

<p style="text-align: center;">LIST OF UNDERTAKINGS</p> <p>1. Undertaking Pg. 86</p>	<p style="text-align: right;">Page 2</p> <p>1 July 11, 2003 2 (9:04 a.m.) 3 CHAIRMAN: 4 Q. Before we begin, I think there's been some 5 agreement reached amongst counsel with respect 6 to argument in this matter and that Ms. Newman 7 is ready to put that on the record, please. 8 MS. NEWMAN: 9 Q. Yes, good morning Mr. Chairman and 10 Commissioners. The parties have agreed that 11 they'll file written argument on July 23rd, 12 that's a Wednesday, by the usual filing time 13 of the Board, which is 3 p.m. And that will 14 be followed up by oral argument at 9 a.m. on 15 Monday, the 28th of July. The parties have 16 also agreed that they would be bound by a one 17 hour time limit. 18 CHAIRMAN: 19 Q. Very well. Okay, so if everyone is in 20 agreement with that we'll pass on by and we'll 21 talk about today's schedule. I think it's 22 everyone's desire to try and finish this 23 matter today as far as the evidence and cross- 24 examination is concerned and we're prepared to 25 accommodate that in any way we can that's</p>
<p style="text-align: right;">Page 3</p> <p>1 reasonable. So I think what we'll do is we'll 2 go till say around 12 noon and see where we 3 are and if we need to break for lunch we'll do 4 so either 12:30 or 1:00 and then we'll come 5 back in an hour and try and finish this 6 afternoon, if indeed we need to do that. So 7 we'll see how that works. That's all I had to 8 say unless anyone had any comment on that in 9 terms of their scheduling, their flights or 10 whatever. No? 11 HUTCHINGS, Q.C.: 12 Q. No, it may be that I may leave a little bit 13 early in the afternoon and leave it with Ms. 14 Andrews because she's going to be dealing with 15 the final Panel in any event, Mr. Chair, but 16 that won't affect the function of the Board. 17 CHAIRMAN: 18 Q. Okay, thank you, Mr. Hutchings. When we 19 finished yesterday, Ms. Greene, you were 20 cross-examining Mr. Barreca. Good morning, 21 Mr. Barreca. 22 MR. BARRECA: 23 A. Good morning. 24 GREENE, Q.C.: 25 Q. Thank you, Mr. Chair. Good morning Mr.</p>	<p style="text-align: right;">Page 4</p> <p>1 Barreca. 2 MR. BARRECA: 3 A. Good morning. 4 MR. STEPHEN L. BARRECA CROSS-EXAMINATION BY MAUREEN 5 GREENE, Q.C. (CONT'D) 6 GREENE, Q.C.: 7 Q. I'd like to turn to page 19 of your pre-filed 8 evidence dated June 23rd. Actually, first if 9 you could look at page 18 where you commence 10 your discussion of the east/west microwave 11 interconnection. 12 A. Yes. 13 Q. Now that project was approved by the Board for 14 2003, is that correct? 15 A. That's my understanding. 16 Q. My understanding of your evidence is that you 17 refer to this project even though it is not up 18 for approval in 2004 with respect to the 19 documentation that was filed for the project, 20 is that correct? 21 A. With respect to - 22 Q. The documentation that was filed for that 23 particular project. 24 A. Yes. 25 Q. If I could turn now then to page 19. If we</p>

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1 look at line 16 on page 19 your conclusion
 2 there is that of the four alternatives
 3 considered, microwave was the least expensive,
 4 is that correct?
 5 A. Yes, ma'am.
 6 Q. I took from your evidence that your area of
 7 concern was that one alternative was not
 8 considered and you referred to that beginning
 9 on line 20, is that correct?
 10 A. Yes, ma'am.
 11 Q. If we turn to page 20 of your evidence, you
 12 refer to IRUs as a way of purchasing the dark
 13 fibre, is that correct?
 14 A. Yes, ma'am.
 15 Q. And the reference there as I understand lines
 16 1 to 12 on page 20 is the costing for IRUs in
 17 the United States, is that correct?
 18 A. Yes, ma'am, I used cost that I had available
 19 that were in US dollars and converted them to
 20 Canadian dollars.
 21 Q. And based on that evidence, you conclude that
 22 another lower cost alternative hadn't been
 23 considered, is that correct?
 24 A. Well, they considered a dark fibre alternative
 25 but they were looking at leasing the fibre on

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1 Newfoundland, and I take from your response
 2 that again you do not know first, if it's
 3 available from NLH-5, and then from NLH-6,
 4 you're not aware of the pricing that would be
 5 available to Newfoundland Hydro for that
 6 option.
 7 A. Yes.
 8 Q. So you wouldn't be surprised if I told you
 9 that IRUs are not available in Canada or in
 10 Newfoundland, would you? Because that is the
 11 information that Hydro has.
 12 A. Well -
 13 Q. Based on your answers to NLH-5 and NLH-6.
 14 A. I would not be surprised if it's not being
 15 offered as a standard service, however, I do
 16 not know if that has been pursued, if a long
 17 term lease as opposed to a monthly lease has
 18 been pursued.
 19 Q. And your objection to the project is based on
 20 your experience in the American market.
 21 A. I don't know that objection is the right term
 22 that I used or that--I don't believe that's my
 23 position that I object to the project, but I
 24 thought that a monthly leasing of a fibre
 25 strand would be a very expensive way to

