to be able to make that conclusion from theevidence of the cost of capital experts?
- MR. BOWMAN: I feel the exercise we just went throughpretty much makes the case. I don't know if I need to bequalified to do that or not.
- MS. BUTLER, Q.C.: Mr. Bowman, I'm sure you weren't here for the evidence of Mr. Osmond in relation to the Rate
- 82 Stabilization Plan. Did you sit through that?
- 83 MR. BOWMAN: I saw the last half day of it.
- MS. BUTLER, Q.C.: Okay. He probably went through the Rate Stabilization Plan in the very first part of his crossexamination, and he was very methodical, I thought, in terms of answering my questions on the three separate
- components which exist to the Rate Stabilization Plan.
- 89 MR. BOWMAN: I think I read that in the transcripts, yes.
- 90 MS. BUTLER, Q.C.: Okay. So let me perhaps close out this
- 91 section with this question. Are you suggesting that the
- 92 other two components of the Rate Stabilization Plan are not
- 93 important at all?

- 1 MR. BOWMAN: I don't know what other two components
- 2 you're talking about. I see two components. I see only the
- 3 fuel adjustment clause component and the balancing
- 4 account. The fuel adjustment component talks to the fuel
- 5 cost variations, load variations and hydraulic variations.
- 6 MS. BUTLER, Q.C.: So you weren't aware that there were 7 three primary components of the RSP before you get into 8 the balancing account.
- 9 MR. BOWMAN: I thought I just said ... I think you're
  referring to the load hydraulic production and fuel cost
  elements.
- 12 MS. BUTLER, Q.C.: Yes, right.
- MR. BOWMAN: Yes. I consider those three together tobe the fuel adjustment component.
- MS. BUTLER, Q.C.: Alright. Well that's perhaps why we
- 16 were having the debate we had. So your qualification here,
- 17 when you say, "Point out that the protection is offered by
- the fuel adjustment component of the RSP alone," the
- 19 document on the screen.
- 20 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. Are you suggesting that the hydraulic variation component is not important?
- MR. BOWMAN: No. I'm suggesting it's part of the fueladjustment clause component that I'm referring to.
- MS. BUTLER, Q.C.: Okay. So when you use the term, "Fuel adjustment component," you're talking about what we heard evidence on as being the three primary components.
- MR. BOWMAN: That's right. In every one of those
  references you brought up, they mention those three
  elements. In response each time I said those three elements
  were the fuel adjustment clause component.
- MS. BUTLER, Q.C.: Alright. So now we understand each other. So you feel that all three components are what's referred to in your term fuel adjustment component.
- 36 MR. BOWMAN: Yes.
- MS. BUTLER, Q.C.: Okay. Now on that same page, the conclusion you had reached, the last sentence in section six, "Hydro and Newfoundland Power, by endorsing the RSP in its present form, are promoting higher rates for consumers." Can you show me where you have assessed the link between a higher RSP balance or an RSP balance and higher rates for consumers?
- MR. BOWMAN: Yeah. I believe Dr. Kalymon's testimony
  indicated that if that balance gets too large, it would be
  viewed negatively by the financial community (inaudible)
- 47 potential for the required returns to increase.

- 48 MS. BUTLER, Q.C.: Okay. I'm aware of the evidence of Dr.
- 49 Kalymon on that point and I agree with the way you put it,
- 50 that he referred to it as being, if it got too large then there
- 51 were risks, but I'm asking you because of the statement that
- 52 you've made here, Hydro and Newfoundland Power by
- endorsing the RSP in its present form are promoting higher
- 54 rates for consumers. Have you assessed the link between
- 55 the RSP balance and higher rates for consumers, beyond
- 56 what Dr. Kalymon has said?
- MR. BOWMAN: No. I'm just saying a potential, according
  to Dr. Kalymon, potential exists for the risk to increase if
  that balance gets too large. I'm not sure what he judges to
  be too large.
- MS. BUTLER, Q.C.: Okay, I accept that, but, you see, he
  didn't actually say there was potential. Your conclusion
  was that Hydro and Newfoundland Power, the two utilities
  here today, by endorsing the RSP in its present form, are
  promoting higher rates for consumers.
- 66 MR. BOWMAN: Okay. Let me insert the word 67 "potentially" promoting higher rates for consumers.
- 68 MS. BUTLER, Q.C.: If you haven't done an analysis of how 69 the balance in the RSP actually relates to the rates which
- 70 consumers pay, how can you make that conclusion?
- 71 MR. BOWMAN: I'm basing it on what Dr. Kalymon said72 that you just said you accepted, that that potential exists.
- MS. BUTLER, Q.C.: I accepted what, that you had repeatedwhat Dr. Kalymon said correctly.
- MR. BOWMAN: Yes. And I'm basing it on what I'm
  saying he has said, the potential exists for rates to be
  higher if that balance gets too large.
- MS. BUTLER, Q.C.: Can you just scroll up into the whole
  paragraph of number six, please? Okay. So because you
  refer to ... actually, I don't see it there. I don't see a
  reference to your ascribing this conclusion to Dr. Kalymon
  in this paragraph of your opening remarks.
- MR. BOWMAN: Yes, I guess I'll have to find that. Like I
  said, I wasn't submitting this as testimony, but I'll be happy
  to produce that reference for you, but I think you just said
  you accepted that, so ...
- MS. BUTLER, Q.C.: That you had repeated what Dr.Kalymon said accurately.
- 89 MR. BOWMAN: Yes.
- 90 MS. BUTLER, Q.C.: Yeah. Page 13, please, Mr. O'Rielly.
- 91 (inaudible), Mr. O'Rielly, the original pre-filed evidence,
- 92 August 17th. Let's try lines nine to ten, and can you read
- in what you describe there as the notion, please?
- 94 MR. BOWMAN: "The notion that Hydro and

- 1 Newfoundland Power should forego a demand energy rate
- 2 because it would tend to create earnings volatility from
- 3 year to year is difficult to accept."
- 4 MS. BUTLER, Q.C.: And this is a reference, I believe, to 5 Mr. Brockman's evidence.
- 6 MR. BOWMAN: That's in relation to the letter in response 7 to **IC-205**, I believe.

MS. BUTLER, Q.C.: Okay, that's correct, because of course 8 this was filed before Mr. Brockman's evidence, I believe. In 9 any event, I want to follow through with that point, and I 10 will go now to Mr. Brockman's first supplemental at pages 11 10 and 11. Thank you. At the bottom of page 10, lines 19, 12 there you go. Mr. Bowman, would you indulge me, please, 13 by reading in lines 19 to 23 of page 10 and lines 1 to 8 of 14 page 11? 15

MR. BOWMAN: "If the demands of Newfoundland Power 16 customers were five percent above forecast, approximately 17 50 megawatts, due to a few very cold winter days, there 18 would likely be minimal impact on revenues to 19 Newfoundland Power as the vast majority of revenues from 20 weather sensitive loads come from energy charges. 21 However, the purchase power expense under the assumed 22 demand energy tariff would increase by two percent, i.e., 23 five percents times forty percent of wholesale costs 24 recovered in demand charges. Two percent of Hydro's 25 proposed annual revenue from Newfoundland Power is 26 approximately 4.2 million. For each \$90,000 increase in 27 expenses, the return on rate base for Newfoundland Power 28 decreases by approximately one basis point, so \$4.2 million 29 increase in annual purchase expense would reduce return 30 on rate base by 45 basis points. The full range of return on 31 rate base set by the Board for Newfoundland Power is 32 33 'question mark' 18 basis points."

- MS. BUTLER, Q.C.: Plus or minus 18 basis points. Mr.
  Bowman, let's take this in pieces. Were you aware that the
  full range of return on rate base set by the Board for
- 37 Newfoundland Power was plus or minus 18 basis points?
- 38 MR. BOWMAN: No.
- MS. BUTLER, Q.C.: Okay. So assuming that as a given for 39 the moment, as I understand ... maybe, Mr. O'Rielly, we can 40 try and get that full paragraph that Mr. Bowman kindly read 41 in on the one screen. Okay, thank you. As I understand 42 Mr. Brockman's point here, correct me if I'm wrong, he's 43 showing that a five percent spike in demand of 44 Newfoundland Power due to weather could cause 45 Newfoundland Power's rate of return on rate base to vary 46 by more than 45 basis points under a demand rate. Am I 47 correct? 48
- 49 MR. BOWMAN: I'm not sure what he's getting at here, to50 be honest.

- 51 MS. BUTLER, Q.C.: Well, you're ...
- 52 MR. BOWMAN: I think ... yeah, I see ...
- 53 MS. BUTLER, Q.C.: ... another cost of service ...
- MR. BOWMAN: I agree that's what he seems to be saying,yes.

MS. BUTLER, Q.C.: Okay. And his evidence, quite frankly,
at the moment on that point, Mr. Bowman, remains
unchallenged, so have you got any calculations to suggest
that this is incorrect?

MR. BOWMAN: What I do have, in my testimony I 60 indicated that any change in revenue stability is likely to be 61 62 within the bounds other like utilities would experience. That's my evidence that's on the record and no on has put 63 evidence to suggest that that's not the case either. I think 64 the issue here is does it cause revenue instability that's 65 outside the bounds that you would expect for a utility of its 66 size, and I don't think anyone has put forward any evidence 67 68 that would indicate that it is.

MS. BUTLER, Q.C.: Alright. Now I'm going to ask you first 69 about Mr. Brockman's evidence and then with your 70 permission you could take me back to where you've 71 actually made the statement you just referred to in your 72 evidence, so refresh my memory to do that with you if I 73 74 forget in a moment. Let's deal with this one first. Have I correctly summarized what Mr. Brockman is saying about 75 the effect of a spike, five percent spike in demand of 76 Newfoundland Power based on his calculations would 77 cause Newfoundland Power's rate of return on rate base to 78 vary by more than 45 basis points under a demand rate. 79

MR. BOWMAN: Under the scenario he's presented in his
calculations, I think that's correct, that that's what he's
saying.

MS. BUTLER, Q.C.: Okay. So when he says a full range of
return on rate base set by the Board for Newfoundland
Power, let's assume a range, I'm sorry, a return on rate base
of 10 percent. Plus or minus 18 basis points simply means
10.18, 9.82, right?

88 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: Okay. And by his calculation the five
percent spike would cause it to vary by more than 45, so
9.65 to 10.45 using my example.

92 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: Okay. Now, we started with this
exercise by a reference to page 13 of your pre-filed, lines
nine to ten, if we can just go back to that thought, please.
"The notion that Hydro and Newfoundland Power should
forego a demand energy rate because it would tend to
create earnings volatility from year to year is difficult to

Now, Mr. Brockman's first supplemental accept." 1 testimony, of course, with those calculations in it was not 2 in your hands when you note this evidence, so I want to 3 4 ask you, given Mr. Brockman's evidence now, his first

supplemental, do you accept that, well do you accept what 5 he has said there? 6

MR. BOWMAN: I don't know how valid his comparison is. 7 I don't know ... I haven't seen any evidence to suggest that 8 that's a realistic scenario and I would like to see a 9 comparison to what other utilities experience. If it brought 10 it outside of what other utilities experience, I would agree 11 with that, but I haven't seen any evidence to indicate that 12 it does. 13

(10:30 a.m.)14

MS. BUTLER, Q.C.: Mr. Bowman, can you show me where 15

you would have made a similar assessment to suggest that 16 Mr. Brockman is in error?

17

MR. BOWMAN: I have not made a similar assessment to 18

suggest he's in error. I said I would like to have seen this 19

put in the context of what other utilities experience because 20

I don't know what this means. I don't have any idea what 21

validity this type of comparison has. 22

MS. BUTLER, Q.C.: And you haven't done any similar 23 assessment to challenge what he has said. 24

MR. BOWMAN: I haven't done something to challenge 25 what he has said and neither has he done something to 26

challenge what I've said. I said if he has put it ... 27

MS. BUTLER, Q.C.: Right. Now let's go ... 28

MR. BOWMAN: If he had put it in the context of what 29

other utilities experience, then I would, that's something I 30 could have related to. 31

MS. BUTLER, Q.C.: Let's go back to where you wanted me 32 to, or where I said I would return and that is where you say 33

you make a statement in your pre-filed. 34

MR. BOWMAN: This may take me a minute. Yeah, page 35 36 13 of my pre-filed, starting line 20.

MS. BUTLER, Q.C.: Okay. So you can read in whatever 37 portion it is that you feel is addressing the point that I just 38 had you read from Mr. Brockman. 39

MR. BOWMAN: Okay. "Thirdly, companies the size of 40 Hydro and Newfoundland Power should be able to manage 41 this low level volatility with little impact on rates. Most 42 every utility in North America manages volatility. The vast 43 majority of utilities have demand charges and time varying 44 rates in their wholesale and retail tariffs. These utilities 45 have determined that the benefits of these rate structures 46

exceed the costs associated with any increase in volatility." 47

MS. BUTLER, Q.C.: So that general statement based on 48 most every utility in North America managing volatility 49 with demand charges is what you were relying upon. 50

MR. BOWMAN: I was relying on Mr. Brockman to 51 respond to that statement and show me that falls outside 52 that range. He submitted two sets of supplementary 53 testimony and in neither case addressed that. 54

MS. BUTLER, Q.C.: Alright. Let's go back to what Mr. 55 Brockman said, and you don't feel that his specific 56 assessment of what would happen, using the example of 57 the demand to Newfoundland Power customers, five 58 59 percent above forecast, taking Newfoundland Power outside of the range, return on rate base permitted by this 60 Board. 61

MR. BOWMAN: This example does nothing to address 62 the issue that's laid out here. 63

MS. BUTLER, Q.C.: That's your opinion. 64

65 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: Let's go back to page 13 of your pre-66 filed testimony, line 21, to continue the thought on this. 67 What you had just read, "Companies the size of Hydro and 68 Newfoundland Power should be able to manage this low 69 level of volatility with little impact on rates," isn't that 70 71 exactly what Mr. Brockman's example is addressing when he shows that a five percent spike results in the utility 72 being taken outside of its permitted rate of return on rate 73 74 base with a demand charge?

MR. BOWMAN: No, I don't think it is. I think it's ... he's 75 put together a scenario. I don't know how much validity it 76 has, I don't know how that compares to what other utilities 77 deal with. It doesn't address this statement. 78

79 MS. BUTLER, Q.C.: Would you agree that if his example were accurate that a risk that takes a utility outside of its 80 authorized range of normal return on equity would not be 81 described as a low level of volatility? 82

83 MR. BOWMAN: I'd have to know what the probability of occurrence is and I can't ... I can come up with a scenario 84 that is certainly detrimental to the revenues but you need 85 to put some boundaries on it. 86

MS. BUTLER, Q.C.: Did you? 87

MR. BOWMAN: I suggested that boundaries be put on it 88 and no boundaries have been put on it. Like I haven't seen 89 anything that would tell me that their revenue instability 90 resulting from this would put them outside the bounds that 91 a normal utility would face. 92

MS. BUTLER, Q.C.: Okay. Despite what Mr. Brockman 93 says. 94

1 MR. BOWMAN: He doesn't address it at all.

MS. BUTLER, Q.C.: And in this section at page 14 you conclude by saying, lines five to seven, "In summary, a small increase in volatility is a minor consideration when weighed against the benefits arising from the introduction of more complex rate structures for large volume customers," correct?

8 MR. BOWMAN: Yes.

MS. BUTLER, Q.C.: Okay. And do you maintain the
opinion that what Mr. Brockman has done does not
address the conclusion that you reach there at lines five to
seven?

MR. BOWMAN: I still maintain that the increase in
volatility that we're talking about here falls well within the
bounds of normal utilities, what a normal utility that size
would expect.

MS. BUTLER, Q.C.: Mr. Bowman, can you tell me what youwould expect for a normal utility, what are the bounds?

19 MR. BOWMAN: I would expect them to be able to cover

this, a demand energy charge. I think that is the industry
norm and I think that they fall within that norm with a
demand energy charge.

MS. BUTLER, Q.C.: When you wrote this pre-filed then on

August the 17th and the portion that we see on the screen,

is it fair to say that you did not know how large the volatility was?

- 27 MR. BOWMAN: I still don't know how large volatility is.
- MS. BUTLER, Q.C.: Okay. Because you didn't do the calculations.

MR. BOWMAN: I haven't seen any evidence put before me. I don't know. I don't know what the calculation ... I can't do those calculations for power.

MS. BUTLER, Q.C.: But, you see, if you can't do the calculations, Mr. Bowman, I'm wondering how you can make the statement which is a conclusion on the screen, "A small increase in volatility is a minor consideration when weighed against the benefits arising."

MR. BOWMAN: I'm making this conclusion because I feel
this falls well within the realm of utilities of similar stature.
If they come in low, you know, under their revenue
requirement, they always come in for a rate case.

42 MS. BUTLER, Q.C.: So that's the answer.

MR. BOWMAN: Yeah. Like I said, I don't see any
evidence to suggest that this volatility falls outside the
realm of what a typical utility experiences.

46 MS. BUTLER, Q.C.: I want to go back ... leave that for a

moment, Mr. Bowman, and just go back to something you 47 said to me a moment ago in relation to the section on rates, 48 and this related to your pre-filed, page 4, lines 4 to 10. 49 50 Yeah. Lines 10 and 11 actually, "There's a great deal that Hydro can do with the rates covering the other 94 percent 51 of sales." See if we can get our minds back to that thought. 52 If you don't have the marginal rates, I'm sorry, marginal 53 costs to design the rates, how do you know that the 94 54 percent of sales that you refer to there can be improved 55 upon? 56

MR. BOWMAN: I don't. That's why I'm indicating that anindependent consultant should take a look at it.

59 MS. BUTLER, Q.C.: I just want to clarify one other point, Mr. Bowman, relative to something you said to me very 60 early in this cross-examination, and perhaps it was an 61 oversight from yesterday, but the document CA-6, which 62 is now labelled and entered, can we just have a look at that, 63 being the opening statement from December 4th? Just go 64 65 back one page, Mr. O'Rielly. Thanks. Do you adopt this testimony as part of your sworn testimony in this 66 67 proceeding?

MR. BOWMAN: I certainly adopt what I said on the
transcript. I read most of this into the transcript. I would
like to have had an opportunity to put this in a format that
would be, you know, line numbering and that, but I have,
I think I'm in a position where I have to adopt this as
testimony.

MS. BUTLER, Q.C.: Thanks you very much. Mr. Chairman,
I believe I'm complete. I'll just take a moment, if I might,
maybe during the break with my colleague, to see if there's
any other questions he has arising but I think I'm complete.

78 MR. NOSEWORTHY, CHAIRMAN: Okay.

MS. BUTLER, Q.C.: Mr. Chairman, he tells me he's content,
so I am indeed complete, Mr. Bowman. Thank you very
much.

82 MR. BOWMAN: Thank you.

MR. NOSEWORTHY, CHAIRMAN: Well, thank you, Ms.
Butler. Thank you, Mr. Bowman. It is quarter to 11 now
and we normally break at 11. If you're prepared, Ms.
Henley Andrews, to continue, I think I'd like ... or do you
wish to take the break now or ...

MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, it really
doesn't matter to me one way or the other.

MR. NOSEWORTHY, CHAIRMAN: I think we'll gothrough to 11, if that's okay.

- 92 MS. HENLEY ANDREWS, Q.C.: Okay, that's fine.
- 93 MR. NOSEWORTHY, CHAIRMAN: Thank you.

- 1 MS. HENLEY ANDREWS, Q.C.: Mr. Bowman, I take it from
- 2 your testimony that you would agree with Mr. Osler that a
- 3 1-CP allocator is more appropriate?
- 4 MR. BOWMAN: For generation demand?
- 5 MS. HENLEY ANDREWS, Q.C.: For generation demand,6 yes.
- 7 MR. BOWMAN: Yes.
- 8 MS. HENLEY ANDREWS, Q.C.: And I think that it's also
- 9 quite clear from your testimony this morning that you
- 10 favour a multi-part rate for Newfoundland Power with a
- 11 demand and an energy component?
- MR. BOWMAN: I certainly favour that but I have also
  suggested that an independent consultant look at it to
  come up with an appropriate design.
- 15 MS. HENLEY ANDREWS, Q.C.: And would you agree that
- 16 the issue of rate design is really the issue that addresses
- 17 the volatility aspect and how you structure your rate to the
- 18 circumstances of the individual utilities?
- MR. BOWMAN: The rate design does balance thosevarious criteria.
- MS. HENLEY ANDREWS, Q.C.: When you discuss performance-based regulation in your opening statements, would you agree that there is currently very little information before the Board on performance-based regulation and the options on how to go about it?
- 26 MR. BOWMAN: Yes.
- 27 MS. HENLEY ANDREWS, Q.C.: So you would agree that
- we're, while it's something that the Board should possibly
- look at in the future, that it's something that we're not readyfor as a result of this rate hearing?
- 31 MR. BOWMAN: That's right.
- MS. HENLEY ANDREWS, Q.C.: Have you given any consideration to how the fact that Newfoundland and Labrador Hydro is a Crown corporation would fit into the whole concept of performance-based regulation?
- MR. BOWMAN: Yeah. I think performance-based
  regulation works better when you have an investor-owned
  utility climate. On the other hand, there's no reason you
  can't apply the same principles to a Crown-owned
  company.
- MS. HENLEY ANDREWS, Q.C.: In setting the revenue
  requirement for Newfoundland and Labrador Hydro and in
  looking at its cost of service study, would you agree that
  the single most important thing is that the assumptions
  used be as correct as possible?
- 46 MR. BOWMAN: That's certainly an important

- 47 consideration.
- 48 MS. HENLEY ANDREWS, Q.C.: Have you taken a look at
- 49 any of the testimony relating to the estimates of the fuel,
- 50 the amount of fuel required for Holyrood?
- 51 MR. BOWMAN: Sorry, could you repeat the question?
- 52 MS. HENLEY ANDREWS, Q.C.: When it comes to Hydro's
- 53 forecast for fuel at Holyrood, there are, I suppose, three
- 54 components. One is the cost of fuel, correct?
- 55 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: A second is the numberof barrels of fuel.
- 58 MR. BOWMAN: Yes.
- 59 MS. HENLEY ANDREWS, Q.C.: And within the calculation
- 60 of the number of barrels of fuel there's the issue of the
- 61 efficiency at Holyrood?
- 62 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: If we are using average
  water conditions, average hydraulic production on a longterm basis to forecast the amount of fuel required in
  Holyrood, do you agree that it would be inappropriate to
  utilize an efficiency factor based upon high water years?
- MR. BOWMAN: Using an efficiency factor based on
  historical figures in high water years would certainly have
  an impact on the results.
- MS. HENLEY ANDREWS, Q.C.: And the impact would be
  that if the evidence before the Board is that the efficiency
  improves with the more the units are run, that in a high
  water year with less running of the units you would expect
  a lower efficiency, correct?

76 MR. BOWMAN: Could you repeat that? I got lost in the77 ...

78 (10:45 a.m.)

MS. HENLEY ANDREWS, Q.C.: If you use average water
and you use an efficiency factor based on a time period
when the efficiency was lower than it normally would be
because of high water, then you would over-estimate the
number of barrels of fuel that you would need?

MR. BOWMAN: You should use an efficiency factor that
reflects expected operation of those units in the test year.
I think I'm answering your question, but if not I'm sure
you'll let me know.

MS. HENLEY ANDREWS, Q.C.: And I think you're
answering my question too, but would you agree that if
you're going to use average water you should use average
fuel efficiency for a similar type of water period?

1 MR. BOWMAN: I think you should take into account the 2 expected operation of a plant.

3 MS. HENLEY ANDREWS, Q.C.: Thank you. I'd like you to

4 take a look at page 7, lines 16 to 19 of your pre-filed

5 **testimony**. Okay. And we think we need to go, yeah, to go

6 back a little. Right there. So at line 16 to 17 you say that

7 your review of the cost of service study relates to the

8 methodology only and that you did not review the 9 assignment of each piece of equipment on the system. I

take it from that that you did not take a, do a review of

Hydro's assignment of specific transmission or generation

12 plant to its various customers?

MR. BOWMAN: That's true, I didn't look ... I didn't do any
kind of in-depth analysis of the assignment of each piece
of equipment on the system, that's right.

16 MS. HENLEY ANDREWS, Q.C.: We have had evidence

that in determining common plant the test is whether the

plant in determining common plant the test is whether the
 plant provides a substantial benefit to two or more
 customers.

20 MR. BOWMAN: Yes.

21 MS. HENLEY ANDREWS, Q.C.: Is that your ... is that also

22 your understanding of an appropriate definition of common23 plant?

24 MR. BOWMAN: That's my understanding.

MS. HENLEY ANDREWS, Q.C.: And in that context howwould you define substantial?

27 MR. BOWMAN: More than average, I guess.

28 MS. HENLEY ANDREWS, Q.C.: More than a little?

MR. BOWMAN: More than a little. I don't have a
dictionary here in front of me. I think that's pretty
judgemental, requires judgement on the part of the cost of
service person.

MS. HENLEY ANDREWS, Q.C.: Looking at your opening 33 statement at page three under the topic, "Rate Design," 34 you've testified that you have recommended that the Board 35 hire an independent consultant to review and recommend 36 rate designs for customers in Newfoundland, and the 37 subsequent sentences seem to relate to the previous 38 recommendation of the Board that Hydro develop a 39 demand energy rate or a three-part rate for Newfoundland 40 Power. Is that correct? 41

42 MR. BOWMAN: That's certainly part of it, yes.

MS. HENLEY ANDREWS, Q.C.: Are you also
recommending that the independent consultant review the
industrial rate design?

46 MR. BOWMAN: Yes.

47 MS. HENLEY ANDREWS, Q.C.: In what respects?

48 MR. BOWMAN: On response to one of the information 49 requests that I submitted, the industrial customers 50 indicated that they were interested in seeing other rate 51 design options. I would like to see the independent 52 consultant include that in a study.

MS. HENLEY ANDREWS, Q.C.: So you're not
recommending that the independent consultant look at the
demand energy rate for the industrial customers?

MR. BOWMAN: Well, part of that study would be to lookat the existing rates, yes.

MS. HENLEY ANDREWS, Q.C.: Could we go to page six,
the section that's called "Industry and Regulatory
Structure?" Am I correct that in this particular section of
your testimony the, what you're basically talking about is
the idea of a substitute for competition?

MR. BOWMAN: I think it's fair to say that performancebased regulation is a substitute for competition. You have
regulation because you don't have competition in the
industry, so performance-based regulation is still regulation
but it imposes a competitive element in a business.

MS. HENLEY ANDREWS, Q.C.: And what is the theory ofthat competitive element?

MR. BOWMAN: One way you might look at it is if you did 70 have a number of distribution companies and a competitive 71 element might come through if you publish the actual rates 72 for each distribution company and its performance, and if 73 you made, like I say, if you publish those and made them 74 available to the public and if, for example, a utility in Corner 75 Brook had low rates and high reliability whereas one in St. 76 John's had higher rates and lower reliability, then that 77 would create a certain competition between those two 78 utilities, and the customers in each ... well, customers in St. 79 John's would be putting pressure on their utility to do a 80 better job. 81

MS. HENLEY ANDREWS, Q.C.: I would consider that to 82 83 be real competition and what I was wondering about is that if you assume for the sake of discussion that we continue 84 to have primarily two utilities, being Hydro and 85 Newfoundland Power, I can see how performance-based 86 regulation might provide some incentive for an 87 independent utility, but I'm a little at a loss with respect to 88 a Crown-owned utility and I really just wondered how you 89 could reconcile the theory of performance-based regulation 90 when dealing with a Crown-owned utility. 91

92 MR. BOWMAN: If you had a price cap mechanism for 93 Hydro, for example, the price cap might set, say the 94 revenues were capped at \$300 million and that's what 95 they're going to get in each of the subsequent years, it was

- allowed to increase, say, at some inflation factor but then 1
- decreased according to a productivity factor, then their 2
- revenues would be tied to that. Now if they could do better 3
- 4 than that, then they would increase their return to their shareholder. 5
- MS. HENLEY ANDREWS, Q.C.: So the idea would be that 6 you would provide, because they would have to meet these 7
- efficiency targets in order to earn their profit, they would 8
- have an incentive to keep their costs down? 9
- MR. BOWMAN: That's correct. 10
- MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, this would 11 be a good place to break. 12
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. 13 Henley Andrews. We'll break until 10 after. 14
- 15

(break)

- (11:15 a.m.) 16
- MR. NOSEWORTHY, CHAIRMAN: Ms. Henley Andrews, 17
- could I ask you to continue with your cross, please? 18
- MS. HENLEY ANDREWS, Q.C.: Yes, Mr. Chairman. Mr. 19
- Bowman, some of your testimony yesterday focused on the 20
- issue of managing the cost of fuel. Do you recall that? 21
- MR. BOWMAN: Yes. 22
- MS. HENLEY ANDREWS, Q.C.: And one of the things 23
- you were asked about, for example, were things like 24
- financial instruments and contract type relationships to 25 manage the cost of fuel? 26
- MR. BOWMAN: Yes. 27
- MS. HENLEY ANDREWS, Q.C.: Are you familiar with the 28 concept of strategic fuel purchasing? 29
- MR. BOWMAN: No. 30
- MS. HENLEY ANDREWS, Q.C.: Would you agree that the 31 amount that's outside of the financial instrument side or the 32 contractual side of reducing your risk on fuel, that the 33
- 34 amount of flexibility that a utility has will depend in part on
- how much fuel storage it has? 35
- MR. BOWMAN: That's certainly a consideration, yes. 36
- MS. HENLEY ANDREWS, Q.C.: And its ability to 37 purchase fuel when fuel prices are lower is going to be a 38 function of ... and the benefit that it can receive from that is 39 going to be a function of how much storage it has? 40
- MR. BOWMAN: Well, this is out of my area. Certainly, it's 41
- a function of the fuel storage they have, but I think you 42
- could probably store it off site, as well. This is definitely 43 getting out of my area of expertise.
- 44
- MS. HENLEY ANDREWS, Q.C.: But would you agree with 45

me that when you look at the issue of fuel purchasing, that 46 it's a broader issue than just looking at the financial 47 instruments? 48

MR. BOWMAN: There's a number of considerations, yes. 49

- MS. HENLEY ANDREWS, Q.C.: One of the areas that 50 Newfoundland Power asked some questions on this 51 morning was the assertion in your evidence that there is 52 insufficient material available or insufficient information 53 available to you to design a rate at this time, and I gathered 54 from your answer that the type of rate that you would 55 propose, if you were to design a rate, would be a marginal 56 cost type of rate? 57
- 58 MR. BOWMAN: I would be looking to incorporate marginal cost elements in a rate. 59
- MS. HENLEY ANDREWS, Q.C.: First of all, are you talking 60 about short-run marginal costs or long-run marginal costs? 61
- 62 MR. BOWMAN: Both.
- MS. HENLEY ANDREWS, Q.C.: And what margin cost 63 information do you think that you need that is not 64 available? 65
- 66 MR. BOWMAN: I need to know what the short-run marginal costs are, what the cost of capacity is, what those 67 costs are in varying time periods. 68
- MS. HENLEY ANDREWS, Q.C.: And what would be the 69 relevance of what the costs are in the time periods? 70
- MR. BOWMAN: To incorporate time of use elements in 71 the tariff. 72
- MS. HENLEY ANDREWS, Q.C.: And if there were to be no 73 time of use elements incorporated into the tariff, what 74 would be the information that you would need to design 75 the rates that's not currently available? 76
- MR. BOWMAN: You would need certainly the short-run 77 marginal costs and then consumption of various levels. 78 You might want to design run out, block rates that reflect 79 80 marginal costs.
- MS. HENLEY ANDREWS, Q.C.: Would you look at a run 81 out rate for the wholesale rate? 82
- MR. BOWMAN: Not very likely. 83

MS. HENLEY ANDREWS, Q.C.: I was intrigued by your 84 suggestion this morning that the industrial customers were 85 looking for real time pricing, and I was wondering where 86 you got that impression? 87

- MR. BOWMAN: I got that from one of the information 88 requests, and I would have to look that up. I believe they 89
- 90 indicated that they would be interested in other rate design
- options, and as I recall real time pricing was one of the for 91

- 1 examples listed.
- 2 MS. HENLEY ANDREWS, Q.C.: Okay, but it's not in any
- 3 of the evidence filed by Mr. Osler, for example?
- 4 MR. BOWMAN: No.
- 5 MS. HENLEY ANDREWS, Q.C.: Now, I note, from your 6 resume, which is attached to your evidence, that you have
- 7 given expert testimony in Nova Scotia with respect to
- 8 interruptible rate design?
- 9 MR. BOWMAN: Yes.
- 10 MS. HENLEY ANDREWS, Q.C.: And what would be ... do
- you think it's appropriate to have an interruptible rateavailable for those customers whose demand is largeenough to take advantage of it?
- 14 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: Do you think this is something that the Board should be encouraging?
- 17 MR. BOWMAN: Interruptible rates?
- 18 MS. HENLEY ANDREWS, Q.C.: Yes.
- 19 MR. BOWMAN: Yes.
- 20 MS. HENLEY ANDREWS, Q.C.: When you look at the ...
- could we take a look at **NP-133**, and in particular I'd like you to take a look at how the interruptible rate for the
- 23 industrial customers is calculated?
- MR. BOWMAN: Sorry, you want me to take a look at howit's calculated?
- 26 MS. HENLEY ANDREWS, Q.C.: Yeah, just take a look at it,
- 27 and it may be easier for you to actually look at the hard
- copy, but if you want to look at it on the screen that's fine.In particular it's the answer to A.
- MR. BOWMAN: I'm somewhat familiar with this response.
  I certainly haven't memorized it, but ...
- MS. HENLEY ANDREWS, Q.C.: Okay. You can see that
  the interruptible rate that's made available to the industrial
  customers is made available during four months of the year,
- 35 from December to March?
- 36 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: And that is basically
  the time when Hydro would expect its peaks to occur?
- 39 MR. BOWMAN: Yes.
- 40 MS. HENLEY ANDREWS, Q.C.: Is it reasonable to design
- an interruptible rate that focuses on a specific time of year
- 42 like that, or would you suggest that an interruptible rate
- 43 should be available year round?
- 44 MR. BOWMAN: Depends on the utility. Certainly, there's

- 45 a much greater demand here in the winter months and the
- 46 non winter months. Like, in our case in Ontario, we spread
- 47 the interruptible discounts throughout the year. We had a
- 48 summer peak, to some extent, and there was some value in
- 49 interrupting in those months as well.
- 50 MS. HENLEY ANDREWS, Q.C.: Would you agree that the 51 rate or the compensation that should be made available to 52 anyone who is providing this type of service should be 53 based upon the value that the service is providing?
- 54 MR. BOWMAN: I think the ... yeah, the value should be 55 reflected in the rate.
- MS. HENLEY ANDREWS, Q.C.: And would you agree that
  an interruptible rate has value in the winter in
  Newfoundland, with Newfoundland's load profile by
  avoiding peakers in the winter?
- 60 MR. BOWMAN: I would certainly expect that to be the 61 case.
- MS. HENLEY ANDREWS, Q.C.: But would you agree that
  it has little, if any, value in the summer, if there's no peaking
  in the summer?
- MR. BOWMAN: I'd be surprised if there's much value in
  the summer. On the other hand, I'm not that familiar with
  their maintenance program. There may be some value and
  there may be some transmission value as well.
- MS. HENLEY ANDREWS, Q.C.: So would you agree then
  that the cost to be incurred by Hydro to purchase this type
  of capacity, because that's really what you're doing with an
  interruptible rate, should be tied to the value that it
  produces during the time of year when it produces that
  value?
- 75 MR. BOWMAN: I think that's right, yes.
- MS. HENLEY ANDREWS, Q.C.: Are you aware of theNewfoundland Power generation credit?
- 78 MR. BOWMAN: I'm aware of it, yes.
- 79 MS. HENLEY ANDREWS, Q.C.: And would you agree that
- 80 ... with Mr. Budgell, that it provides a ... the Newfoundland
- 81 Power generation availability has a similar role as the
- 82 interruptible from the industrial customers?
- MR. BOWMAN: It plays a similar role, but generation iscertainly different than interruptible load.
- MS. HENLEY ANDREWS, Q.C.: Would you agree that in
  the way in which it is utilized, and the evidence indicates
  that it's used from a peaking perspective, that its real value
  is in the winter during peak periods?
- MR. BOWMAN: In terms of deferring the need for
  additional capacity, I would say that's correct. Within that
  ... we have seen testimony that indicates that it's winter

- 1 peak demands that drive generation investment.
- 2 (11:30 a.m.)

3 MS. HENLEY ANDREWS, Q.C.: Now, I want to ask you some questions relating to rate stabilization, the Rate 4 Stabilization Plan and also with respect to rate stabilization 5 or fuel adjustment mechanisms. Could we take a look, Mr. 6 O'Rielly, at NLH-99, page 1 of 2? And if you could leave 7 that on the screen? I'd like to take a look at page 10 of your 8 opening statement, and on the previous page you had 9 recommended that the RSP be eliminated gradually in order 10 to spread the rate impact over time? 11

12 MR. BOWMAN: Yes.

13 MS. HENLEY ANDREWS, Q.C.: When you were asked

some questions this morning with respect to the phase out

15 of the preferential rates for government customers on the

isolated system ... on the interconnected system and the

17 isolated system you indicated that a five year period would

18 be a reasonable period to do that?

MR. BOWMAN: I think what I indicated was that waswhat the Board felt was a reasonable period.

MS. HENLEY ANDREWS, Q.C.: Okay, and do you think that five years would also be a reasonable period of time to get rid of the existing balance in the RSP?

24 MR. BOWMAN: Possibly. I'd have to see ... I think it's a

<sup>25</sup> function of where rates are going in the future. Like, you

want to minimize the rate impact so you'd have to take into

27 account what rate impacts are expected in the future and

just how much you want to write off in any given year.

29 MS. HENLEY ANDREWS, Q.C.: So you wouldn't want to

30 create a huge bump in customer's rates, so I guess it falls31 into the category of gradualism, would you agree?

32 MR. BOWMAN: That's right.

MS. HENLEY ANDREWS, Q.C.: Now, when we look at the top of page 10 of your evidence, or your opening statement, you say that the RSP, broken down into its principal components, includes a fuel adjustment charge to enable refunds or pass throughs and a balancing account. Would you ... how do you ... what do you consider is in the fuel adjustment charge?

40 MR. BOWMAN: Well, certainly the variations in hydraulic

41 production, and as well, and the changes in the cost of fuel,42 there could be a load element as well, a growth element.

43 MS. HENLEY ANDREWS, Q.C.: Now, when you talk about

substituting other mechanisms, I take it you don't favour
 any form of fuel adjustment account?

46 MR. BOWMAN: I wouldn't say any form. If I favoured a 47 form of fuel adjustment I would want incentives on the 48 utility to do a better job of managing that fuel element.

49 MS. HENLEY ANDREWS, Q.C.: So I take it that your

50 preference would be to not replace the RSP with a fuel

51 adjustment rider?

52 MR. BOWMAN: A fuel adjustment rider that would allow 53 the utility to directly pass through those costs to 54 consumers, no matter what they were.

MS. HENLEY ANDREWS, Q.C.: You would favour that ornot?

57 MR. BOWMAN: I would not favour that.

MS. HENLEY ANDREWS, Q.C.: Okay. Now, when you
look at NLH-99 you'll see that the question was would Mr.
Osler support elimination of the RSP for industrial
customers and have it replaced by a fuel adjustment
charge, and when you go down to subparagraph 1 in the
answer, you see that Mr. Osler has indicated that load
variance risks normally reside with the utility?

65 MR. BOWMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: Would you agree that thatis true in North America? And take the time to read theparagraph, if you like.

MR. BOWMAN: I'll do that. I can't really say that I've
reviewed fuel adjustment clauses to the extent that I would
be able to make that assertion. I think that's probably the
case, but I can't say that with any real support.

MS. HENLEY ANDREWS, Q.C.: And I take it you're not ina position to disagree with Mr. Osler?

75 MR. BOWMAN: That's right.

76 MS. HENLEY ANDREWS, Q.C.: Are you familiar with how

77 the load variation adjustment works for Newfoundland

78 Hydro's Rate Stabilization Plan?

79 MR. BOWMAN: To the extent that it allows them to80 compensate for variations in load growth relative to what81 is forecast.

MS. HENLEY ANDREWS, Q.C.: Would you agree that the
way in which it is applied, so that by doing a monthly rerun
of the cost of service study and then reassigning costs
between customers based upon what their actual loads
have been versus the forecast loads, effectively changes
the rates for the customers for that month?

MR. BOWMAN: I think whenever there's an RSP
adjustment it's changing the rates. If you're ... I'm not sure,
are you asking me if just doing it on that basis changes the
rates? I think the rate level certainly is changing.