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1 a monthly basis and I thought that they should
 2 possibly look at leasing it on a long term
 3 basis, using an IRU type of contract.
 4 Q. And using the pricing from the United States
 5 which you are familiar with, you suggested
 6 that the IRU way of getting dark fibre would
 7 be a cheaper alternative, is that correct?
 8 A. Yes, ma'am. Potentially could be a cheaper
 9 alternative.
 10 Q. And that is the only reason put forward in
 11 your evidence for questioning the
 12 justification for that project.
 13 A. Yes.
 14 Q. Now if you could look, please, at the response
 15 to NLH-5 where you were asked what was the
 16 availability of IRUs in Canada, particularly,
 17 Newfoundland. And I guess the reference to
 18 the page number had been to your original
 19 evidence but in your answer you provided that
 20 you did not know the availability of IRUs in
 21 Newfoundland, is that correct?
 22 A. No, ma'am, did not have time to pursue that.
 23 Q. If we look at the response to NLH-6 where we
 24 ask you whether you were aware of the pricing
 25 for IRUs in Canada, particularly,

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1 proceed.
 2 Q. And you assumed that a product was available
 3 here in Newfoundland.
 4 A. I assumed that it should be pursued.
 5 Q. And you don't know whether it has or it hasn't
 6 been.
 7 A. I do not know that.
 8 Q. The next project I'd like to refer you to is
 9 the power line carrier one which begins on
 10 page 17 of your evidence. Now that is a
 11 project where there is an amount before the
 12 Board for 2004, is that correct?
 13 A. I'm sorry I didn't hear your entire question.
 14 Q. We just talked about the east/west
 15 interconnection of the microwave which is not
 16 before the Board, it was already dealt with by
 17 the Board, now in the power line carrier, this
 18 particular one, funds were approved by the
 19 Board for 2003, is that correct?
 20 A. Yes.
 21 Q. And there is a smaller portion before the
 22 Board now to complete the project in 2004, is
 23 that correct?
 24 A. Yes, ma'am.
 25 Q. If you look at line 15 of page 17, I take from

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1 your evidence, particularly line 15, that you
 2 agree with the replacement of the power line
 3 carrier?
 4 A. Yes, based on the description and given the
 5 fact that most of it has already been replaced
 6 or--replaced in like kind or replaced with
 7 portions of the microwave system. The
 8 remaining portion from the description does
 9 appear to be warranted.
 10 Q. If we turn to page 18 where the issue that
 11 you've raised is the reference to the digital
 12 PLC technology and the high potential for the
 13 PLC technology. Now do I understand from your
 14 lines 4 to 7 that the digital PLC technology
 15 is not now on the market and will not likely
 16 be on the market for five to seven years?
 17 A. No, ma'am.
 18 Q. Okay, what do you mean then by lines, well,
 19 particularly, lines 6 and 7 and then I'll take
 20 you to your responses to some NLH request for
 21 information.
 22 A. Digital PLC is commercially available now and
 23 you can check on the internet and you'll find
 24 numerous sources for digital systems, as well
 25 as new generations of analogue systems. What

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1 that the broadband PLC will be on the market
 2 in five to seven years and we asked you
 3 specifically with respect to high voltage
 4 electrical utility applications which is
 5 Hydro's needs and I'd just like to refer you
 6 to part of the answer. Unfortunately, the
 7 lines aren't numbered. You mention, actually
 8 at the very last line on the page and you just
 9 referred to it in your evidence, I believe,
 10 you mentioned that there are 75 utilities
 11 conducting broadband PLC pilot projects and
 12 then the previous bullet above it, you
 13 attached a presentation, is that correct?
 14 A. Yes, ma'am.
 15 (9:19 a.m.)
 16 Q. When you look at the presentation as we have,
 17 it appears that the pilot projects were all
 18 being done by distribution utilities, is that
 19 correct?
 20 A. I don't know that.
 21 Q. Could I refer you to page 6 of the
 22 presentation. And there are other references
 23 in the presentation, I won't take you to them
 24 all. But if you look at the first bullet,
 25 refers to the transmitter receiver is coupled

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1 I was pointing out here is that there is a lot
 2 of research being conducted in PLC technology,
 3 both analogue, digital and even broadband
 4 communications over PLC technology. And
 5 that's what I was referring to here is that
 6 there is such an increased emphasis on
 7 research in this area, new found emphasis on
 8 research in this area, it appears that in the
 9 next five to seven years we're likely to have
 10 broadband capability, high speed internet type
 11 capability over some PLC technology.
 12 Q. That's not available at the present time?
 13 A. That is not available at the present time.
 14 Q. And in your opinion, is not likely to be
 15 available for five to seven years.
 16 A. Right. Commercially available. There are
 17 numerous utilities throughout the world that
 18 are conducting broadband PLC pilot programs at
 19 this time or trials.
 20 Q. Yes, and I'd like now actually to refer to
 21 that. In NLH-4, the question was to provide
 22 the information that you relied upon that
 23 broadband PLC would be available for high
 24 voltage electrical utility applications,
 25 because you just mentioned that you believe