MS. HENLEY ANDREWS, Q.C.: That's what I mean. Inother words, the Board sets rates in a hearing such as this

- 1 one, and I know that the proposal for Hydro on a go
- 2 forward basis is different than what the past has been, but
- 3 those costs go into a cost of service study, correct, during
- 4 a general rate hearing?
- 5 MR. BOWMAN: Yes.
- 6 MS. HENLEY ANDREWS, Q.C.: And the forecasts for
- 7 load, both with the demand and the energy components,
- 8 determine how much revenue is to be recovered from each
- 9 customer, each customer class, correct?
- 10 MR. BOWMAN: In a cost of service study?
- 11 MS. HENLEY ANDREWS, Q.C.: That's right.
- 12 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: And as part of the
  general rate application the Board then sets rates to recover
  the forecast costs that is has determined are going to be
- assigned to each class of customers, correct?
- 17 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: But when you rerun the cost of service the month after the rates have been set, for
- example, and you put a credit into one customer's account
- and a debit into another customer's account to reflect the
- 22 difference between what they've actually consumed versus
- 23 the forecast, you are changing the amount of revenue
- 24 which will be recovered from them, isn't that correct?
- 25 MR. BOWMAN: That's right.
- MS. HENLEY ANDREWS, Q.C.: So to that extent, in the case of the customer that has received the debit, who subsequently gets an RSP adjustment to recover that cost, that customer is contributing more to the revenue requirement than was originally in the rates set by the Board?
- MR. BOWMAN: The RSP is certainly assigning revenue requirement to the various customer classes, yes.
- MS. HENLEY ANDREWS, Q.C.: Okay, and that aspect of it has nothing to do with fuel, would you agree?
- 36 MR. BOWMAN: Which aspect?
- MS. HENLEY ANDREWS, Q.C.: That when you are rerunning your cost of service, that deals with the demand and the energy from your classes of customers and how the costs are assigned between the customers, but it's not a direct result of variations in fuel, fuel costs?
- 42 MR. BOWMAN: And was there a question in there?
- MS. HENLEY ANDREWS, Q.C.: Yes. I'm asking you, doyou agree with that?
- 45 MR. BOWMAN: I apologize for this, but could you run me

- 46 through that once more? I'm not sure I got it.
- 47 MS. HENLEY ANDREWS, Q.C.: Okay. Would you agree
- 48 that a load variation adjustment of the sort that we have
- 49 just described, that I have just described to you ...
- 50 MR. BOWMAN: Meaning load adjustments on the basis 51 of demand and energy?
- 52 MS. HENLEY ANDREWS, Q.C.: That's right.
- 53 MR. BOWMAN: Yes.
- 54 MS. HENLEY ANDREWS, Q.C.: Is not a fuel adjustment?
- MR. BOWMAN: Generally, changes in fuel prices are 55 recovered in energy, the energy component in price. 56 However, rates vary, rates can ... like, the rates don't 57 recover the exact components coming out of the cost of 58 service study, to begin with. I think the RSP component, 59 there's no question it's administratively complex, and I think 60 the issue we're discussing here really is an interpretation of 61 what was ... what the Board meant, what the Board's 62 direction was at that time, and it's difficult for me to actually 63 know what it was the Board had in mind at that time. 64
- MS. HENLEY ANDREWS, Q.C.: Okay. Now, when youtalk about using indices for fuel prices?
- 67 MR. BOWMAN: Yes.
- 68 MS. HENLEY ANDREWS, Q.C.: Would you agree that that
- 69 would ... the type of indices that might be used would be
- <sup>70</sup> something that would require some further study?
- 71 MR. BOWMAN: Yes.
- MS. HENLEY ANDREWS, Q.C.: So that's also something
  that the Board might be able to look at in the future but it's
  not something that there's enough information available
  here right now for the Board to make a ruling on?
- 76 MR. BOWMAN: If you're talking about in terms of a
  77 performance type incentive, I agree. If you're talking about
  78 in terms of setting the revenue requirement, I don't think
  79 they have any choice in the issue.
- MS. HENLEY ANDREWS, Q.C.: You're suggesting that the
  Board should determine what the price of Bunker C would
  be, utilizing these various indices that you have referred
  to?
- MR. BOWMAN: I'm suggesting a performance mechanism
  in the future could be based on an indicia tied to some wellknown published index.
- 87 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BOWMAN: I'm saying that's something that theBoard could look at in the future.
- 90 MS. HENLEY ANDREWS, Q.C.: Let's assume for the

1 moment that Hydro's customers want some form of

- 2 smoothing mechanism for fuel price and that the Board
- 3 feels that that's appropriate, notwithstanding that that's not
- 4 your position.
- 5 MR. BOWMAN: Uh hum.

MS. HENLEY ANDREWS, Q.C.: Would you agree that one
of the problems is that the smoothing mechanism or the
mechanism, I won't call it smoothing, the mechanism that
was in place in the 19 ... prior to the RSP, so prior to 1986,
where the fuel adjustment was made monthly, really

- 11 provided very little smoothing effect?
- 12 MR. BOWMAN: That's right.

13 MS. HENLEY ANDREWS, Q.C.: And that when you look

14 at fuel adjustment riders, the types of riders that have been

in place in various jurisdictions, that most of them would

- not make the adjustment on a monthly basis?
- 17 MR. BOWMAN: That's correct, and my opening remarks

here suggests that only one state is actually doing it on amonthly basis.

20 MS. HENLEY ANDREWS, Q.C.: And that's Connecticut?

- 21 MR. BOWMAN: That's right.
- 22 MS. HENLEY ANDREWS, Q.C.: And that does provide for

a lack of predictability and a fair amount of waxing and

waning, if you like, in the price of electricity for customers,right?

26 MR. BOWMAN: It could.

27 MS. HENLEY ANDREWS, Q.C.: And is it correct that most

of the jurisdictions which have adopted fuel riders or fuel

- adjustment riders would smooth the impacts of variation in
- 30 fuel prices over periods of 6 to 12 months?
- 31 MR. BOWMAN: Yes, that's right.
- 32 (11:45)

MS. HENLEY ANDREWS, Q.C.: And that if you're looking at a jurisdiction, such as Newfoundland, where there's no summer peak because there's very little air conditioning used, but there is a winter peak, that a 12 month smoothing period would provide a reasonable degree of stability to customers, including industrial customers?

39 MR. BOWMAN: I think so yes.

MS. HENLEY ANDREWS, Q.C.: Now, would you agree
that when it comes to looking at the existing Rate
Stabilization Plan and the balance in the fuel component,
it's just the fuel component, not the hydraulic component
of the plan, that a large part of the problem is that Hydro's
rates set in 1992 assumed a \$12.50 per barrel cost of Bunker

46 C and that the plan has been allowed to grow?

47 MR. BOWMAN: That's a problem, yes.

48 MS. HENLEY ANDREWS, Q.C.: And would you also agree

49 that if the fuel price, the price of fuel had been adjusted

- 50 periodically during the last ten years, then the amount in
- 51 the Rate Stabilization Plan, the balance in the fuel portion
- 52 of the Rate Stabilization Plan would not be as large as it is
- today, nor would it grow to the same extent in the future, if
- 54 the price was set appropriately?

MR. BOWMAN: That would certainly help reduce the
balance. As I understand it, they've had above average
hydro conditions here in the last few years. I'd say it's
certainly contributing to the imbalance.

MS. HENLEY ANDREWS, Q.C.: Well, that leads me into
the issue of the hydraulic portion. You would agree that if
you look at hydraulic production, it has a ... the main driver
behind the amount of hydraulic production would be
weather?

64 MR. BOWMAN: That's a major consideration, yes.

MS. HENLEY ANDREWS, Q.C.: Okay, and to the extent
that it's not weather, for example, to the extent that a
reduction in hydraulic production results from a mechanical
failure, that that would generally be a risk that would be
borne by a utility?

### 70 MR. BOWMAN: Yes.

71 MS. HENLEY ANDREWS, Q.C.: That with respect to hydraulic, again, if customers wished to have some 72 protection from dry periods and were prepared to have an 73 account that balanced out some of the risks associated with 74 dry periods versus wet periods, the fact that over the last 75 76 number of years the amounts that have been built up in the fuel adjustment portion of the RSP, the fact that those have 77 been offset by Hydro by the amounts that were being 78 credited to the hydraulic means that today, at the end of a 79 wet period, there is very little in the account to protect 80 customers from dry periods into the future? Want me to try 81 that an easier way? 82

### 83 MR. BOWMAN: Yes.

MS. HENLEY ANDREWS, Q.C.: Okay. Even by my
standards that was a long question. If customers felt that
it was important to have a hydraulic adjustment mechanism,
then you would expect that since weather variations occur
over a much longer period of time than fuel variations, but
that type of an adjustment plan would have a much longer
curve, would you agree?

MR. BOWMAN: Yes. I've actually heard climatologists say
that we're in the midst of a 10,000 year cooling cycle right
now.

94 MS. HENLEY ANDREWS, Q.C.: But it could be 30 years?

- For example, Environment Canada uses 30 years from a
   forecasting perspective?
- 3 MR. BOWMAN: Could be 30 years or it could be one year,
- 4 could be five years, could be 10,000 years.
- 5 MS. HENLEY ANDREWS, Q.C.: Okay. Now, let's assume
- that in looking at the fuel adjustment you want to startfresh.
- 8 MR. BOWMAN: Okay.
- 9 MS. HENLEY ANDREWS, Q.C.: You have two ... would
- you agree with me that there would then be two issues, one
- issue would be how would you recover the existing balancein the RSP?
- 13 MR. BOWMAN: Right.
- 14 MS. HENLEY ANDREWS, Q.C.: And the second issue
- 15 would be how would you design the adjustment into the
- 16 future to recover the amount of fuel variation that you're
- 17 prepared to commit?
- 18 MR. BOWMAN: Yes.
- 19 MS. HENLEY ANDREWS, Q.C.: And that all of that would
- 20 have to, in coming up with that plan to have a new system
- on a go forward basis and to amortize the existing balance,
- one of the elements you'd have to look at would be the impact on customer's rates?
- 24 MR. BOWMAN: That's right.
- MS. HENLEY ANDREWS, Q.C.: Those are all my questions. Thank you.
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
  Henley Andrews. Thank you, Mr. Bowman. We'll move
  now to questions, cross-examination by counsel. Mr.
  Kennedy, please?
- MR. KENNEDY: Thank you, Chair. Mr. Bowman. Mr. Bowman, just a couple of curiosities of my own, first, relating to the interruptible rate concept. Is the interruptible rate that would be afforded by Hydro, in this case to the industrial customers, is that conceptually associated or tied to the concept of the coincident peak in any way?
- MR. BOWMAN: Indirectly. I think they've based it on the expected operating pattern of a combustion ... well, a peaking option, and the peaking option is ... the expectation is that it would operate during peak periods, but I wouldn't say it's direct, for rate making purposes I wouldn't say there's a correlation there with coincident peak. There are a number of coincident peaks, if that's what you're asking.
- MR. KENNEDY: Okay. I guess the curiosity arises from
  the fact that the interruptible rate applies over a four month
  period is, I think has been established in the evidence?

- 48 MR. BOWMAN: Yes.
- 49 MR. KENNEDY: And that they are the four winter months,
- 50 and that I'm assuming the rationale is that Hydro provides
- 51 this interruptible rate and has contractually secured the
- <sup>52</sup> ability to interrupt the power to the industrial customers for
- 53 that four month period because it's that four month period
- 54 where they may need to interrupt the rate?
- 55 MR. BOWMAN: That's my understanding, yes.
- 56 MR. KENNEDY: Okay.
- MR. BOWMAN: From a planning perspective. I'm not
  sure whether they need it over the entire year from an
  operating perspective. There's no doubt in my mind their
  operators would like to have that flexibility.
- 61 MR. KENNEDY: So conceptually, there's no direct or even 62 indirect tie between the concept of the coincident peak and, 63 for instance, it being a 1-CP or a 4-CP and then the 64 interruptible rate and the need for power over, in this case, 65 a four month period?
- 66 MR. BOWMAN: I don't see any connection to the 67 coincident peaks, no.
- 68 MR. KENNEDY: The interruptible rate, as I understand it, 69 and I think you established in questioning to Ms. 70 Andrews, is one of the rationales for that is that it voids the 71 requirement to build generation or increase capacity on the 72 system because it allows them to decrease the amount of 73 power that they're delivering to a particular customer, high 74 energy customer?
- 75 MR. BOWMAN: That's certainly the most significant76 benefit, I would say.
- MR. KENNEDY: And so in the case of the marginal costbased rate design, would that interruptible rate be then tiedto the long-run marginal cost?
- 80 MR. BOWMAN: Yes.
- MR. KENNEDY: Okay. They were my curiosities on 81 interruptible rates. The questions, more substantive, I 82 guess, questions, just relating to one aspect of your pre-83 filed testimony, Mr. Bowman, and that's relating to your 84 recommendation of an independent consultant, and I'm 85 wondering if you could provide some elaboration on the 86 process that would be ... that you would recommend that 87 the Board or the panel would employ in retaining a 88 consultant, assuming that was something that they would 89 entertain? 90
- MR. BOWMAN: Are you talking in terms like a terms ofreference for the independent consultant?
- MR. KENNEDY: Well, I guess that's the thing. You wouldinitially have to establish a terms of reference for this

1 independent consultant?

2 MR. BOWMAN: Yes.

3 MR. KENNEDY: Okay, and the process, would that 4 independent consultant normally require a marginal cost 5 study be completed prior to them doing their own work?

6 MR. BOWMAN: They would have to work with Hydro's 7 staff to develop marginal costs. I should say, I did this 8 once for the Regulatory Board in Nova Scotia, and 9 basically they hired me to work with Nova Scotia Power's 10 staff and that was to develop various rate options under 11 their expansion program.

MR. KENNEDY: Okay. Well, let's take that concrete example then in Nova Scotia. You were hired by or given the mandate by the Public Utilities Board of Nova Scotia to implement a new rate design for the public utility?

MR. BOWMAN: Well, it was to design rate designs, and
then those rate designs were put forward when the utility
came in for the next rate case.

19 MR. KENNEDY: So these were put forward by you as sort

of an option A, option B, option C of rate designs or did you design one overall rate design and say that that's your recommendation?

MR. BOWMAN: No. I designed rates that were supposed to be consistent with their expansion program and I filed a report, so basically, the designs in that report were discussed as part of the next rate application by the utility.

MR. KENNEDY: So when you came up with this design
was this done as independent of the utility or did you work
with the utility in coming up with the design?

30 (*12:00 noon*)

MR. BOWMAN: Well, my design was independent, but I had to work with the utility to come up with those designs.

33 MR. KENNEDY: Okay, so it was ultimately though your

own design, your recommendation of what you deemed tobe a best design for rates in the circumstances?

MR. BOWMAN: It was certainly mine. It's pretty fair to say that Nova Scotia Power weren't going to adopt those recommendations.

MR. KENNEDY: Okay, but preceding that recommendation
you needed to work with the utility in order to secure the
information necessary for you to make that rate design
recommendation?

- 43 MR. BOWMAN: That's correct.
- 44 MR. KENNEDY: And that involved a marginal cost study?

45 MR. BOWMAN: Yes.

46 MR. KENNEDY: Okay. Now, I understand that in order to
47 do an appropriate marginal cost study in these
48 circumstances that it may involve both utilities, both Hydro
49 and Newfoundland Power would need in a marginal cost
50 study, is that your position, as well?

51 MR. BOWMAN: Yes.

52 MR. KENNEDY: Okay, so and the same independent 53 consultant, would that independent consultant be in 54 charge of having the marginal cost study conducted?

55 MR. BOWMAN: They would be involved in the process,

and I will say, Newfoundland Power has developedmarginal costs, I think back in `98, maybe.

58 MR. KENNEDY: `97 as a result of Mr. Bowman's

59 recommendations in 1996.

60 MR. BOWMAN: Thank you.

61 MR. KENNEDY: Okay, so would you ... that would just 62 need to be freshened up, I take it, or it could be used as at 63 least a starting point on a marginal cost study?

MR. BOWMAN: I would expect they'd be in a pretty goodposition to update those figures.

66 MR. KENNEDY: Okay, so it's starting from there you

would ... the independent consultant would work with bothNewfoundland Power and Hydro in first generating amarginal cost study?

70 MR. BOWMAN: That would be one of the first steps, yes.

71 MR. KENNEDY: Okay. That's one of the first steps?

72 MR. BOWMAN: Yeah.

MR. KENNEDY: And then is there a step between that and
then the independent consultant actually generating a rate
design that they then recommend?

MR. BOWMAN: Yeah. You would need the ... like I said
earlier, you'd need the billing determinant data and various
load data. If you're going to design run out block rates,
you need to know consumptions of various levels, so the
utility would have a great deal more information as well on
actual load shapes and such.

MR. KENNEDY: Okay, and that's information in addition
to the information that comes out of the marginal cost
study then?

85 MR. BOWMAN: Yes.

MR. KENNEDY: Okay. Is there another step in addition to
that? So there's the marginal cost study that needs to be
generated, there's additional information to be obtained
from the utility relating to load characteristics and billing
determinants?

- 1 MR. BOWMAN: Yeah. These are things they should 2 have.
- 3 MR. KENNEDY: Yes.
- 4 MR. BOWMAN: Yeah, and with that, the independent
- 5 consultant should be able to come up with rate designs.
- 6 MR. KENNEDY: And would the ... in the case of Nova 7 Scotia, were you give an free hand on the rate design or 8 were you given instructions by the utility board concerning 9 what the objective of the rate design was?
- MR. BOWMAN: Yes, I was given objectives, so the objective was that that rate designs be consistent with their expansion plans, so by inference, it meant you had to employ marginal cost aspects in the rate design.
- MR. KENNEDY: Okay, and again, I just want to try to get
- a firm understanding of the process that would need to be
- 16 employed, so independent consultant hired, a marginal cost
- 17 study generated by working with the utilities, the gathering
- 18 of additional information that's required, the determination
- by the independent consultant of a rate design that they
- 20 then recommend, and then that goes back before the Board,
- 21 is that what happened in Nova Scotia?
- MR. BOWMAN: Yes. Then the report is filed with the Board.
- MR. KENNEDY: Mr. Bowman, sort of one issue I had with 24 your recommendation concerning the abandonment of the 25 RSP. Presumably this independent consultant, that if they 26 were, in fact, charged with this duty to do this review and 27 recommend a rate design, would look to the RSP itself and 28 make determinations regarding its appropriateness, and 29 conceivably that independent consultant may, in fact, feel 30 that an RSP in one form or another is an appropriate part of 31 a rate design mechanism, correct? 32
- 33 MR. BOWMAN: That's possible.
- MR. KENNEDY: So if it was the case that the panel was to follow your recommendation of an independent consultant conducting this review it would be premature, wouldn't it, to in this application, abandon the RSP when, in fact, the independent consultant may just end up recommending implementation of another RSP?
- MR. BOWMAN: Well, since Newfoundland is the only
  jurisdiction that uses this type of RSP I'd be very much
  surprised if the independent consultant would make that
  recommendation.
- MR. KENNEDY: But it is conceivable? We could be on
  the avant-garde of rate making design and everyone follow
  us for a change, and I don't mean to be factious, but it is
  conceivable that the RSP, for whatever circumstances that
  are peculiar to Newfoundland, is particularly appropriate for

## 49 Newfoundland?

MR. BOWMAN: It's entirely ... like I say, it's without 50 regulatory precedent that an RSP like that is used in North 51 America. If Newfoundland thought it was leading the way 52 53 and this is something that was going to gain widespread regulatory acceptance, then I would agree with that. On 54 the other hand, it's been in place now for 15 years and no 55 one's adopted it, so if it is on the leading edge it's taken a 56 long time to appear. 57

MR. KENNEDY: Just one further point on this, and I don't mean to oversimplify your concerns, but in regards to the RSP, if I gather you correctly, one of your chief principal concerns is that it places too much emphasis on stability at the risk of increasing the cost that might otherwise be decreased without trying to achieve that additional stability inside the RSPs?

MR. BOWMAN: I think that would be an
oversimplification. Because I think the seven reasons I've
given here in my opening remarks are more accurate.

MR. KENNEDY: Okay. I'm just curious. The RSP, as you
know, was borne out of some concerns expressed by
consumers and a response to that dating back into the `80s,
and you've given evidence on your interpretation of what,
in actual fact, you felt those consumers were expressing as
a concern and how the response to the RSP didn't address
that?

75 MR. BOWMAN: That's correct.

MR. KENNEDY: So this rate design person, the
independent consultant, when they go through this
process that we just went through, where is it that they
take into account the wishes, if you will, of the consumers
of Newfoundland and what peculiarities those consumers
may have that are different than the consumers of other
jurisdictions?

MR. BOWMAN: Well, it would be appropriate to list that
in the rate design objective. If the consultant isn't to use
what I'll refer to as standard Bond Bright criteria then that
should be included in his terms of reference.

MR. KENNEDY: So would you though need to conduct 87 some sort of survey to determine whether, for instance, 88 stability is the ... as far as the consumer is concerned, a 89 90 much more important principle to take into account than the lowest possible costs and therefore, you know, that's 91 something that the independent consultant should take 92 into account when they go forward with their recommended 93 rate design? 94

MR. BOWMAN: That would be useful information for the
consultant if you could conduct such a survey and word it
properly.

- 1 MR. KENNEDY: And so that would potentially be another
- 2 step in that process that the independent consultant would
- 3 need to do?

4 MR. BOWMAN: That's something you could do unless 5 you wanted the independent consultant to just kind of start 6 from a clean slate.

7 MR. KENNEDY: Could you tell me ... give me your best 8 guesstimate as to the amount of time that that would 9 require from the moment that the independent consultant 10 is actually given this objective or entrusted with this 11 obligation and then when they would return with the 12 recommended rate design?

13 MR. BOWMAN: I mean, how many of my competitors hear

14 it. I think that this is ... actually, maybe we should ask Dr.

15 Wilson, since he did a review of Newfoundland Power's

16 rates, but I'm trying to remember how long it took me in

17 Nova Scotia, and I believe it ... I certainly don't think it was

- as long as six months. I think it was more like four monthsor something like that.
- 20 MR. KENNEDY: So a four to six month process?
- 21 MR. BOWMAN: I think that's a pretty generous timeframe.
- 22 MR. KENNEDY: Okay.

MR. BOWMAN: But by the time you write the report andeverything that might be realistic.

MR. KENNEDY: That's all the questions that I have, Chair.Thank you, Mr. Bowman.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
Kennedy. Thanks again, Mr. Bowman. We'll go now to
Mr. Browne on redirect, please?

- MR. BROWNE, Q.C.: Thank you, Mr. Chair. In a question from Ms. Butler you made reference to the distribution systems in Ontario. Can you expand upon that a little?
- 33 You mentioned that there were between 90 and 100?

MR. BOWMAN: Yes. Well, back when I was working for 34 Ontario Hydro I think there was of the order of 327 35 municipal utilities. Ontario is deregulating, going to a 36 competitive market, we think, early next year. They've put 37 in a performance based regulatory mechanism. One of the 38 objectives of that was that it was judged that there was a 39 lot of inefficiencies with that number of distribution 40 companies. One of the objectives was to provide incentive 41 for mergers and acquisitions to get it down to a more 42 manageable number, and it has worked to the extent that I'm 43 told that the number of distribution companies now in 44 Ontario is somewhere between 90 and 100. 45

46 MR. BROWNE, Q.C.: And in Ontario is it true that a 47 number of cities operate their own distribution systems? 48 MR. BOWMAN: That's right.

MR. BROWNE, Q.C.: How does that work, can you expandupon that a little? Like the City of Toronto, for instance?

MR. BOWMAN: Well, the City of Toronto is now a 51 distribution company not unlike Newfoundland Power, so 52 they have their own distribution facilities, they purchase 53 power at wholesale, and they're also, as I understand it 54 they're ... so they're a distribution company, like a wires 55 company owner, and in addition, I think they have a supply 56 company, so they are actually competing for various 57 customers on the supply side of the business, as well. 58 59 Supply being arranging of fuel supplies and metering and 60 billing.

MR. BROWNE, Q.C.: As a curiosity, how would a city be
able to ... like the City of Toronto, be able to get into that
business? It seems like it would take a lot of money
initially?

MR. BOWMAN: Yeah. Well, they've been doing this
since the beginning of time, so they were already in the
business, but there's mergers and acquisitions going on.
Yes, you would have to ... if you were going to merge you
would have to purchase those ... sorry. If you were going
to acquire you would have to purchase those facilities of
the other distribution company.

MR. BROWNE, Q.C.: And do these companies actuallymake money for the cities?

MR. BOWMAN: Well, the intent is that they make a
return. Like, on the distribution side they're on a
performance based regulatory mechanism, and the hope is
that they will make money, and they have an opportunity
to make a higher rate of return if they perform better than
the indicators in the performance based formula, so they
make money for their owners, whoever that might be.

MR. BROWNE, Q.C.: So the City of Toronto, that could be
helping out with the city's finances if they were indeed
making money?

MR. BOWMAN: It could be, could become that way. If
they own it and they are making revenues they could apply
that to the City revenues. I'm not sure how they're doing
the accounting, but that's certainly one possible scenario.

MR. BROWNE, Q.C.: And is that the way it developed in
Ontario, the cities and towns ran the distribution systems
or is that something that came in recent years?

MR. BOWMAN: Oh, no, that's been ... that goes back a
long ways. I really don't know what the overall intent was
at the time. I think it was to give the local municipalities a
certain level of control over the electricity sector in their
areas.

MR. BROWNE, Q.C.: You used the concept real time
pricing. Can you give us some indication of exactly what
that means?

MR. BOWMAN: Okay, but real time pricing, the intent, 4 instead of setting rates ... like in Newfoundland, Hydro's 5 case, they set rates that are in place now back in 1992, I 6 believe, so under real time pricing you shorten that 7 timeframe when the rates are applicable. In the real time 8 pricing rate designs we had in Ontario we were setting the 9 rates on a day ahead basis and they were based on the 10 production costs of our marginal unit, so we recovered the 11 fixed cost in a fixed cost of the system in a component that 12 varied by season, it didn't vary by hour. It varied by time 13 14 of day and it varied by season, but the energy component would vary to reflect the forecast production costs on a 15 day ahead basis, so in that sense it was a purely marginal 16 energy cost component, so real time is a bit of a misnomer 17 in the sense that they're forecast a day ahead, but it's closer 18 19 to real time, certainly, than setting rates on a year or two year ahead basis. 20

MR. BROWNE, Q.C.: In reference to the interruptible rate that you made reference to for Newfoundland Power and they've made available to them, how exactly would that work to go right down to the consumer level?

25 (12:15 p.m.)

MR. BOWMAN: The intent, as I understand it, and I 26 understand this was a negotiated rate, but the information 27 filed here, the intent was to give the interruptible customer 28 a credit on the basis of its value and that's a marginal value, 29 marginal cost value to the system. The intent there was to 30 reflect what they're avoiding in the future as a result of 31 having this interruptible contract, and in this case, 32 Newfoundland Hydro indicates that it's a peaking option, 33 a combustion turbine, so they drive the cost of that 34 combustion turbine and tried to put it on a consistent basis 35 with the characteristics of an interruptible load, okay, so 36 the value that comes out of that is the fact that they're able 37 to avoid constructing this combustion turbine in the future 38 because that interruptible contract is there, so the theory 39 behind it is there's benefits to all consumers on the system 40 and there's a benefit to the interruptible customer because 41 he gets a discount on his electricity charges. 42

MR. BROWNE, Q.C.: So from a practical perspective, for
the ultimate consumer, the end user, me, say, for instance,
how would it ... how would I get the benefit?

MR. BOWMAN: Your benefit arises because
Newfoundland Hydro will be able to construct fewer new
facilities in the future, at least it's delayed in the future, so
that benefit of not introducing that capital cost into their
rate base is passed on to consumers. Rates, generally, will
be lower as a result of interruptible contracts.

MR. BROWNE, Q.C.: Ms. Henley Andrews asked you in reference to the RSP and the elimination of it and your evidence that it be done gradually. How do you see it ... no one has asked you this. How do you see it done gradually, can you tell us the way it would work, from your perspective?

MR. BOWMAN: Well, I would freeze the current account
balance in the RSP, and you might look at different
accounting mechanisms for recovering it, for example,
through a surcharge on electricity rates in the future, but
you would spread that out over a period of time so as to
minimize the impact on consumer rates.

64 MR. BROWNE, Q.C.: And over what period are you ... are 65 you prepared to say that or can you give us ...

MR. BOWMAN: Well, it depends on the amount that's in
the account and where rates are going, so you want to
smooth it out, and I know Hydro is coming back in 2003 for
another rate case, so it would depend on what they're
asking for, at that time.

MR. BROWNE, Q.C.: But you would freeze it the way it isnow and sort of start over, is that what you're saying?

MR. BOWMAN: Well, I would freeze the account. I don't
think you want to continue to add to that account,
continue to put it in arrears.

MR. BROWNE, Q.C.: Philosophically you disagree with
fuel adjustment charges and RSPs, and I know because
we've had this discussion, but you're also for incentive
based programs that would go along with such an
elimination, is that accurate, or can you expand upon that?

81 MR. BOWMAN: Yeah, I'm not ... I'm opposed to fuel adjustment clauses where the utility is just allowed to pass 82 through whatever the costs are, because there's no 83 incentive for them manage those costs. I would ... I'm not 84 opposed to a fuel adjustment clause that includes the 85 incentive mechanisms that I talked about in my opening 86 remarks. In other words, it puts some incentive on the 87 utility, and I think Mr. Brockman elaborated on the 88 mechanism they had in Florida. It puts some incentive on 89 the utility to do a good job on maintaining its units to 90 maintain a good conversion efficiency factor, and I believe 91 he talked about an index. If you can negotiate contracts 92 you come in under this index, then you can keep that 93 money, and of course, if you do a worse job then your 94 shareholders end up paying for it. In either case though 95 the customer sees the index, so it's shielded from those 96 risks, those upside risks. 97

MR. BROWNE, Q.C.: So it would be different than now
where Hydro has the 50 million and now they want to go to
the 100 million, sort of blank cheque type of thing?

- 1 MR. BOWMAN: That's right, there wouldn't be any of that
- $2\qquad \text{any more under my } \dots \text{ my recommendation is that you}$
- 3 would discontinue that.
- 4 MR. BROWNE, Q.C.: Okay. Thank you, very much.
- 5 MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
- 6 Browne. Thank you, Mr. Bowman. Commissioner Powell,
- 7 would you begin your questions, please?
- 8 COMMISSIONER POWELL: Thank you. Good day, sir.
- 9 MR. BOWMAN: Good day.

COMMISSIONER POWELL: I just have three short 10 questions. One, maybe I misinterpreted what you said 11 yesterday when you were talking about fuel and fuel prices 12 and that. I thought I understood that one of the ways that 13 we could get a better bang for our fuel buck is if Hydro had 14 some sort of incentive that encouraged the purchasing of 15 fuel if there's any savings to be shared amongst ... some of 16 the benefit to be shared amongst those .. the purchasing of 17 fuel, if there's any savings that are to be shared amongst ... 18

- or some of the benefits be shared amongst those within theorganization, were able to keep a better rate?
- 21 MR. BOWMAN: That's true.
- 22 COMMISSIONER POWELL: Okay. My question then was
- one of the things that have been put into evidence over the
  last few weeks was Hydro has an executive incentive plan,
- 25 it's a pilot project. Are you familiar with that?
- MR. BOWMAN: I remember reading about it in the transcripts. I'm certainly not ...
- 28 COMMISSIONER POWELL: Would that type of plan29 cover that type of an issue?

MR. BOWMAN: You could certainly ... my understanding 30 of most management programs is that you try to tie the 31 incentives to the corporate goals, and if there's a corporate 32 goal to reduce fuel costs because of this incentive 33 mechanism then you could also tie that management 34 program, their incentives, to the same thing. Now, you 35 36 would want to only apply that to the managers who actually have some control over that aspect of the 37 operations, but, yes, I think you could tie the two together. 38

COMMISSIONER POWELL: So the concept of their
incentive plan, you think basically is a good idea? You
may not specifically, this one, address that issue, but the
concept of an executive plan is a ...

- 43 MR. BOWMAN: I think that's a good plan.
- 44 COMMISSIONER POWELL: Yeah, okay.
- 45 MR. BOWMAN: I think that would be a good way to get
- everyone in the company working towards the same goals.

47 COMMISSIONER POWELL: Good, okay. On page 6 of48 your pre-filed testimony?

49 MR. BOWMAN: Is that page 6?

COMMISSIONER POWELL: Page 6, yes, line 18. You say
"I recommend that the Board encourage the government to
complete its energy policy review." The word there
"encourage" what's your definition of encourage?

MR. BOWMAN: I think you may want to ... I don't know
how things work between the Board here and the
government, but I think you might want to send a letter to
the government saying that completion of its energy policy
review would be a good idea and would be a good thing for
consumers in this province.

COMMISSIONER POWELL: And then you go on to say,
"Or alternatively, conduct its own hearing into the
structure and regulation of the Newfoundland Power
sector." Would you think that would benefit the
government's initiative and energy policy review or would
that hinder?

MR. BOWMAN: Well, I'm not sure where the government 66 stands on its energy policy review. Like, I put that part in 67 there in the event that the energy policy review has been 68 stopped or left incomplete. I don't know where it stands, so 69 I was not too sure what to recommend in that regard. I 70 think the energy policy review is a good idea for 71 Newfoundland and Labrador, and if the government is 72 going to complete that study then that's positive. If they 73 don't, I think it ... like, I think the Board, it would be good if 74 the Board told them or passed along to them that it's a 75 good idea to finish this energy policy review, you support 76 77 the energy policy review.

COMMISSIONER POWELL: Okay. My final question is 78 page 22 of your pre-filed evidence, line 20 under 79 government involvement in the power sector, and it talks 80 about the separating government from the regulatory 81 process, and it specifically relates to the ... on page 23 it 82 talks about the rural subsidy and talks about it being a tax. 83 84 I'm wondering, did you see any documentation that you can provide to guide the panel on how we could refuse the 85 passing on of this tax to the ... 86

MR. BOWMAN: I have no idea how you can refuse it. I
think pretty much every rate design expert that's appeared
before this Board, probably in the last decade, has referred
to this as a tax, but, you know, I don't know. I certainly am
not familiar with the legislation and what you can do to get
out of it. The energy policy review might be a good way to
address that.

94 COMMISSIONER POWELL: Would you recommend then
95 that we order Hydro not to pass it on to the customers as
96 a cost but actually as a tax and have it shown on their bills

1 as such?

- 2 MR. BOWMAN: I'm not ... well, I think it would be ... it's
- 3 certainly good, I think, to let the customers know that there
- 4 is this subsidy involved. I think it's good to let the ones
- 5 who are paying it know about it and I think it's good to let
- $\mathbf{6}$   $% = \mathbf{1}$  the ones who are receiving it know about it, so I think it's
- 7 a good thing to show on the bills, and I'm not sure if it's
- 8 being shown there now or not, but it's good to inform
- 9 consumers that this is going on. I think the more you can10 make these things transparent, the better I feel.
- 10 make these things transparent, the better I feel.
- COMMISSIONER POWELL: Thank you. That's all, Mr.
   Chair.
- MR. NOSEWORTHY, CHAIRMAN: Thank you,Commissioner Powell. Commissioner Saunders, please?
- COMMISSIONER SAUNDERS: I have no questions, Mr.Chair.
- MR. NOSEWORTHY, CHAIRMAN: Thank you.Commissioner Whalen?
- 19 COMMISSIONER WHALEN: No, Mr. Chair. I had a 20 number of questions on the post RSP period and sort of 21 how that would transpire, but Ms. Henley Andrews and 22 also the Consumer Advocate on redirect, handled those 23 quite nicely, so there's nothing outstanding for me. Thank 24 you.
- 25 (12:30 p.m.)

MR. NOSEWORTHY, CHAIRMAN: Thank you, 26 Commissioner Whalen. I know it's 12:30. I just have a 27 couple of questions, I guess, if you can indulge me for a 28 moment before lunch. Thank you very much, for your 29 evidence and testimony, Mr. Bowman. One of the 30 questions that I have, actually, Mr. Kennedy, I believe, got 31 most of it in and I believe the Consumer Advocate 32 addressed it somewhat on redirect as well, and it relates to 33 the relationship, I guess, between the study that you're 34 advocating here on rate design and the RSP, and I 35 understood from your discussion with Mr. Kennedy, 36 37 basically, that I think he was suggesting that if indeed the panel were to consider the recommendation that you have 38 of looking at a consultant do a rate design, that indeed the 39 RSP would be a very important part of that, and indeed it 40 would not (inaudible) be better rather than eliminate it at 41 this point in time to tie it to that really and have it dealt with 42 in that vein. I think your response was basically that you're 43 not in favour of the RSP and it should be eliminated now 44 and you didn't see any reason for that. I suppose my 45 question just expands that a little bit, because I heard you 46 say after that ... and I did think you concurred with the RSP 47 as being an important part, but there are issues here in 48 relation to, on page 16, for example, of your opening 49 statement you said, "But I don't think the Board had 50

- 51 enough information before it to allow design of such
- 52 incentive mechanisms." And that was really, you were
- talking about there in relation to the RSP?

54 MR. BOWMAN: Yeah, in relation to a fuel adjustment 55 component.

- 56 MR. NOSEWORTHY, CHAIRMAN: Right.
- 57 MR. BOWMAN: Yes.

MR. NOSEWORTHY, CHAIRMAN: Which would, 58 presumably the RSP would be eliminated on that basis. 59 You also, I think, talked to ... you just commented to Mr. 60 Browne, I believe, on the fact of the matter that in transition 61 you're proposing to freeze current account balance. The 62 possibility of surcharge was an option in relation to the 63 RSP, to look at where rates would be going in future, and I 64 think you said it's really dependent on the amount in the 65 account, so there are certain issues there as well. And I 66 believe you had referred as well to the 2003 Hydro 67 application or proposal to come back with another 68 application in 2003, so I guess my question surrounds the 69 fact that it just seems to me that, again, by way of process 70 here, that if the Board was going to address the RSP in a 71 deliberate way, that in essence, assuming that the study, 72 consultant's study on rate design were to be carried out, 73 that indeed it might be appropriate to look at the RSP as it 74 75 relates to that as well. Because I think you could address three issues, one being to have a deliberate and conscious 76 look at the RSP, what value it has had, what value it may 77 have in future. Indeed the ultimate decision there may be 78 to eliminate it based on the recommendation that you've 79 come up with now. You could, as well, look at the 80 transition issues in terms of the balance of the account. I 81 think, by way of what you had indicated in Nova Scotia, 82 the process that you had there was that the study was 83 done, indeed it was brought back in relation to the next 84 application? 85

#### 86 MR. BOWMAN: That's correct.

MR. NOSEWORTHY, CHAIRMAN: Which would be 87 88 consistent with what Hydro, at least, is proposing, at this point in time, and you could also address the incentives 89 aspect of it, which, as you point out on page 16, I guess, 90 there's really not enough information before us now to 91 allow us to deal with that, so it just seems to me though by 92 way of process, that there are ... there's some merit, if you 93 will, along the lines that Mr. Kennedy had pointed out to 94 looking at it in that way. Would you see that and would 95 96 you expect that?

MR. BOWMAN: I see what you're saying, but I reach a
different conclusion. I think there is merit in eliminating the
RSP now, setting the revenue requirement on the basis of
Hydro's forecast costs for the test year, and then having

the rate design expert look at the rate designs and file its 1 report and then at that time he, or the Board itself, can look 2 at performance based regulatory mechanisms. Like I said 3 4 two days ago now, I know it was in your annual report that you're going to look at performance based regulatory 5 mechanisms. If the Board conducted its report at the same 6 time, made those two reports available to Hydro, then 7 Hydro could submit its next rate application on the basis of 8 that information. As I say, I don't see any reason for 9 continuing the RSP. The chances of a rate design expert 10 recommending that you implement an RSP seems very 11 remote to me. Like I say, there's no regulatory precedent 12 for doing such a thing. 13

MR. NOSEWORTHY, CHAIRMAN: There has not been 14 much difference between the process that I describe and 15 what you describe, except for what I would see as the 16 elimination and the chopping virtually of the RSP at this 17 point in time, and I guess what I'd be proposing is that that 18 19 would be done, at least in a deliberate, conscious and considered way in relation to the study that you're 20 advocating? 21

- MR. BOWMAN: Well, I guess ... no, I think the difference is that I don't see ...
- 24 MR. NOSEWORTHY, CHAIRMAN: No, I understand.
- MR. BOWMAN: Yeah, I think it's been discussed at lengthin this hearing.

MR. NOSEWORTHY, CHAIRMAN: I understand yourposition. Yeah, yeah. No, no, I understand you.

29 MR. BOWMAN: I don't think an independent ...

MR. NOSEWORTHY, CHAIRMAN: I understand your 30 position. The other question that I have really relates to, I 31 think, page 20 of your pre-filed. I would say in the 11 32 weeks that we've been at this, if there is one conclusion 33 that we have all reached at this point in time, and that 34 there's unanimous consensus on among everybody in the 35 room, is that the current form of regulation is slow, time 36 consuming, cumbersome and expensive. I have no doubt 37 in my mind that we would all, perhaps, nod in agreement 38 with that and we should be looking at other ways of, 39 perhaps, improving, if you will, some of those items. 40 There's certainly no question about that. 41

42 MR. BOWMAN: That is one statement I haven't been 43 challenged on.

- MR. NOSEWORTHY, CHAIRMAN: No, no. I think it, as
  I say, unanimous agreement on that. Further on though
  you do say in line 17, 18 and 19 "Hydro and Newfoundland
  Power should have control and responsibility for their
  costs with their overall performance being subjected to
- 49 public scrutiny." I guess what you're talking about there,

to some degree, is the performance based regulation. I 50 asked the sort of the flip side of this question, I think, to 51 Mr. Brockman the other day in relation to what does he see 52 53 as the incentives, and you've commented along the same vein, with a view to the fact that you go on to say, as well, 54 "The customers do not care how much Hydro spends on 55 maintenance," for example. That indeed any familiarization 56 that I have with performance based, not in the utility, but 57 58 really would be set against standards, so I mean, there are standards in relation to maintenance, so ultimately there is 59 a measure there, and certainly while customers may not be 60 concerned with it explicitly they are concerned with it 61 62 implicitly when they get their bills, and certainly it would be a responsibility of the Board to monitor that, and 63 presumably would be one of the overall performance 64 And I would think that some of those 65 variables. performance variables are there right now, quite frankly, in 66 terms of return on equity. I would think they're there in 67 review of costs, for example, that we would undertake now, 68 69 so I'm not, for the life of me, don't think that the ... I would agree that customers couldn't care less probably about 70 71 what we're doing within the four walls of this room as long as they feel relatively confident that we're doing our job 72 and that what's important to them is their bills, ultimately, 73 so I think there are some considerations that we're going 74 through now in relation to performance. But I'm wondering, 75 76 I guess, what do you see, and again, it's probably the flip side of the incentive question, what do you see as the 77 measures, if you will, of a utility in relation to the 78 performance based regulation as being the overall measures 79 that are indeed distinct and different from some of the 80 things that we would be undertaking discussions on now 81 within this room? There's costs, there's return on equity, I 82 mean, these are the business measures basically that are 83 there, regardless of what the business is. Could you 84 comment on that briefly for me? 85

MR. BOWMAN: Well, I prefer ... when I'm talking about
performance based regulation, you can have targeted
incentives, like related to operating and maintenance cost.
I prefer broad based incentives, in other words ...

90 MR. NOSEWORTHY, CHAIRMAN: For example?

MR. BOWMAN: For example, I would prefer just a 91 regulatory mechanism that gives them ... sets the initial 92 revenue requirement and then adjusts it according to some 93 form of inflation factor, less some form of productivity 94 95 factor. By doing that you're allowing the utility to expend the capital in those areas that gives it the most bang for its 96 buck. If you start having specific targets then they might 97 be concentrating on O & M costs when capital costs would 98 be more effective, for example, so I like an overriding type 99 of performance measure and that's based on the revenues. 100 The other two things that I feel customers are concerned 101

about is just basic customer service in terms of when I have 1 a billing complaint, when I call up the customer service line 2 is there someone there to answer the phone, and the other 3 4 thing is reliability, and there's a number of different measures for reliability but I would ... something in ... I think 5 you heard a lot of testimony concerning (inaudible) earlier, 6 system average interruption frequency and duration. 7 Those are industry standards. I don't think they're the 8 best. Like, I think of outages. From my perspective, I had 9 a 36 hour outage, I think it was last summer. When that 10 happened, number one, I'm mad that it took that long for 11 them to respond. I can't, for the life of me, understand why 12 it would take that long when there hasn't been an ice storm 13 or anything. I reported immediately, and the other thing, 14 when I called customer service to find out what was going 15 on it was like I was being a real pain calling her and asking 16 her when I might get my service back, so those are the 17 types of things, I'd rather tie reliability to those types of 18 things, customer service, because that's what the customer 19 sees. 20

MR. NOSEWORTHY, CHAIRMAN: But, would you agree, 21 I mean, it's not necessarily a country mile from the fact that 22 we are here establishing revenue requirement on some 23 24 basis, we're looking at maintenance costs, we're ... and I'm not suggesting that it shouldn't be, perhaps, done in a 25 different way, a more expedient way, but those are indeed 26 the measures that we're talking about here, quite frankly, 27 and it may be a matter of setting some automatic 28 adjustment and some performance incentives based on 29 that, but the performance indicators really are not 30 substantially different, are they? 31

- 32 MR. BOWMAN: Within this room or ... sorry, I ...
- 33 MR. NOSEWORTHY, CHAIRMAN: Well, you know ...
- 34 MR. BOWMAN: Like that the customers see?

MR. NOSEWORTHY, CHAIRMAN: Yeah. Well, I guess, 35 you know, under a performance based regulation, and 36 that's what I'm ... that's where I'm coming from. I'm asking 37 you, I guess, what some of the performance indicators 38 would be which would be different from setting the revenue 39 requirement which you just mentioned is a performance 40 indicator, maintenance costs, setting standards in relation 41 to that, return on equity and setting incentives in relation 42 to that. I'm trying to understand, I guess, what the 43 performance measures would be which would be different 44 from these? 45

46 MR. BOWMAN: The difference is, like, say, once every
47 five years you look at things in some detail ...

MR. NOSEWORTHY, CHAIRMAN: I understand, in
relation to the timing, I understand that quite well. I'm
wondering if the indicators are different and what they

51 would be?

MR. BOWMAN: Well, the indicators between review 52 periods are that you don't go back and look at every capital 53 expenditure that's been looked at in this hearing, so in other 54 words, you're allowing the utility to expend capital in the 55 areas that are most benefit to it. You've got a performance 56 mechanism in there that instead of reviewing each 57 individual cost component you're giving them more of a 58 free hand so they can employ capital and operating and 59 60 maintenance costs in a more effective manner that way.

61 MR. NOSEWORTHY, CHAIRMAN: Right.

MR. BOWMAN: So I think the difference is that you're ...
in between reviews you're still putting the incentive
mechanisms on them.

65 MR. NOSEWORTHY, CHAIRMAN: Sure.

66 MR. BOWMAN: And there's incentive there for them to 67 employ capital and in a more efficient manner.

68 MR. NOSEWORTHY, CHAIRMAN: So the difference is in 69 the automatic ... the automation of the process, I guess, in 70 relation to the fact that you don't review it as often or 71 there's an automatic adjustment that's normally applied 72 there?

MR. BOWMAN: That's certainly one of the major benefitsof it, and then there's the freedom a utility has within ...

MR. NOSEWORTHY, CHAIRMAN: And then incentives
in relation to the performance measures, but I'm not
detecting any difference in the performance measures per
se.

MR. BOWMAN: Well, except that the utility is allowed tokeep higher rates of return.

81 MR. NOSEWORTHY, CHAIRMAN: Yeah, understood.

82 MR. BOWMAN: Or absorbs lower rates of return.

MR. NOSEWORTHY, CHAIRMAN: Understood, but that's
incentives in relation to the performance indicators
themselves, isn't it?

86 MR. BOWMAN: Yes.

MR. NOSEWORTHY, CHAIRMAN: Which would be
return on equity, which would be maintenance costs, which
would be the RSP fuel adjustment if indeed that were in
place. Okay.

91 MR. BOWMAN: The utility is managing those rather than 92 the regulatory board.

93 (*12:45 p.m.*)

MR. NOSEWORTHY, CHAIRMAN: Understood, yeah.
Okay. Thank you, very much. I appreciate that. It's

- 1 quarter to now. We'll break for lunch. Does anybody have
- 2 any objections? I can reconvene at quarter after if you
- 3 wish. If there's any ... there's no preference to that? We'll
- 4 do it ... I would prefer to begin at 2:00 so we'll have most of
- 5 the afternoon. Anybody ...
- 6 MS. BUTLER, Q.C.: I think we're generally just trying to 7 determine if there's questions arising from the Board's 8 questions, Mr. Chairman.
- 9 MR. NOSEWORTHY, CHAIRMAN: Oh, I see. Well, we 10 can go on and quickly deal with that, I guess, if it's of no ...
- 11 MS. GREENE, Q.C.: We have no questions arising.
- 12 MR. NOSEWORTHY, CHAIRMAN: Thank you.
- 13 MS. BUTLER, Q.C.: And we don't either, Mr. Chair.
- 14 MR. NOSEWORTHY, CHAIRMAN: Okay.
- 15 MS. HENLEY ANDREWS: And we don't either, Mr. Chair.
- 16 MR. BROWNE, Q.C.: And we have no questions.
- 17 MR. NOSEWORTHY, CHAIRMAN: Mr. Kennedy?
- 18 MR. KENNEDY: No questions, Chair.
- 19 MR. NOSEWORTHY, CHAIRMAN: Any redirect?
- 20 MR. BROWNE, Q.C.: No.
- 21 MR. NOSEWORTHY, CHAIRMAN: Okay. Thank you,
- very much, Mr. Bowman. We'll return this afternoon at 2:00with Dr. Wilson. Thank you.
- 24

(break)

- 25 (2:00 p.m.)
- MR. NOSEWORTHY, CHAIRMAN: Good afternoon,
  before we get started, Mr. Kennedy, are there any
  preliminary matters to be dealt with?
- MR. KENNEDY: I don't believe so, Chair. I don't think there was any undertakings requested in the last day, so I wouldn't imagine there's any to be reported on. I can advise that it's the intention of counsel to meet on the break this afternoon in an effort to try to determine a schedule for next week, and hopefully I'd be in a position to report on that right after the break.
- 36 MR. NOSEWORTHY, CHAIRMAN: Good afternoon, Dr.37 Wilson.
- 38 DR. WILSON: Good afternoon.
- 39 MR. NOSEWORTHY, CHAIRMAN: Good to see you
- 40 again. Could you take the Bible please in your right hand?
- 41 Do you swear on this Bible that the evidence to be given
- by you shall be the truth, the whole truth, and nothing but
- 43 the truth, so help you God?

- 44 DR. WILSON: Yes, I do.
- 45 MR. NOSEWORTHY, CHAIRMAN: Thank you very much,
- 46 you can be seated. Are you ready to begin, Dr. Wilson, are
- 47 you prepared? Do you have all the information you need48 there?
- 49 DR. WILSON: Yeah, I do, thank you.
- 50 MR. NOSEWORTHY, CHAIRMAN: Okay, could I ask you51 to begin Mr. Kennedy please?
- 52 MR. KENNEDY: Dr. Wilson, I should ask, do you have an 53 opening statement that you're providing here this 54 afternoon?
- 55 DR. WILSON: I have pre-filed evidence and it's put in the 56 record, as I understand, including a summary that's up 57 front, and before the report itself.
- 58 MR. KENNEDY: And that's the summary report and then 59 the actual report itself, they're both dated July 31, of 2001?
- 60 DR. WILSON: They are.
- 61 MR. KENNEDY: And is my understanding correct that 62 you'd like to make a clarification concerning one of the 63 items in your report itself?
- DR. WILSON: I would. I'd like to withdraw one of the 64 criticisms that I made of Hydro's proposed rates, and that's 65 specifically with respect to the non-firm industrial rate. In 66 the report that is covered at page 36. I think everything 67 that's said on page 36 and 37 is sort of accurate, but Ms. 68 Henley Andrews asked me a question on discovery and 69 after I worked through it, I saw the error of my ways and I 70 really don't think the conclusion is right, so let me see if I 71 can find that data request. It was IC-274, and if the 72 arithmetic that I did in IC-274 is correct, I think it indicates 73 that the criticism that I made of the non-firm industrial rate 74 proposal is inappropriate, and given what I've seen while 75 I've been here, and further looking at the numbers, I think 76 that that rate proposal is a good one. 77
- 78 MR. KENNEDY: Dr. Wilson, subject to that change or
  79 caveat, if you will, of your originally filed report, do you
  80 otherwise adopt your report in its entirety?
- 81 DR. WILSON: Yes, I do.
- MR. KENNEDY: That's all the questions I have on direct,Chair. The witness is available for cross.
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.
  Kennedy. I'll ask Mr. Young to begin your crossexamination please?
- MR. YOUNG: Thank you, Chair. Good afternoon, Dr.Wilson.
- 89 DR. WILSON: Good afternoon.

mmary

MR. YOUNG: The last qualification you made just a 1 moment ago is going to change a couple of my questions 2 and we won't be exploring that to any great, the 3 4 interruptible rate for industrial customers, and I'll just touch upon it a little later. The first thing, I guess, we should talk 5 about in that case is, it arises in Mr. Brickhill's evidence, 6 I want to refer you to his. This is his **first supplementary** 7 evidence at pages 12 and 13, and the topic of discussion is 8

9 NCP versus CP distribution demand allocation.

10 DR. WILSON: Page 12.

MR. YOUNG: Page 12, yes, actually it's probably closer to 11 the bottom of page 12. Yeah, this is the question that's in 12 his testimony and his response follows at page 13. I think, 13 I don't know if we have to read that in. A quick summary of 14 that, I think, and perhaps you can agree with me on this or 15 vary my answer, or my question if you think it's 16 appropriate, but my characterization of the question and 17 the answer here is that he's taken exception to your point 18 that distribution demand allocation should be done 19 according to non-coincident peak, and I think it's making 20 the observation, which I'll ask you to comment on, that 21 Hydro's rural customer areas, the area, the territories we 22 serve and the loads in those areas, are different than what 23 you might normally expect to find in an area that a 24 distribution utility is operating in. I'm just wondering, did 25 you take into account when you gave your evidence the 26 nature of the Hydro rural service territories, or is this a more 27 general comment you're making? 28

DR. WILSON: It's a general comment. Generally, to the 29 extent that distribution demand costs are allocated on the 30 basis of a peak measure, it's NCP for the reasons that I 31 discussed in my pre-filed testimony, and also I had made 32 the suggestion that consideration should be given to 33 allocating a portion of distribution costs on the basis of 34 energy rather than either NCP or CP. I would say that my 35 observation and Mr. Bowman's on this matter is accurate. 36 There may be a question of degree, and that is using CP as 37 opposed to NCP, which is less important to me than the 38 demand energy split. It may be less of a problem because 39 of the nature of the service area as described by Mr. 40 Brickhill which I would accept as accurate. 41

42 MR. YOUNG: I see. Okay, so the, I think the comments 43 you've made and Mr. Bowman have made is that the 44 predominant allocator (inaudible) in the industry is 45 noncoincident peak for this, and I'm just wanting to 46 ascertain on this point that that was your general point 47 here, that that's generally correct.

DR. WILSON: It's generally viewed that local distribution
facilities are built to serve the needs of the community
where they exist rather than the coincident peak of the
system as a whole, which is probably more generally

52 thought of as being appropriate for generating plant 53 allocation.

MR. YOUNG: I suppose this could be the exception that
proves the rule, to some extent, could it? I mean if indeed
the ...

MR. NOSEWORTHY, CHAIRMAN: Excuse me, Mr.
Young, I wonder could you pull the mic a little bit closer.
We're having difficulty hearing up here.

60 MR. YOUNG: Sorry about that. I'll repeat my question, Dr. Wilson. I can hear myself better now, so ... I suppose then, 61 Dr. Wilson, this might be the exception that proves the rule, 62 is that a possibility here, that there may be rural areas 63 64 where the loads are different than you'd expect in other kinds of areas, and that Hydro rural areas might be a case 65 where NCP is perhaps not the ... the only appropriate way 66 to do it, and that CP may be correct, is that your testimony? 67

DR. WILSON: No, I think that NCP continues to make 68 69 sense, but the extent to which using a CP versus an NCP would produce a difference may be a lot less here, it may be 70 minor here compared to be what it would be somewhere 71 else, especially ... his point is that, as I understand it, the 72 NCP methodology would be particularly appropriate where 73 you have distinct differences between areas that are served 74 by individual substations, let's say, and one local area that 75 76 is predominantly commercial and another local area is predominantly residential, and therefore different demand 77 patterns in those areas, and I think that he would agree that 78 79 NCP would be most appropriate there. I think you may see argument that this is not really what you see in the 80 Newfoundland Hydro system. I don't think he really argues 81 that NCP is wrong. I think that he says that the choice of 82 NCP versus CP is not a big deal given the homogenous 83 84 nature of the Hydro area as he sees it.

MR. YOUNG: And I think that's also your comment on it
also perhaps, that there's probably not a big difference, is
that correct? I don't mean to put words in your mouth, but
at least it's something to that effect.

BR. WILSON: Based upon what he has said, I would, my
inclination would be to believe that there is less difference
here than there would be in Ontario or British Columbia, or
the US for example, and many other systems.

MR. YOUNG: Uh hum, I'd like to move on to another issue. 93 You, in a sense, brought it up when you mentioned that 94 you take a larger issue with the allocation of the ... or the 95 fact that there's no allocation of distribution to energy, and 96 I'd like to ask you about that as it relates to transmission 97 costs. I put it to you, you're a little bit on your own on this 98 one, at least in this hearing, and as I understand the view 99 held by Mr. Brickhill and others, when they look at 100 causality as it relates to transmission allocation, they try to 101

- put themselves in the place of the engineer as to what the 1 engineer is thinking when he's designing the system, and 2 what considerations go into the sizing of the conductor, 3 4 and the sizing of the structures, the poles, the transformers that carry the power, and as I understand it they say that if 5 an engineer makes a decision based on cost causality, 6 they'll do it to meet the peak as opposed to some other 7 consideration. Is that your ... have I correctly laid out the 8
- 9 way that Mr. Brickhill and others deal with this. I know this
- 10 is an issue you're more than passingly familiar with.

DR. WILSON: Yeah, it's an interesting issue, and there's a 11 couple of questions there. I agree that the exercise of cost 12 allocation tends to be more engineering oriented, if you 13 14 will, as a general proposition, whereas pricing and rate making tends to be more of an economic issue. I think 15 economists probably have more of worth to say about 16 pricing than they do about cost allocation, so to a large 17 extent, a lot of the cost allocation kinds of things that have 18 19 been discussed here, and indeed that I have discussed, are engineering. But from an engineering perspective, I don't 20 think that there is a fundamental conceptual difference 21 between what the experts have been telling the Board. I 22 think that there is a conceptual agreement that if the facility 23 24 is designed for energy purposes as well as demand purposes, that there ought to be some splitting of the 25 revenue responsibility between those two cost categories, 26 and there's, and in the application, I think we all agree that 27 the transmission line, the radial line that runs from the 28 generating plant to the grid, the Cat Arm line, if you will, is 29 appropriately dealt with on the same basis as the 30 generation itself, some of it being attributed to energy and 31 some of it being attributed to demand. I would go further 32 than that and say that the same logic applies to the grid 33 itself, and I think that's where, that's where we sort of part 34 company, and others, including Mr. Brickhill, have argued 35 that, no, the grid itself, unlike the transmission radial, is 36 built for peak demand. It's not built for energy purposes. 37 I think that's wrong. I think that if all you were interested 38 in was meeting a 1-CP, or for that matter, a 2-CP or a 4-CP, 39 you would never build the type of transmission grid that 40 we have here, nor for that matter the distribution lines and 41 poles. You would have local generation that's directly 42 connected to load, because that would be the cheapest 43 way of meeting the coincident peak demand requirement. 44 The only reason we spend tens of millions, hundreds of 45 millions of dollars building expensive capital intensive 46 47 transmission grids and distribution grids is that it's cheaper to deliver energy over a long period of time that way than 48 to have local generation, small local generation connected 49 directly to load, which would be very expensive to run, but 50 much cheaper to install, so because we have ... I agree that 51 once the system is built, it's going to handle both peak and 52 off peak requirements, but the system, the decision to build 53

the system that way, to build that capital intensive 54 transmission grid, is one that's driven by the fact that it's 55 going to be needed thousands of hours per year and not 56 57 just 1-CP or 4-CP, and so I would carry the logic of Cat Arm further than Mr. Brickhill does and say it's not only the Cat 58 Arm radial that is built with energy in mind, the way that 59 the hydro dam is built with energy in mind. The capital 60 intensive transmission grid is built for much the same 61 reason, and would not be built unless we were talking 62 about being able to use it, thousands of hours, so as to 63 bring down the cost of delivering energy. 64

## 65 (2:15 p.m.)

66 MR. YOUNG: You've answered a number of my questions in one, and that's useful. I would suggest to you that on 67 the surface both views, and I think you perhaps already 68 agreed with me on this point, they're both logical. One 69 though is looking at the decision of the sizing of the line 70 and determinations as to what's the appropriate plant. The 71 72 other is looking at, well why do we need the line in the first place, why would we build the line, and that's an interesting 73 74 point of departure.

DR. WILSON: I agree with that, with your statement. I
think it's a very important one, that it's not that Brickhill's
argument is illogical and mine's logical. There's logic to
both of them.

- 79 MR. YOUNG: Yes, to both.
- 80 DR. WILSON: Sure there is.
- 81 MR. YOUNG: Different views of the same ...
- 82 DR. WILSON: And that's the nature of cost allocation, as 83 opposed to rate design.
- 84 MR. YOUNG: Yes.

DR. WILSON: When it comes to rate design there are 85 rights and there are wrongs, but when it comes to cost 86 allocation there's rationale, and I think somebody earlier 87 last week said that when it comes to cost allocation it's 88 appropriate or inappropriate, depending upon what you're 89 objective is, as opposed to correct or incorrect, and I think 90 that rates can be done straightforwardly and they can be 91 correct or they can be incorrect in relation to economic 92 Cost allocation is not that way and principles. 93 commissions, boards, have a lot of discretion in terms of 94 which particular rationale they want to follow. 95

MR. YOUNG: You were asked in an information request on
this issue, NLH-38, can we see that please ...

98 DR. WILSON: NLH-38?

MR. YOUNG: Yeah, it's on your screen there now. It's, I
suppose there's two kinds of logic. There's the engineer's
logic and there's someone's logic looking at it after the fact,

1 which is sort of an economist's logic, and then there's

- 2 precedent which is lawyer's logic, I suppose, if that's logical
- з at all.

4 DR. WILSON: Well you have to be careful of that too. I 5 mean if you start, if you start allocating costs here 6 according to rationales used in Southern California, that 7 may be very fine for your, you know, avocado growers in 8 the central part of the island, but it might not be so good 9 for the pulp and paper industry.

MR. YOUNG: We would have a very good irrigation rate,I'm sure.

12 DR. WILSON: Exactly.

MR. YOUNG: Just back to NLH-38 though, you were asked 13 if you would provide the names of any US or Canadian 14 utilities that allocate transmission costs based on energy 15 and your response was that you hadn't done a study at the 16 time. I'm just wondering, have you had any opportunity 17 since, or can you provide any further information on this at 18 all as to other jurisdictions where this may be used and 19 why it may be used, or why it may not be used, you know, 20 that you have been involved in, for example. 21

DR. WILSON: Yeah, I have not done a survey and I can't give you a comprehensive list.

24 MR. YOUNG: No.

DR. WILSON: Transmission, as the Board probably 25 knows, is to some extent allocated at two levels in the US. 26 Wholesale rates are dealt with by the Federal Energy 27 Regulatory Commission, and they essentially use what's 28 known as a 12-CP. They take the coincident peak and 29 twelve months so it's, you know, a little bit more energy-30 oriented than a 1-CP or a 4-CP. But that only applies to 31 wholesale transactions and for the most part transmission 32 is dealt with at the local level by state commissions and 33 there's a lot of variation from commission to commission. 34 They ... a couple that I have been involved in recently, 35 Montana, Connecticut, and New York to some extent, it 36 varies from utility to utility in some of these states too, 37 allocate at least a portion of their transmission costs based 38 on energy as has been pointed out, this Board does with 39 respect to radial lines. 40

41 MR. YOUNG: So you made a point there which I think is 42 interesting just from a point of looking at this 43 comparatively. If a utility was going to allocate, or a 44 regulator, I suppose, was going to allocate or have the 45 allocation of transmission done on a 12-CP, that has shades 46 of energy in it already. Is that the point you're making 47 there?

48 DR. WILSON: Yeah, somebody made that observation
49 before, the further you go away from a 1-CP, if you got to,

you know, 8,760, that would be an energy allocation.
Obviously 12 is not going very far in that direction, but to
some extent.

MR. YOUNG: Right, and in a related matter, although this
probably doesn't have a huge impact on anyone's costs
overall so it's probably not worth an awful lot of everyone's
time, gas turbine fuel costs. Your evidence, I understand,
is that the fuel cost relating to gas turbines should be
allocated to energy as opposed to demand.

DR. WILSON: Now there I don't really know of any other 59 place that I've seen fuel costs allocated on the basis of 60 61 demand. Now that's not to say that there aren't any, but generally fuel costs, whether it's, whether it's coal or 62 whether it's gas or oil, or what it is, it's allocated on the 63 basis of energy with one exception, and that is the 64 investment cost in the fuel itself. Oftentimes the coal pile 65 or the fuel, the investment cost of the fuel that's sitting in 66 the tank is thought of as a capital investment and would be 67 68 allocated the same way that the generating plant is, but for the most part, the expense of the fuel is allocated to energy 69 70 as a running cost as opposed to demand. But again, probably not a really big deal here because you don't use 71 a lot of gas. It will be a much bigger problem if you were 72 allocating the residual fuel oil, but obviously you're not. 73

MR. YOUNG: A very different issue, I would suggest to 74 you, because I mean the view of it that's been taken that's 75 76 inherent in the cost study Hydro has done, I think you'd acknowledge is that the only reason the gas turbines are 77 there is to provide instantaneous capacity and the use 78 pattern is not terribly high. There's not an awful lot of this 79 fuel burned or at least forecast to be burned, so that, I 80 suppose, and I'm putting the question to you, is one reason 81 you could justify classifying it to demand as opposed to 82 fuel. I mean it's really just to support a very short period of 83 time that it's going to be run, but you need it to run the 84 plant. 85

BR. WILSON: It's a rationalization. Again, it's not one ofthese things that is without logic.

MR. YOUNG: Moving on to the rural subsidy if I might. I'd
like to refer you to page 32 of your report, and you mention
there that Hydro has not made much progress, and then on
page 41, and I guess this is getting into the meat of it ...

92 DR. WILSON: 41?

MR. YOUNG: Yeah, 41, in summary of recommendations.
This is the last page of your report. You have a comment
there that, well I'll just show it to you and ask you to deal
with it. It says Hydro should continue to cover the rural
deficit based on equity considerations that the Board
deems appropriate. One equitable way to cover the rural
deficit without distorting price signals would be to fund it

- 1 through marginal cost rate design procedures. I'm having
- 2 a little bit of difficulty understanding exactly what's meant
- 3 here, and I wonder if you could elaborate on it a little bit.
- 4 Talking about the marginal cost application to this issue, I
- 5 wonder if you could expand on that a bit.

DR. WILSON: It would actually be quite easy to do on the 6 Hydro system. Hydro's system would be one of the most 7 straightforward, I think, that I've ever seen in terms of being 8 able to set up a marginal cost pricing arrangement that 9 achieved all of the kinds of efficiency objectives that 10 economists like and produce the revenues that are required 11 to cover things such as the rural subsidy. We've had 12 different people put in different numbers about the marginal 13 14 cost of Holyrood. I think one of the numbers that was talked about today or yesterday was 4.59 cents, but that 15 assumes a \$28.00 price of oil so with a lower price of oil it 16 would be a little bit lower than that. But if ... and this also 17 ties back to recommendations have been made in the past 18 19 by Mr. Brockman on behalf of Newfoundland Power, which I understand they don't really fully support in this 20 proceeding, they backed off it somewhat, but if you were to 21 establish a marginal cost rate design for Hydro to charge 22 the marginal running cost of Holyrood to energy, perhaps 23 24 build some seasonal variation into it so as to recognize the energy component of transmission costs and so on, and a 25 modest demand charge tied to the peaker method, let's say, 26 something that would produce, you know, \$40.00 or so per 27 kw per year. With those types of charges, you would be 28 coming out, you would come out with a revenue amount 29 that was very close to the revenue requirement plus the 30 rural subsidy for the island interconnected system. You 31 know, you could have Mr. Hamilton run the numbers for 32 you, but I think if you charged, you know 4 1/2 cents for 33 energy in the wintertime, and 4 cents for it in the 34 summertime, and you had a \$4.00 or \$5.00 demand charge 35 recognizing the marginal cost of generation capacity in the 36 wintertime, and maybe \$2.00 or \$3.00 demand charge in the 37 summertime, with whatever appropriate fiddling was 38 necessary in order to deal with other objectives that the 39 company and its customers and the Board may have, you 40 would come out with something on the order of \$280 to 41 \$290 million which would be sufficient to cover the revenue 42 requirements of Hydro and the rural subsidy as well. If you 43 didn't have quite enough well you could adjust that 44 demand charge or energy charge a little bit so as to do it, 45 and still have a price structure that rationally reflected what 46 the marginal cost of producing a kilowatt hour was, and 47 what the marginal cost of meeting incremental demand was, 48 and have the revenues that were necessary to meet all of 49 your revenue requirements. That's a lot easier approach to 50 rate design than going through all of the rationalizations 51 that we go through in cost allocations, and I realize that it 52 may cut down on certain flexibilities but it would make a lot 53

- 54 of sense to me to go at it that way.
- 55 (2:30 p.m)
- 56 MR. YOUNG: If I understood what you just said, you're
- 57 not suggesting a radically different treatment of the deficit.
- 58 I mean it would still be included in Hydro's overall revenue
- 59 requirement.
- 60 DR. WILSON: The RSP.
- 61 MR. YOUNG: Yeah ...
- 62 DR. WILSON: Sure.
- 63 MR. YOUNG: No, no, not the RSP, but on the ...
- 64 DR. WILSON: The rural subsidy.
- 65 MR. YOUNG: On the rural subsidy.
- 66 DR. WILSON: Yes.

MR. YOUNG: It would still be included in the overall
revenue requirement and it would be collected from
customers other than the rural customers. It's just that you
would change the, well change the rates essentially to
match marginal costing principles. Is that ...

72 DR. WILSON: It would and it would under the circumstances that exist here, given Hydro's cost structure, 73 it would cover the rural subsidy as well. As an economist, 74 I will say that I, and in relation to the discussion that 75 76 existed earlier about is this a tax or is this a cost. I don't 77 think that tax collection through utility rates is the best way to go about income distribution, but I think it's a political 78 reality that most regulatory commissions to some extent 79 have to deal with and that's true in the US as it is in Canada 80 with lifeline rates. For whatever reasons, legislatures would 81 rather have regulatory commissions deal with this aspect of 82 83 income distribution than to deal with it directly, so as long as it's something that has to be dealt with, I think it's 84 appropriate for commissions to do that. I don't think that 85 86 I would recommend doing away with the rural subsidy, but I think that it can be accommodated without distorting price 87 signals, especially given the fortuitous circumstances that 88 Hydro is in. 89

MR. YOUNG: When I read your evidence, I had a different 90 impression than the testimony you just gave, and that's 91 probably my error and not any error in what was written. I 92 93 wonder if I could, Mr. O'Rielly, please bring up the 1996 Rural Report, at page 23 at the bottom, and it goes on to 94 page 24, and can we just see a little bit more of the ... at 95 least some of the next page to make sure that we have the 96 97 right ... yes, there we go. I'll just read some of it out and ask you to respond to this. The Board's consultant, Mr. 98 George Baker, conducted a detailed examination of the 99 costs associated with rural systems. In his analysis, Mr. 100 101 Baker examined both the full embedded cost and the marginal cost associated with increased consumption on
isolated systems, and then, I won't read it all out, but you
can see what he's done here, if you choose to take a

4 moment to read it is he's actually done a marginal cost

5 study in the diesel areas and proposed a rate structure

based on that, so I just want to clarify this was not the sort
of comment you had in relation to your proposal here in

8 your testimony, is that correct, this is a different kind?

DR. WILSON: Yeah, my comments on the rural subsidy are 9 not in the direction of trying to charge rural customers 10 prices that more accurately reflect costs, that's obviously 11 not the intent of the rural pricing program. The intent of 12 the rural pricing program is to provide affordable rates that 13 14 are admittedly below costs and the extent to which those rates are going to be below cost is to a large extent, I think, 15 a policy issue as opposed to a straightforward economic 16 issue. I would not object to a price that covered at least the 17 short-run marginal cost, the cost of running these kinds of 18 19 units in rural areas as long as it didn't interfere with whatever the overriding concerns with respect to income 20 policy is. Would an economist rather have the government 21 provide direct subsidies to consumers and then let 22 consumers decide whether they're going to spend that on 23 24 electricity or something else, by and large, they would, but there are social concerns that if you do that the distribution 25 of cash may be spent on cigarettes and coca-cola as 26 opposed to being spent on, or something else as opposed 27 to being spent on electricity and that's not the intent of the 28 income distribution policy, so I'm not really getting into an 29 argument that rural rates ought to be more cost based. I 30 think I accept the proposition that they're not, and for some 31 of the same reasons that we have lifeline rates in other 32 places. 33

MR. YOUNG: I wonder if I could refer you to page 38 and 34 I have a question relating to the purchase from industrial 35 customers. This is at the bottom. Perhaps I'll just, as a time 36 saver I'll just read it out, it's not terribly long. It says, 37 second, Hydro has used a system load factor to classify 38 the cost of purchased power obtained from non-utility 39 40 generators to demand and energy but has assigned all costs of purchasing power from industrial generators to 41 energy. Unless there are fundamental differences between 42 these two types of purchases, for example, a high 43 probability that industrial purchases will not be available at 44 the time of the system peak, it would be preferable to apply 45 the same cost classification procedures to both types of 46 purchases. Dr. Wilson, I'm just wondering if you have had 47 an opportunity to learn as to, anything as to the timing of 48 the purchases from industrial customers. I mean we 49 generally call this secondary, it's sort of commonly called 50 secondary energy purchases. 51

52 DR. WILSON: Uh hum.

MR. YOUNG: Made at times which you may or may not know, correct me if I'm getting into an area here where I'm providing you with information you didn't otherwise have, but made at time when those customers, perhaps, had no load in their own paper mills, as it comes to be in the real case, but in fact have generation available. Is that your understanding?

DR. WILSON: Yes, that is something that I've learned andI understand that that's the way in which that's done.

62 MR. YOUNG: So would you expect in that scenario that 63 this would be sort of an incidental thing, having nothing to 64 do with peak, or that it might follow the peak times, or be 65 sort of random, or have you made any assessment of that?

66 DR. WILSON: I would think that you may have a situation 67 in which more purchases would be made during off-peak 68 times. That, of course, may result in hydro storage that is 69 useful at peak times, but it wouldn't increase system 70 capacity.

MR. YOUNG: Yeah, I guess one phrase we sometimes use 71 when we talk to our industrial customers about this is, you 72 know, we'll store your water in our reservoir, and that's not 73 obviously what happens, but you're talking, I think, about 74 75 essentially an energy issue, are you not? You're transferring the ... unless you have a low head problem, or 76 77 something that really hits capacity in a hydro plant, you're talking about the availability of saving energy as opposed 78 to capacity? 79

DR. WILSON: I think to a large extent you are, and I think
that's true with regard to the non-utility generators as well.

82 MR. YOUNG: If a non-utility generator was there 83 essentially all the time, as opposed to strictly being a run of 84 the river plant, would that make a difference in your 85 assessment?

BR. WILSON: I would agree that there is some element of
that NUG purchase that is capacity related but by and large
I would think that the NUG cost, much like the cost of a
storage hydroelectric plant is energy related as opposed to
being capacity related.

MR. YOUNG: Uh hum, yeah, no, I think that we probably 91 agree there that the ... I guess where we're not sure we 92 agree with you or not is whether in the instance of an 93 94 industrial purchase, as we call the secondary energy purchase, whether it would be proper to allocate any of that 95 to demand, given that Hydro in those scenarios, if you'll 96 accept my point, really has very little control over when 97 they come, can't require them at peak for example. 98

99 DR. WILSON: I don't have a problem with it being treated 100 as an energy purchase. If anything, I probably would 101 prefer to see equivalency between these two types of purchases achieved by the NUG being thought of more as energy as opposed to the industrial purchase being

thought of as capacity.

MR. YOUNG: I see, yeah. My final question is about the 4 thing that you started off talking about, Dr. Wilson, which 5 was the slight change you made in your evidence in 6 relation to the non-firm industrial rate. I think you said that 7 by and large you're fairly comfortable with the rate 8 structure as it is now, having learned the cost components 9 of it, and IC-274 which you referred to, I think, ends up 10 with a roughly 5 cent per kilowatt hour cost comprised of 11 a demand and energy component and demand, \$1.50. 12

DR. WILSON: Depending on the load factor and
depending upon the cost of oil, so that probably is a little
bit high in relation to your actual cost of oil right now.

MR. YOUNG: Yes, it may be in fact, yes, I agree. That's on
\$28.00 and the load factor that was given in that question.
But I just want to confirm that the point you made a few
moments ago related to the rate being an acceptable one.
Is that because you feel that these demand and energy
price components properly monitor or properly follow the

marginal costs in this circumstance and that that would be

an appropriate kind of an approach to this rate?

DR. WILSON: I think they do, and you know, looking at 24 my evidence as it was originally presented at pages 36 and 25 37, I think my problem in looking at this was I ... and I 26 incorrectly presumed that the energy charge in the firm 27 industrial rate was reflective of system energy costs and it 28 would be at \$12.50, but it's not at \$20.00, let alone \$28.00, so 29 since we don't, since we're not really dealing with \$12.50 oil 30 this charge in the firm industrial rate is not, does not cover 31 marginal cost and if anything the implication of my 32 discussion here is not that the interruptible energy charge 33 is too low, or that the demand charge is inappropriate, but 34 it really suggests that the energy component of the firm 35 industrial tariff is on the low side and still more related to 36 the \$12.50 oil price than to something else. 37

MR. YOUNG: I'm just curious though. On the, in the 38 outcome here with the answer to IC-274, there were some 39 questions before about the \$1.50 demand charge being an 40 appropriate ... the question was to another witness ... being 41 appropriate. Could you comment on whether or not with 42 this marginal cost based energy rate, using the actual oil 43 price in Holyrood, whether that demand charge is an 44 appropriate figure? 45

46 DR. WILSON: I think it is, yes.

47 MR. YOUNG: Okay, thank you. Those are all my48 questions. Thanks, Chair. Thank you, Dr. Wilson.

MR. NOSEWORTHY, CHAIRMAN: Thank you, Mr.Young. Thank you, Dr. Wilson. Ms. Butler, could I ask

51 you to begin your cross, please?

52 (2:45 p.m.)

53 MS. BUTLER, Q.C.: Thank you, Mr. Chairman. Good afternoon, Dr. Wilson. I wonder if we might look first to an 54 55 exhibit that was attached to Mr. Brockman's testimony and it's referred to as LBB-3. Mr. Wilson, do you recall 56 reviewing this in the course of you preparing for your 57 58 testimony in the sense that what Mr. Brockman has done is listed the 26 Board recommendations from the generic 59 hearing, and indicated to the right whether Hydro's 2001 60 filing complies and if not, why? 61

DR. WILSON: Subsequent to filing my testimony, I thinkI've seen this, yes.

MS. BUTLER, Q.C.: Okay, would you scroll down and let
the witness have a quick glance at the nature of it. It goes
on for several pages, of course. In your review of it, was it
substantial enough, Doctor, that you could say whether in
fact you agree or disagree with Mr. Brockman's conclusions
in the column to the right?

DR. WILSON: I'd have to look at each one individually.
Maybe that's something you'd like me to do this evening
and report back to you in the morning. I don't have this
fresh in my mind right now, but I think that you can see
from the thrust of my testimony, I generally felt that Hydro
did comply with the, with the recommendations. I don't
think there were many cases where they didn't comply.

MS. BUTLER, Q.C.: Okay, that's satisfactory to me. I 77 wouldn't want you to be put through another exercise this 78 79 evening. Mr. Young has asked you some questions about elements of this insofar as they address cost allocations. 80 There are four in here that I want to look at and compare to 81 your executive summary, so Mr. O'Rielly has very kindly 82 set up the system where we can have both on the screen, 83 with the screen split, there you go. Now this is the 84 executive summary from your pre-filed which is, if we can 85 just expand that a little so that the witness can see. Can 86 you scroll down on the executive summary, Mr. O'Rielly? 87 88 In the executive summary, I think we're going to be going to pages, Roman numerals two and three. Okay, that's 89 great, thank you. So it's the first recommendation I wanted 90 to ask you about at the outset, and perhaps if you could 91 just take a moment to read that for us, Doctor? 92

DR. WILSON: That Hydro's cost of service study be of the
embedded type and that the methodological objective be to
allocate costs to rate classes in a fair and equitable manner
based on causal responsibility for cost incurrence.

MS. BUTLER, Q.C.: Okay, now Mr. Brockman has certainly
indicated that Hydro's filing complies with that. Do you
agree with his conclusion on that particular one?

DR. WILSON: At least in part. I do think that, I do think 1 that they've, they've done an embedded type cost of 2 service study. I think that they have attempted and have 3 4 generally explained why they've allocated costs in the way in which they did. I think that their attempts have been to 5 be fair and equitable. I've indicated a number of ways in 6 which I thought it would be more reasonable to allocate 7 costs if cost causality was your objective. For example, we 8 talked about the energy component of transmission, the 9 energy component of distribution. Those are two places 10 where I don't think the ... while there is some rationale to 11 what Hydro does, I think that there are stronger rationales 12 pushing in a different direction. 13

MS. BUTLER, Q.C.: Would it be fair to say that in the particular examples that you've just given me that there are judgement, there is judgement at play and you don't necessarily agree with the exercise of the judgement in the cost allocation?

DR. WILSON: I think that's true. I think that's generally 19 true of cost allocation exercises. Another way of putting it 20 is that there is in cost allocation, again, to distinguish it 21 from rate design, there's a degree of arbitrariness in most 22 things that are done in the cost allocation field. It's a 23 question of, you know, more or less what is more 24 reasonable, and of course all of these ways of expressing 25 an implied judgement. 26

MS. BUTLER, Q.C.: Okay, so looking at the bottom of the 27 screen which is Roman numerals, page two from your 28 executive summary, you indicate substantive cost 29 allocation and rate design topics that we believe merit 30 particular consideration by the Board in this proceeding 31 include the following, and then, of course, you have a 32 number of them. If we could scroll down to the second last 33 bullet on that page, the absence of marginal cost 34 considerations in, if I can just add to what you've indicated 35 there, number one, Hydro's cost allocation, and number 36 two, rate design proposals. Is that fair to split it out that 37 way? Are you making two separate points? 38

DR. WILSON: Yes, I think so. I think that, I think there are
two separate points, and there are some ways in which
marginal cost considerations (inaudible) either given some
weight in the rate design proposals or at least the rate
design proposals were not inconsistent with marginal cost
principles ... the interruptible rate for example.

MS. BUTLER, Q.C.: Alright, but when I compare what's
there at the bottom of the screen and Mr. O'Rielly has very
kindly got his hand marker on it, absence of marginal cost
considerations in Hydro's cost allocation. To the
recommendation number one, which is that the study be of
an embedded type, with methodological objective to
allocate costs to rate classes, etcetera. Are you suggesting

that the cost of service study should have been a marginalcost of service study?

DR. WILSON: No, I'm not. Obviously the Board said do an 54 embedded type, but I don't think that that foreclosed 55 consideration of marginal cost principles, especially given 56 all of the water that's been under the bridge in the last eight 57 years here, and the extent to which the Board ... I realize, 58 you know, the people who make up this panel and make up 59 60 the Board change over time, but certainly it's been my impression that the thinking of the individuals that 61 comprise the Board have not been stagnant for eight years, 62 and that the, and that the opportunity is present to 63 consider improvements to methodologies that may have 64 been thought the way to go eight years ago, so I'm not 65 saying that Hydro didn't do what they were told to do. 66 What I'm suggesting is that the Board give consideration 67 to the following points, and one of those points is trying to 68 utilize marginal cost principles in rate design more so than 69 70 is reflected in this application and frankly, to move in the direction that Newfoundland Power has suggested in the 71 past, but not in this case. 72

MS. BUTLER, Q.C.: Yeah, but again, I can see that in
relation to rate design, but the bullet actually says absence
of marginal cost considerations in Hydro cost allocation as
well.

77 DR. WILSON: Yes.

MS. BUTLER, Q.C.: So if we can just scroll up to the top of
that again, so that we can see what the bullets relate to. It
starts with "substantive". Substantive cost allocation and
rate design topics which we believe merit particular
consideration ... so what specifically are you asking the
Board to do relative to that second last bullet on this
application?

DR. WILSON: To give, give encouragement and direction
to Hydro and probably to Newfoundland Power as well that
they would like to see greater consideration of marginal
cost principles as we move forward.

- 89 MS. BUTLER, Q.C.: On a go forward basis.
- 90 DR. WILSON: Uh hum.

MS. BUTLER, Q.C.: Now I'm going to be coming back to
that split screen, Mr. O'Rielly, but I just need to go to a
separate exhibit for a moment and that is page 21 of your
pre-filed, that's, I think, the body of the report, and of the
executive summary?

- 96 DR. WILSON: Page 3?
- 97 MS. BUTLER, Q.C.: Page 21.
- 98 DR. WILSON: Page 21.
- 99 MS. BUTLER, Q.C.: On the bottom of page 21 on my copy

... yeah, it's 22, good, thank you, that's the one, Mr.
 O'Rielly. The last paragraph that you're addressing on
 page 21, Doctor, I wonder if you'd be kind enough to read

4 that please?

5 DR. WILSON: It would be far better and a more reasonable 6 regulatory procedure to calibrate Hydro's costs and 7 wholesale rate structure in this proceeding so that retail rate 8 design in the next NP rate case can reflect the appropriate 9 cost based charges that NP will actually realize as its retail 10 sales volumes change.

MS. BUTLER, Q.C.: I'm sorry to say, Doctor, that I don't
understand that paragraph, perhaps you could explain to
me what exactly you're recommending there. I think I'm
particularly lost in reference to calibrate Hydro's costs.

DR. WILSON: I made the point prior to this that I did not 15 agree that Hydro's charges to Newfoundland Power, the all 16 energy rate was what was the best reflection of Hydro's 17 costs and that a, that a rate that reflected both demand 18 charges and energy charges as well as seasonal variation 19 would be a better reflection of the costs that Hydro incurs 20 as it incurs them, and my point is it would be more 21 straightforward, and I think easier for Newfoundland Power 22 to design and pass through rates to its customers if the 23 prices that it paid to Hydro were cost reflective in the first 24 place. That would be more sensible to me and I think more 25 straightforward than for Newfoundland Power to attempt to 26 design rates for its customers based upon some presumed 27 cost structure that Hydro has that is not reflected in the 28

29 rates that Power pays to Hydro.

MS. BUTLER, Q.C.: Okay, but on this same point, Mr. 30 Brickhill has a Q. and A. which is relevant. I wonder if we 31 can look at Mr. Brickhill's supplementary at page 4, and 32 I'm looking for the question, will the proposed energy rates 33 ... I apologize, Mr. O'Rielly, maybe it's ... thank you. Will 34 the proposed energy rates of Newfoundland Power and the 35 industrial customers cover marginal costs in the test year, 36 and I wonder if you could just read his answer there? 37

DR. WILSON: In the case of Newfoundland Power, yes,
and in the case of industrial customers, no. Newfoundland
Power's energy rate includes its allocated demand costs,
the rural deficit and the RSP. This results in the marginal
revenues received from Newfoundland power exceeding
the marginal energy costs of supplying Newfoundland
Power by Hydro.

MS. BUTLER, Q.C.: Let me ask you first, do you agree with
what he has said about Newfoundland Power's rate?

DR. WILSON: Yes, I think I do. I think that he is saying
essentially that the rates, that is the dollars, the total
amount of dollars that Newfoundland Power pays to Hydro
will cover the marginal costs of serving Newfoundland

51 Power, and I think he's ... I think as far as that goes, he's 52 right.

MS. BUTLER, Q.C.: What about line 18 though, where he
says Newfoundland Power's energy rate includes its
allocated demand costs, etcetera. Do you agree with that?

56 DR. WILSON: Sure, it includes allocated demand costs. 57 That's not to say that there wouldn't be alternative ways of 58 determining an allocated demand cost, but given the 59 allocation and the classifications that Hydro used, yes, I 60 agree that the rates that are being charged to 61 Newfoundland Power on a total revenue basis are aimed at 62 covering that revenue requirement.

MS. BUTLER, Q.C.: I had understood when we addressed
this earlier with Mr. Brickhill and perhaps with others as
well, that essentially what was being said that was as a
result of the RSP, at the end of the day Newfoundland
Power always pays its own way, notwithstanding ...

68 DR. WILSON: I don't, I don't take, I'm really not taking issue with that in the sense of total revenue being equal to 69 total cost, that the total amount of dollars that are paid by 70 Newfoundland Power are in some sense compensatory and 71 in line with the cost of service allocations that Hydro has 72 done. I think that that's, I think that's basically true. Is that 73 satisfactory in terms of rate design, I don't think that that 74 75 addresses the rate design question or the price signal question or efficiency questions at all. 76

77 (*3:00 p.m.*)

MS. BUTLER, Q.C.: So let's just go back to where we were 78 with your pre-filed at page 21, that paragraph that I was 79 having difficulty with, thank you. It would be far better, 80 that paragraph there, so why would it be better to calibrate 81 Hydro's costs on wholesale rate structure, etcetera, if in fact 82 vou agree with what Dr. Brickhill is saying at page four of 83 his first supplementary evidence, ultimately that 84 85 Newfoundland Power's rates are sufficient to cover the costs associated with the service. 86

87 DR. WILSON: I don't think that Mr. Brickhill really takes issue, or that we have a fundamental disagreement on 88 pricing and price signals except that as he states in the 89 testimony that you had up a moment ago, that he doesn't 90 think price signals make any difference, that it's not 91 important to have rates to Newfoundland Power that reflect 92 the changes in costs that are incurred by Hydro as 93 Newfoundland Power's energy demand requirements go up 94 and down. I think it probably is. I will agree that you can, 95 if you want to you can bypass the whole issue of prices 96 reflecting costs to Newfoundland Power and deal only with 97 is the total bill equivalent to the total cost, but that's not 98 very helpful if we're talking about the Delta, if we're talking 99 about changes, if we're talking about growth, if we're 100

- talking about customers making decisions at the retail level, 1 the Newfoundland Power level to buy electricity to heat 2 their homes, or oil to heat their homes and the fluctuations 3 4 that can take place over time in the energy sales and the power sales of the retail utility. I think that in order for the 5 retail utility to have the right motivations, especially if there 6 is going to be a significant passage of time between 7 wholesale rate cases, I think it's desirable for the retail 8 9 utility to have its own cost responsibility related to the cost structure of its supplier than simply be tied to some total 10 revenue responsibility in a test year. I think that it will be 11 easier and Newfoundland Power will have more motivation 12 to have cost reflective retail rate designs if those cost 13 reflective retail rate designs are tied to the wholesale rates 14 that they pay in the first place, and I understand that Mr. 15 Brickhill disagrees with that. And to a limited extent he and 16 I have some agreement and that is that cost reflective rates 17 are more important at the ultimate customer level. If we had 18 to have them one place or the other, I would say that I 19 would rather have them at the retail level which would be 20 the point of sale that Hydro makes to, you know, it's own 21 industrial customers and the customers that it serves at 22 retail and then the prices that Newfoundland Power 23 charges its customers at retail, but I think it would also, as 24 a second concern, be desirable to have cost reflective 25 wholesale rates. 26
- MS. BUTLER, Q.C.: Okay, can we go back now, Mr. O'Rielly please, to the split screen that we had the two exhibits on? Thank you. The other recommendation from Mr. Brockman's list that I wanted to address was number 12, and this was discussed a moment ago between yourself and Mr. Young, correct, in the sense that ...
- 33 DR. WILSON: Right.
- 34 MS. BUTLER, Q.C.: Cost of gas turbine and diesel fuel in
- the island interconnected system were recommended to be classified to demand and that is what Hydro reflected in the
- filing, do you agree with that?
- 38 DR. WILSON: Yes.
- MS. BUTLER, Q.C.: Okay, and your point on this is actually at Roman numerals three of your executive summary. Thank you, it's that third bullet there on your screen. Classification of gas turbine and diesel fuel to demand ... now again, the heading, of course, for these bullets, in this particular case was additional issues for consideration.
- 46 DR. WILSON: Right, I put this as in issue for consideration
  47 but not ranked in importance with some of those above it.
- 48 MS. BUTLER, Q.C.: Okay, so the first series of bullets are
- 49 actually of primary consideration and the remaining are of
- 50 less importance, as you say.

- 51 DR. WILSON: I think so, yes.
- 52 MS. BUTLER, Q.C.: So while you agree that Hydro has
- 53 done their filing in accordance with recommendation 12,
- 54 you are recommending again on a go forward basis that
- 55 there be some consideration to the classification of gas
- 56 turbine and diesel fuel to demand, is that right?
- 57 DR. WILSON: I think they ought to be classified to energy 58 as opposed to demand. I don't, other than the rationale 59 that Mr. Young suggested to me, I don't know of any 60 reason to classify those costs as demand charges. It seems 61 strange to me.
- MS. BUTLER, Q.C.: So in that sense you are disagreeing with the recommendation that was made by this Board.
- 64 DR. WILSON: Yes.
- 65 MS. BUTLER, Q.C.: Okay.
- 66 DR. WILSON: I can't think of anything more energy than 67 fuel.
- 68 MS. BUTLER, Q.C.: Okay, recommendations 15 and 16,
- okay, transmission lines and substations to be classified in
- 70 the same manner as the generating stations they serve. Do
- you agree that Hydro has complied with that as well?
- 72 DR. WILSON: Yes, they have.
- MS. BUTLER, Q.C.: And number 16, transmission be
  classified 100 percent to demand and Hydro's filing
  complies with that as well?
- 76 DR. WILSON: Yes, it does.
- MS. BUTLER, Q.C.: And number 18, transmission and
  subtransmission costs in the island interconnected be
  allocated by means of a 1-CP, and their filing is consistent
  with that as well?
- 81 DR. WILSON: Yes.
- MS. BUTLER, Q.C.: Okay, now in your executive summary,
  page 2, the Roman numerals, once again you consider there
  is merit in the Board considering the assignment of network
  transmission costs to demand rather than energy as well as
  the allocation of these costs using a single CP, so again,
  Doctor, is it fair to say that in that sense you disagree with
  the Board's recommendations from the earlier report?
- BR. WILSON: Yes, I think that those, that those directives,guidance should be reconsidered.
- MS. BUTLER, Q.C.: And the final recommendation I just
  want to point out on which you may be making a different
  proposal is 19 and 20, can you just take a moment to read
  for yourself recommendation 19 and recommendation 20,
  that's the classification of distribution costs, and the
  allocating of distribution costs.
- **EXECUTECH Inc.** 579-4451

1 DR. WILSON: Well again, I'm recommending a departure

2 from Hydro's procedure and the Board at that time did

3 accept the classification of distribution for interim use, so

- 4 if that is presumed to be a direction that's carried forward to5 this hearing, yes, that's another area where I'm
- 6 recommending reconsideration.
- 7 MS. BUTLER, Q.C.: Okay, that was 19 you were 8 addressing?
- 9 DR. WILSON: Uh hum.
- MS. BUTLER, Q.C.: Do you agree that Hydro's filing complies with recommendation 19?

DR. WILSON: Yes, except that I don't see recommendation

19 as constraining Hydro for purposes of this filing as you
may be able to argue that the Board's directives with
respect to some of the earlier things you asked did seem to
constrain Hydro.

MS. BUTLER, Q.C.: And number 20, does Hydro filingcomply with that as well?

DR. WILSON: Well they approved it at that time and I gather that Hydro is doing the same thing here, so again, they certainly don't seem to have been foreclosed from doing something else, but they don't appear to be doing something that is inconsistent with procedure that has been approved by the Board.

MS. BUTLER, Q.C.: Okay, now at the bottom part of the screen, in terms of the point that you make here, the assignment of no distribution system costs to energy is what you're recommending and the allocation of ...

DR. WILSON: No, I'm not recommending that. I'm saying that that's an issue to be addressed and I would recommend the assignment of distribution costs to energy because I believe that distribution systems are built for purposes other than simply peak load.

MS. BUTLER, Q.C.: I'm sorry, these bullets fall under the heading of the topics that you considered merited particular consideration by the Board on a go forward basis, right?

38 DR. WILSON: Sure.

MS. BUTLER, Q.C.: Okay, so back to the point again, the assignment of no distribution system costs to energy and the fact that you don't necessarily agree with recommendation, I guess it would be 19.

43 DR. WILSON: This is the interim issue, yeah.

44 MS. BUTLER, Q.C.: 19, okay, are you aware of any other 45 utilities in Canada where a portion of distribution costs are

46 classified as energy?

47 DR. WILSON: I don't know one way or the other. I haven't

48 surveyed Canadian utilities.

49 MS. BUTLER, Q.C.: Okay, so why do you consider that 50 there is merit in considering this issue if you're not familiar

51 with any other utility that does it?

DR. WILSON: Because I'm guided by logic and reason and 52 not simply by precedent. If I was guided simply by 53 precedent I guess I wouldn't be recommending the 54 Commission reconsider any of its previous directives, but 55 just because this was the way that it was done ten years 56 ago, or this is the way that it's done in Nova Scotia or 57 British Columbia, I don't think ought to be the end of the 58 59 Commission's inquiry on the matter, and certainly when you think about the logic of it and the fact that distribution 60 systems, transformers, poles, wires, are designed and 61 configured with energy delivery considerations in mind, 62 and the fact that they are used over an extended period of 63 time and not just in order to meet the peak demand, and 64 that's what drives the capital investment, it seems to make 65 66 some sense to me as an economist that if you're going to allocate costs that consideration be given to the energy 67 68 measure as well. The Commission in the future may want to decide to bypass a lot of these cost of service issues 69 entirely, that is cost allocation issues and cut right to the 70 71 chase, go to rate design and dispense with this elaborate system of rationalizations that we're dealing with, but if 72 we're going to deal with an elaborate system of 73 rationalizations, I think we ought to think about what the 74 rationale is and not just what Ontario's doing. 75

- 76 MS. BUTLER, Q.C.: Okay, thank you. That's the end of
- that particular section, Mr. Chairman, and it is 3:15, if you'd

78 like to break there.

MR. NOSEWORTHY, CHAIRMAN: Sure, I appreciate that.
Thank you, Ms. Butler, Dr. Wilson, we'll break until 3:30.

(break)

81

82 (*3:40 p.m.*)

MR. NOSEWORTHY, CHAIRMAN: Thank you. Could Iask you to continue Ms. Butler, please.

MR. KENNEDY: Chair, just before Ms. Butler continues 85 her cross-examination I would like to take the opportunity 86 to report on the meeting of counsel during the break and 87 what's being proposed for the schedule with the panel's 88 willingness is that on Monday, December 10th would be an 89 off day and we would not need to sit on Monday, 90 December 10th. On Tuesday, December 11th, that we 91 would commence the usual time at 9:30 on that morning 92 with the capital budget application argument and that upon 93 completing the argument that we would move to the JD 94 Edwards demonstration and upon the conclusion of that 95 we would end for the day. Wednesday, December 12th is 96 being reserved exclusively for Mr. Drayson, for the cross-97

- examination of Mr. Drayson. As was already determined 1 both Thursday and Friday are Board matter days. The next 2 3 sitting day would be December 17th, and we would start again at the usual time of 9:30 with the Abitibi witnesses, 4 Mel Dean and Mr. Jean and that both of those witnesses is 5 proposed would take the stand at the same time, provide 6 7 their evidence simultaneously and that would allow for cross-examination by counsel concerning Abitibi's affairs, 8 9 and it was considered to be the most efficient way to do that, and that upon the cross-examinations being 10 completed, the Abitibi witnesses, we would then start with 11 Bill Brushett of Grant Thornton, the financial advisor for 12 the Board and Mr. Brushett would continue until he's 13 complete extensibly, Tuesday, December 18th and that 14 would be the final witness and the conclusion of the 15 evidentiary portion of the hearing, and so I guess upon the 16 panel's return, perhaps on tomorrow morning, if they could 17
- 18 confirm whether that's an appropriate schedule.
- MR. NOSEWORTHY, CHAIRMAN: Thank you very much,Mr. Kennedy.
- 21 MR. KENNEDY: Thank you, Chair.

22 MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, Mr.

23 Kennedy did indicate to us that there's a possibility that

 $\label{eq:cfb} CFB\ Goose\ Bay\ wants\ to\ make\ a\ presentation.\ I\ don't\ know$ 

if you've had any thoughts on the scheduling on that.

MR. KENNEDY: There is an indication that CFB Goose 26 Bay have retained counsel and have contacted the inhouse 27 counsel of the Board, Ms. Dwanda Newman, concerning 28 what mechanisms may be available to them to make 29 presentation. It would seem to be fairly undecided, based 30 upon my understanding of discussions that she has had 31 with them to date about what type of presentation they 32 would make, whether it would be just a presentation or 33 evidentiary matter, and I think until that's determined it's 34 difficult to figure out how we would slot them in, and but 35 there have been some proposals put forward to them along 36 those regards, whether they wanted to do a letter of 37 comment or whether they wanted to do an actual 38 presentation, as was indicated by the Base Commander 39 when were in Goose Bay, and I think that's sort of subject 40 to what way they want to go, that's going to drive in large 41 part the recommendation that comes forward to the panel 42 about what's an appropriate mechanism. 43

MR. NOSEWORTHY, CHAIRMAN: Excuse me, how is that
to be handled counsel? The counsel that they have
retained, will they be getting back to Ms. Newman soon?

47 MR. KENNEDY: I've asked your inhouse counsel to in turn48 ask the counsel for, the recently retained counsel for CFB

- 49 Goose Bay once they've made a decision about what they
- 50 would like to do to by letter make a formal request and that
- 51 then could be tendered here in the hearing so that the

application, if you will, could be made to the panel and the
panel could give leave, as it's deemed appropriate to them.
So at this point the ball's in their court and we're waiting on
a reply from them as to what they are proposing in that
regard, but it would come to the panel for the panel's leave.

MR. NOSEWORTHY, CHAIRMAN: It would be nice to get 57 that dealt with as quickly as possible. I guess given the 58 59 schedule which you just reviewed with us there that seems to be the only potential additional item, certainly that we're 60 aware of at this point in time and I guess with Christmas 61 fast approaching, I'm sure everybody in this room would 62 like to get through this hearing in advance of Christmas as 63 quickly as possible, and so certainly if we could get some 64 notion of that, what they would propose in any event fairly 65 quickly, so we could deal with it, it would certainly be 66 appreciated. 67

MR. KENNEDY: I should add one further comment. There 68 was a letter of comment received from IOCC, and as was 69 70 correctly pointed out by counsel for the Industrial Customers, there are some statements made in that letter by 71 the representative for IOCC that was suggested they may 72 be confused about the process employed, and I was going 73 to suggest that the Secretary to the Board reply to IOCC to 74 explain to them the process that's available for them to 75 make whatever representations they want to make. Clearly 76 77 the letter was accepted as a letter of comment, but they seem to indicate in that letter of comment that they're 78 perhaps seeking further opportunities or redress and that 79 80 in turn needs to be addressed.

MS. GREENE, Q.C.: Mr. Chair, if I might, there is one other 81 item that might potentially impact the schedule and I have 82 mentioned that at the meeting of counsel and that would be 83 the filing of additional documentation Hydro has agreed to 84 file, and there are four items; one is the most recent forecast 85 of fuel prices, and we will be in a position next week to file 86 that forecast. As of this point in time I'll be planning to do 87 that, I guess then there will be the question as to whether 88 there needs to be any examination, but it would be the most 89 90 current forecast of No. 6 fuel and diesel fuel. The other item would be a revision to the capital budget, which I had 91 92 mentioned to you earlier, arises from the decision of JD Edwards to continue in support of the current software 93 application which has allowed us to defer the purchase of 94 two computers beyond the 2002 capital budget year. I will 95 be filing that formally which will be to remove \$2.1 million 96 97 that's now in there for that purchase as a result of that information we received, and as a result of that I need to 98 add approximately \$143,000 to purchase the existing lease 99 which will expire in 2002, because we need some computer 100 application. And the other pieces of information are simple 101 undertakings, the 2001 customer survey, the letter from the 102 government hopefully will be available next week with 103

- respect to Harbour Deep, and the last piece, which I don't 1 think will be available next week, is the report on the 2
- architectural strategy for the computers. I just wanted to 3
- mention that we will be filing information next week which 4
- we had agreed to provide before, and there may be 5
- something coming out of that other counsel may wish to 6 7 raise.
- 8 MR. NOSEWORTHY, CHAIRMAN: Yes, I think we were aware of those items, it's a matter I guess, and I'm sure you 9 will get those to us as quickly as possible so we can try 10 and tie up certainly the loose ends, before Christmas. 11 Thank you very, Ms. Greene. Ms. Butler, could I ask you 12
- to continue your cross please. 13
- MS. BUTLER, Q.C.: Thank you, Mr. Chairman. I'll just be 14
- another five minutes, I think Dr. Wilson, Mr. Wilson, sorry. 15
- I wonder if we might just address the rural deficit again. I 16
- know Mr. Young asked you some questions about this and 17
- I think you have a reference in your Executive Summary, 18
- page 8, just under the paragraph where you are Mr. 19
- O'Rielly, please. Thank you. Lines 18 to 20, feel free to go 20 on to the next page if you wish. Dr. Wilson can you read 21
- the, I think the first sentence is fine. 22
- DR. WILSON: The Board should consider developing an 23 evidentiary record regarding the extent in which the rural 24 deficit should be reduced and the extent to which universal 25 service should be subsidized. 26
- MS. BUTLER, Q.C.: If Hydro filed annually reports with the 27 Board identifying the amount of the deficit and steps being 28
- taken, or activities being implemented to reduce the deficit,
- 29 do you agree that that would be one approach towards or 30
- consistent with the recommendation you make here? 31
- DR. WILSON: It would not be inconsistent, but I don't 32 think that would necessarily answer the question as to 33 whether and the extent to which it should be reduced. 34
- MS. BUTLER, Q.C.: In relation to its reduction, as I 35 understand it, we can go to the exhibit if you wish but if 36 you recall the number then we won't need to, Hydro is 37 proposing an increase of 3.5 percent to rural customers as 38 a result of this application? 39
- DR. WILSON: I recall that, yes. 40
- MS. BUTLER, Q.C.: Okay, and for the benefit of the record, 41
- you won't need to go it, Mr. O'Rielly, but that is found in 42 Mr. Hamilton's, page 1 of his second supplementary. Do
- 43
- you view Doctor, a 3.5 percent increase as being significant 44 enough to move towards the phase out of the preferential 45
- rates which obviously play a significant role in this deficit? 46
- DR. WILSON: No, I didn't see the 3.5 percent 47 recommendation as moving in that direction. I saw that as 48 merely tying the rural rate to the Newfoundland Power rate, 49

- but not with the intent of reducing the deficit. 50
- MS. BUTLER, Q.C.: Alright. In relation to the deficit, and 51
- the price paid by these customers in terms of preferential 52
- rates, were you aware of the RFI which is CA-155 which 53
- 54 indicated that the price to customers on preferential rates
- would be expected to approximately double once the rates 55
- are completely phased out? 56
- DR. WILSON: I recall that, yes, and would move to some 57 percentage, it was at 20 percent, I don't remember what the 58 percentage of cost was, but it was still significantly below 59 cost, which I don't really argue with. 60
- MS. BUTLER, Q.C.: Okay. Mr. O'Rielly has very kindly put 61 62 that on the screen for us, and at lines 8 to 11 you'll see that based on actual 2000 data, according to Hydro the 63 consumers pay \$215,000, and without those preferential 64 rates they would pay approximately \$620,000, so almost 65 double. 66
- 67 DR. WILSON: Sure.
- MS. BUTLER, Q.C.: Okay. Now in terms of phasing out 68
- the preferential rates, even over a five year period, do you 69
- agree that the result would be a significant increase to 70 71 those customers?
- DR. WILSON: To phase it out entirely? 72
- MS. BUTLER, Q.C.: Yes. 73

DR. WILSON: Sure it would be ... depending on what 74 significant means ... it would be more than significant, it 75 would be very, very large, probably more than, I think it 76 77 would be a very large increase to them, certainly more than they would want to see. 78

MS. BUTLER, Q.C.: Alright. Let's just go back to page 9 of 79 your executive summary then. Yeah, there you go. I'm 80 reading now from line 19 on page 8, and right through to 81 page 9, the extent to which the rural deficit should be 82 reduced and the extent to which universal service should 83 be subsidized, Hydro should continue to cover the rural 84 deficit based on equity considerations that the Board 85 deems appropriate. One equitable way to cover the rural 86 deficit without distorting price signals would be to fund it 87 through marginal cost rate design methods. Now, I guess 88 what I'm curious about is what you're actually 89 recommending, knowing that of course in order to recover 90 its cost, I mean we've seen that the prices would double. 91

DR. WILSON: My recommendation is not to remove the 92 rural deficit by increasing the rate to the rural customers, 93 but rather to pay for the rural deficit through the difference 94 between revenues that would be generated at marginal cost 95 rates and the cost of service revenue requirement. I think 96 the type of marginal cost rate design that I suggested 97 earlier in my talk with Mr. Young would produce something 98

- 1 in the order of \$15 or \$20 million or so more than the cost of
- 2 service revenue requirements. So it would be a way for

3 compensating Hydro for the cost of serving rural

4 customers without charging rural customers all this cost.

5 MS. BUTLER, Q.C.: Thank you, Doctor, and thank you, 6 Mr. Chairman. Those are my questions for Dr. Wilson.

7 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
8 Butler. Thank you once again, Dr. Wilson. Ms. Henley
9 Andrews can I ask you to begin your cross-examination,
10 please.

MS. HENLEY ANDREWS, Q.C.: Yes, Mr. Chairman. Dr. Wilson, is it correct to say that there are, that within the cost of service expert community, if you like, there are experts who fall into, I suppose the embedded cost of service proponents and those who fall into a category of marginal cost of service proponents?

DR. WILSON: I don't think it can be broken down quite 17 that cleanly. I think that to an extent, most cost of service 18 practitioners agree that the total revenues to be recovered 19 by a utility should reflect the embedded actual cost of the 20 utility, and I think that most people that, even in this 21 proceeding, that have suggested embedded cost ideas as 22 being the place where they get their primary guidance, have 23 acknowledged that there are also ways in which marginal 24 cost pricing can make a positive contribution to good 25 results as they see them. So I think there tends to be a mix 26 in which most people would agree that rates should be 27 designed so that the total revenues that they produce are 28 equal to the actual embedded cost of the utility, the 29 facilities that are actually there and the cost the utility is 30 going to incur based upon the test year, but that to the 31 extent that one wants efficient price signals so that 32 consumption is not discouraged when it provides greater 33 value than cost and should be discouraged when the value 34 that it provides is less than cost, to that extent that 35 marginal cost pricing is appropriate within an embedded 36 context. I would say that there are others, and I would 37 probably fall into this camp, that would like to do less in 38 39 terms of cost allocation and to the extent possible cut right to the chase as far as rate design is concerned, and then 40 balance the rate design with the total revenue requirement 41 of the utility. My suggestion that, of course, is not 42 43 original, this is something that Mr. Brockman had recommended in the past and I think it's been suggested in 44 this forum as well as a number of others. 45

MS. HENLEY ANDREWS, Q.C.: Wouldn't you agree that
in order to take your preference, your preferred route, that
you would still have to study Hydro's embedded costs?
You would still have to know what those embedded costs
are?

51 DR. WILSON: You would but you know those pretty much

from the financial records and the operational records of 52 the company. You wouldn't have to go through the kind of 53 elaborate cost allocation procedures that are reflected in 54 55 Hydro's cost of service study that Mr. Brickhill presented, and you certainly wouldn't have to come up with 56 interesting ideas like splitting costs between energy and 57 demand based upon system load factor which is an 58 interesting compromise but has no particular theoretical 59 60 foundation for it.

MS. HENLEY ANDREWS, Q.C.: In addition to looking at
what the embedded costs are though, you would have to
then study the long run marginal costs and the short run
marginal costs, correct?

DR. WILSON: You'd have to estimate what they are, but
on this system its straightforward, as I think was illustrated
in my discussion with Mr. Young. You would not have to
spend a weeks on it. It's something that we could figure
out with the help of Hydro, people like Mr. Osmond, Mr.
Hamilton, in fairly short order.

MS. HENLEY ANDREWS, Q.C.: Dr. Wilson, I participated 71 in the 1993 cost of service methodology hearing, and my 72 recollection is that during that hearing there was 73 74 considerable discussion of, particularly from Mr. Baker, with respect to marginal cost of service versus embedded 75 cost of service methodology, and I think we spent a 76 considerable number of days just dealing with the 77 appropriateness of the equivalent peaker as the measure of 78 long run marginal cost, and would you agree that when 79 you're looking at long run marginal cost, one of the things 80 that you first have to determine is what your benchmark is 81 going to be for the cost of adding capacity in the future? 82

BR. WILSON: What the actual engineering plan is for theutility?

MS. HENLEY ANDREWS, Q.C.: And what the cost is of
the equivalent peaker that you're going to use if that's the
methodology that you choose?

88 (4:00 p.m.)

DR. WILSON: Well first of all I do not agree that you have 80 to spend a lot of time dealing with the utilities actual 90 capacity expansion plan, and the issue may not be what 91 type of peaker is going to be installed. The question is 92 what is a reasonable estimate of the cheapest type of 93 capacity that would be available to meet 1 kw of demand, 94 and if you agree with the proposition that when a utility 95 spends more than the cheapest cost of capacity that is 96 builds efficient thermal plants, that run economically, or 97 builds hydro plants that store large amounts of water, they 98 are incurring those extra costs, those costs in excess of the 99 cheapest type of capacity that could be built would be very 100 expensive to run. You're incurring those additional 101

- 1 capacity costs in order to produce lower cost energy, and
- 2 if you accept that proposition then the rest is pretty easy,
  3 it's pretty straightforward, it's not something that's going to
- take long periods of time to study. You may have hours of
- argument about the validity of the proposition I just stated,
- but once that proposition is established, determining
- 7 approximately what the number is is not going to take long,
- 8 now there may be some fine tuning that's going to take a
- 9 longer period of time or you're going to charge, you know
- 10 4 cents a kilowatt hour, or 4.1 cents a kilowatt hour, that,
- 11 there may be some computations that are related to the
- revenue requirement that need to go into that one.
- MS. HENLEY ANDREWS, Q.C.: Dr. Wilson, are you aware
  that in the 1977 to 1979 period, the Ontario Public Utilities
- Board had a generic hearing on marginal cost of service?
- 16 DR. WILSON: I was the advisor to the Ontario Municipal
- System in that proceeding, and you're right, it went on formore than a year.
- MS. HENLEY ANDREWS, Q.C.: It went for 120 sittingdays?
- 21 DR. WILSON: It went on for a long time, and there were 22 lots of viewpoints expressed.
- MS. HENLEY ANDREWS, Q.C.: And at the end the
  Ontario Public Utilities Board retained the embedded cost
  of service methodology?
- DR. WILSON: An embedded cost of service methodology,at least to some extent, yeah.
- 28 MS. HENLEY ANDREWS, Q.C.: Dr. Wilson, I take it from
- 29 your pre-filed testimony that you have not looked at issues
- 30 of assignment by Newfoundland and Labrador Hydro as
- 31 between common and specifically assigned?
- DR. WILSON: I haven't looked in detail at it. I understand what their guiding philosophy is and I considered that but it's not something that I spent a good deal of time at looking at the individual facilities. I'm aware of some of the
- controversies involving individual pieces of equipment, butI was not focused on that primarily.
- MS. HENLEY ANDREWS, Q.C.: You would agree that
- Hydro's proposed definition of common plant which is that
- is plant that is of substantial benefit to two or more classes
   of customers is a fairly well recognized definition of
- of customers is a fairly well recognized definitioncommon plant?
- 43 DR. WILSON: Did it say two or more classes of customers44 or two or more customers?
- MS. HENLEY ANDREWS, Q.C.: I think it says, oh two ormore firm customers, I'm sorry.
- 47 DR. WILSON: There are many instances where direct 48 assignments are made even though more than one

- customer is served off a particular facility. I understand, I 49 50 guess, the logic of this but I would not object to a direct assignment of a line that served two paper plants, simply 51 52 because it was serving two or more customers. I think that if those were the only two customers that were being 53 served, it would make more sense to assign that and divide 54 it between those two customers than to allocate it as a 55 common cost element. 56
- MS. HENLEY ANDREWS, Q.C.: Prior to preparing and
  filing your testimony, were you aware that in October of
  2000, the Board had conducted a hearing to get input from
  the parties as to whether the 1993 generic methodology was
  still appropriate in the current day rate setting
  environment?

63 DR. WILSON: I was not aware of that, no.

64 MS. HENLEY ANDREWS, Q.C.: So prior to filing your 65 testimony, were you aware that in October of 2000, when 66 the Board ordered Hydro to file this rate application, or file 67 a rate application, that having heard the parties the Board 68 decided that Hydro would use the 1993 generic cost of 69 service methodology?

DR. WILSON: No, I was aware of that. I think that's
reflected in my pre-filed testimony, that Hydro did indeed
follow the procedures for the most part that the Board had
specified.

MS. HENLEY ANDREWS, Q.C.: And I take it then that
your evidence on a number of issues as Ms. Butler pointed
out to you before the break, where you suggest to the
Board that they should depart from their 1993 cost of
service methodology, are simply your indication that that
would be your preference, if it's open for debate?

DR. WILSON: Yes, I think that's a fair statement. I think
that I have presumed that the Board did not wish to
foreclose or limit their consideration to determinations that
had been made eight years ago and that they did want me
to identify areas of possible consideration and change for
the future.

MS. HENLEY ANDREWS, Q.C.: However, you would
agree that if the Board made a determination in 2000 that the
1993 cost of service methodology was still appropriate in
the current day rate setting environment, then in fact its
opinion expressed in 1993 had been reconfirmed a number
of years later?

DR. WILSON: I would have seen that more as a, you know,
starting point for the purposes of this hearing as opposed
to resolving in year 2000 the questions about cost of
service methodology that may be raised in the hearing. I
did not see it as something that was reaching final
determinations on these matters with respect to the hearing,
but rather as giving some indication to Hydro as to a, as to

- a starting point that would be appropriate for the filing, not
   that modifications to that wouldn't be appropriate.
- 3 MS. HENLEY ANDREWS, Q.C.: You are aware though that
- this was not intended to be a generic cost of servicemethodology hearing?
- 6 DR. WILSON: It's a specific hydro hearing, but it's 7 certainly possible that policy matters that are addressed 8 here would be of relevance in a subsequent Newfoundland 9 Power hearing, but it does apply to Hydro's rates as 10 opposed to NP's rates, that's true.
- MS. HENLEY ANDREWS, Q.C.: In relation to the Rate Stabilization Plan, are you aware of any other utilities in North America which have an adjustment for load
- 14 variation?
- DR. WILSON: I really have not canvassed that, I cannot recite to you or give you a list of those that do, but on the other hand I can't really tell you authoritatively that there are none. I don't know of any that have a rate stabilization plan that's just like this. I do know of many utilities that
- 20 have what are known as regulatory assets or deferred
- 21 revenue accounts, that sometimes exceed \$100 million or
- even a billion dollars which conceptually are not terriblydifferent than the RSP and I think would create many of the
- same types of problems that the RSP could create.

MS. HENLEY ANDREWS, Q.C.: I take it from your testimony with respect to non-utility generation and secondary energy, that you really haven't studied what the non-utility generators, what the purpose of that, those purchases really were with respect to demand versus energy?

DR. WILSON: Not in detail, no. I know generally about
non-utility generators in various markets, but I don't know
anything about, really about the specifics of the non-utility
generators here.

- MS. HENLEY ANDREWS, Q.C.: Those are all my questions, Dr. Wilson. Thank you.
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
  Henley Andrews, Dr. Wilson. Mr. Browne, if I can ask you
  to begin your cross-examination please.
- MR. BROWNE, Q.C.: Thank you, Mr. Chairman. Dr.
  Wilson, the requirement for conservation in this particular
  industry, from a consumer perspective, is that always a
  constant? People always be aware that conservation is
- 44 important of electricity?

DR. WILSON: Certainly, to an extent, I think an economist would say, with regard to rate structure, which is central to this hearing, that if you have a rate design that reflects the additional cost of producing another unit of output or the cost that would be saved if a unit of output is not

consumed that that will serve as a strong and an 50 appropriate conservation signal. Prices that are 51 substantially in excess of marginal cost will curtail 52 53 consumption more than marginal cost prices, but usually that's not thought of as good conservation by economists, 54 just suppressing demand. What we would like to do is 55 avoid demands that produce less benefit than they do 56 costs and to serve those demands where the benefits 57 exceed the cost, and in that sense I think that conservation 58 so as to maximize the use of resources and the benefits that 59 are derived from resources is always a good thing. 60

MR. BROWNE, Q.C.: So is it fair to say it's not something
that should be turned on and off, like we have conservation
measures some years but not in others?

64 (4:15 p.m.)

DR. WILSON: If your adhering to my implied definition of
conservation which is prices that reflect marginal cost, I
would agree with you. If you mean something different,
then I'd have to know what your referring to as a
conservation measure.

MR. BROWNE, Q.C.: Just that the consumers always have
conservation put forward to them by utilities, all of the time,
year over year over year, that's all I'm asking. Is there merit
in that, so people are always aware of the benefits in
conservation. Does that help the system?

DR. WILSON: I think so, but I would go beyond that and 75 say if the utilities do a good and efficient job in their 76 pricing, there probably is an awful lot other than that that's 77 required to achieve reasonable levels of conservation. 78 That's not to say that I'm against consumer education, but 79 I think that the most important thing to achieve 80 conservation that is efficient is a price system that exists in 81 other markets where prices reflect marginal cost of 82 production. 83

MR. BROWNE, Q.C.: In terms of this particular province, 84 there's been a lot of discussion concerning the Holyrood 85 generating plant out there and the fact that oil is being 86 87 consumed there in part to produce electric heat in other parts of the province, and we had Ms. Pauly from the 88 Federal EnerGuide Program who testified and I think it's a 89 fair paraphrase of her evidence she asked why would you 90 have Bunker C oil burning at the Holyrood generating 91 station to produce electricity to heat people's homes 92 instead of telling people it might be more economical from 93 an environmental perspective and from an efficiency 94 perspective if people ordered their own oil in their own 95 homes to cut down the cost associated with the Holyrood 96 generating station and the requirement to purchase so 97 much oil, I guess. Is there any merit in that, in her 98 comments there? 99

- 1 DR. WILSON: No, setting aside, you know, possible
- 2 issues like I would expect that people in their own homes if
- they burn oil are going to burn distillate which costs more

4 than the residual fuel oil that's burned at Holyrood.

5 MR. BROWNE, Q.C.: And that's true, they would ...

DR. WILSON: I think if the Holyrood, if the price that is 6 charged to consumers reflects the additional running costs 7 8 of Holyrood, I think if we're talking about \$20.00 oil, if it's priced not below the 4.59 cents, plus delivery costs, line 9 losses, that sort of thing, and people choose to incur that 10 cost as opposed to buying distillate, I don't see anything 11 objectionable about that. I would not, you know, 12 recommend charging 15 cents a kilowatt hour for home 13 heating to force people to shift to wood or oil if the 14 marginal costs of producing and delivering electricity is 15 only 5 or 6 cents. 16

MR. BROWNE, Q.C.: And if people when they heat their 17 18 own homes with the alternate fuel, with oil or propane, if they're paying as they go according to markets, they pay 19 when the oil man comes, I think is an old saying around 20 here, do you think it's fair that people who heat their homes 21 with electricity are really given a benefit through the Rate 22 23 Stabilization Plan, because they're not paying the true price that it costs for a barrel of oil. Is that fair to both 24 consumers, from a consumer perspective do you think? 25

- DR. WILSON: Well, within at least a limited sense, as Mr.
  Bowman indicated oftentimes there are rate stabilization
- 28 plans over shorter periods of time, the propane companies
- or oil companies will introduce as well, pay fixed ...
- MR. BROWNE, Q.C.: Sure six to 12 months, or equal
  payment plans, or something like that.
- 32 DR. WILSON: Right.
- 33 MR. BROWNE, Q.C.: So you do pay within the year?

DR. WILSON: Right, and I think that that, certainly that 34 aspect of rate stabilization is something that some 35 consumers like and it does disconnect the immediate price 36 37 signal from the immediate consumption, but I think most people probably understand when they see their bill even 38 though they're not paying that cost now that they did incur 39 it, and they incurred that cost and they're going to have to 40 41 pay over the next 12 months for that consumption that they had, so I'm not terribly troubled about that. I think it is, I 42 think you do have an issue when you start deferring 43 today's cost to future time periods, unless you have some 44 strong belief that these oil prices that you're deferring are 45 going to come down in the future and there is some social 46 merit to spreading out those costs over a number of years. 47 The prospect of a growing and increasing deferred revenue 48 item that's large in relation to the utility company's total 49 revenue requirement can become a financial problem for the 50

51 utility and as I've testified can seriously distort price 52 signals.

53 MR. BROWNE, Q.C.: And it's your belief consumers 54 should have correct price signals?

55 DR. WILSON: In short, generally I would agree with that.

MR. BROWNE, Q.C.: On page 9, lines 7 to 9 of your prefiled evidence, if we can go to that place, you state that
consideration should be given to eliminating the RSP
component that intentionally defers cost recovery to future
time periods. Can you elaborate on that, sir?

DR. WILSON: Well, I have in the testimony, I've discussed 61 62 that in some detail on pages 33 through 36, but just to summarize to the extent that the RSP defers costs for a 63 substantial period of time, it may, one, shift costs from 64 those who benefitted from the consumption to somebody 65 else; it can separate charges from costs in terms of price 66 signals so that people do indeed consume electricity, even 67 68 though the benefit they're deriving from it is less than the cost that the utility is incurring in order to produce it; and 69 70 moving in this direction of deferring costs should be done, if at all, carefully by a regulatory commission that considers 71 what the benefits are that are being created from that 72 deferral and weighing those benefits against the cost of 73 74 doing it.

MR. BROWNE, Q.C.: We heard from Dr. Osler in his 75 evidence that when he referred to the Rate Stabilization 76 Plan when it was introduced, he referred to in terms of 77 extremes. We have one extreme where there was nothing, 78 and then we went to the other extreme where we went into 79 this three year continuum. Do you have any comments on 80 that as to how any plan should be established? What 81 would be your views on what the replacement for the RSP 82 should be? 83

DR. WILSON: I think the RSP mixes at least two different 84 objectives. One objective which is a common objective in 85 utility pricing and regulation is cost recovery and that type 86 of cost recovery is reflected in fuel adjustment clauses that 87 88 many utilities have when they operate in environments that have unpredictable or unstable fuel costs. Those usually 89 have (inaudible) mechanisms that is passing those costs or 90 cost reductions through the customers in a fairly short 91 period of time, oftentimes as frequent as monthly 92 adjustments. While I share some of the concerns about 93 those types of fuel adjustment programs or policies that 94 Mr. Bowman, for example, testified to, that is shifting risk 95 from the enterprise to consumers, I think that type of 96 adjustment procedure, that type of adjustment provision is 97 pretty common in utility pricing and there are arguments 98 both ways on it. When it comes to the second apparent 99 purpose of the RSP, and that is take costs of providing 100 service this year and defer them two or three years down 101

- 1 the road so that they would be covered by future 2 consumers in association with future consumption, I think
- that's a more, that's a somewhat more troubling aspect of it,
- 4 particularly if the balance is growing substantially over
- 5 time, and so I think that those two objectives should be
- 6 thought of probably separately, and it may be beneficial to
- have separate provisions for those two objectives, if bothobjectives are desired.
- MR. BROWNE, Q.C.: It's 4:30, what's the will of the panel,
  Mr. Chairperson?
- MR. NOSEWORTHY, CHAIRMAN: May I ask, Mr.
  Browne, how long you might be. Would you have any notion at this stage?
- 14 MR. BROWNE, Q.C.: I could be an half hour, but if you
- give me the night I could be 15 minutes. So if you're going
- to continue tomorrow, if you see continuing with Dr.
- 17 Wilson tomorrow, I can see some advantage to stopping
- now but if your intention is to try to finish with Dr. Wilson,
- I would continue on. Do you want to continue on and tryto finish with Dr. Wilson.
- MR. NOSEWORTHY, CHAIRMAN: Well, I certainly wouldn't mind continuing on and finishing with Dr. Wilson if that was possible and I haven't asked anybody if that was possible by 5:00, but I mean we have fair bit to go
- through yet, I don't know how much redirect, for example,
- at this point in time, realizing that the cross is not finished,
- 27 Mr. Kennedy.
- MR. KENNEDY: I think an overnight might be appropriate,Chair, I don't think there's any flights out anyways.
- 30 DR. WILSON: I would have nothing to do tomorrow 31 morning (*laughter*).
- 32 MR. BROWNE, Q.C.: That might be the answer (*laughter*).
- 33 MR. NOSEWORTHY, CHAIRMAN: Some others might
- have something to do. We'll come back here at 9:30. Thankyou very much.
- 36 *(hearing adjourned to December 7, 2001)*