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1 to middle voltage, less than 69 kV, which
 2 would be for distribution utility. Are you
 3 aware of any pilots that are ongoing for high
 4 voltage electrical applications which are
 5 Hydro's requirements?
 6 A. I don't have any firsthand knowledge of that.
 7 Q. The next thing I'd like to talk to you about
 8 is a little bit about your background and your
 9 experience.
 10 A. Yes, ma'am.
 11 Q. I understood from the CV that you have filed
 12 with your pre-filed evidence, as well as your
 13 direct evidence yesterday--I think Mr.
 14 O'Reilly is looking for the CV for me. There
 15 is another page before that, Mr. O'Reilly. In
 16 reading, and correct me if I'm wrong, Mr.
 17 Barreca, but in reading your pre-filed
 18 evidence as well in listening to you
 19 yesterday, my understanding is that your
 20 experience has been primarily in the
 21 telecommunications industry?
 22 A. I have more experience in the
 23 telecommunication industry than any other,
 24 yes, ma'am.
 25 Q. And I understand that you worked for Bell

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1 South until 1997, which is a
 2 telecommunications company.
 3 A. Yes, ma'am.
 4 Q. And then when you went with the consulting
 5 firm for one year from '97 to '98, I believe
 6 you also mentioned yesterday that that firm is
 7 a consulting firm in technology change, again
 8 primarily the telecommunications industry, is
 9 that correct?
 10 A. I believe the majority of their work is in
 11 telecommunications but a significant portion
 12 of their work are in other industries as well.
 13 Q. When I looked at the list of your testimony
 14 and I believe, Mr. O'Reilly, if you can
 15 continue going with the CV, it is the last two
 16 pages of the CV. I wanted you to refer to the
 17 page called "Testimony of Stephen L. Barreca",
 18 attached to the CV. When I reviewed this
 19 listing of your testimony, Mr. Barreca, it
 20 appeared certainly since '99, if not before,
 21 that your evidence has been primarily with
 22 respect to property evaluation, is that
 23 correct?
 24 A. Yes, ma'am.
 25 Q. Would this be the first time that you have

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1 operates as an isolated integrated utility in
 2 very challenging geographical areas of the
 3 province?
 4 A. Yes, ma'am.
 5 Q. You are familiar with -
 6 A. In general, yes, I am.
 7 Q. When you get into the operation or the design
 8 operation of the systems, is it true to say
 9 that someone would need to have knowledge of
 10 the business operation requirements as well as
 11 the environment in which they operate?
 12 A. In terms of -
 13 Q. Being able to provide an opinion with respect
 14 to whether something meets the functional
 15 requirements of the business.
 16 A. Well I'm not sure how to answer that. I think
 17 in terms of being able to evaluate the budget
 18 that they put forth, I don't think you have to
 19 have intimate knowledge of how a specific type
 20 of equipment may function, you know, in
 21 detail, I think, understanding--an
 22 understanding at a higher level should be
 23 sufficient. And that was the point that I was
 24 trying to make in answer to this, is that
 25 there are so many different aspects of

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1 consulted or certainly appeared as a witness
 2 in Canada? You have not listed any Canadian
 3 experience on your resume, in terms of
 4 testimony.
 5 A. No, I have not filed any specific testimony.
 6 Q. Could we look now at the response to NLH-1,
 7 please. In NLH-1 we asked you to outline your
 8 experience in the design and operation of a
 9 telecommunication system for a Canadian
 10 electric utility whose primary role is a bulk
 11 grid owner and operator. And I'd also like--
 12 because you've addressed NLH-1, 2 and 3 all in
 13 the one answer, I'd like to look at the last
 14 paragraph on page 3 of NLH-1. And I believe
 15 your response to the question indicated that
 16 you have not been involved in the design or
 17 the operations of a telecommunications system
 18 for a Canadian electrical utility or the
 19 design and operation of a power system
 20 teleprotection system or the design and
 21 operation of power line carrier technology in
 22 high voltage, is that correct?
 23 A. Yes, ma'am.
 24 Q. Are you familiar with the nature of Hydro's
 25 operations in terms of the fact that Hydro

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1 technology and functional requirements, that
 2 no one individual could possibly understand
 3 that level of detail. But that that level of
 4 detail should not be required, you know, to
 5 review a budget proposal.
 6 Q. Going back to the first page of your CV,
 7 please, Mr. O'Reilly. The very last
 8 paragraph, please, on the page. I see that
 9 you are a member of the Institute of
 10 Electrical and Electronic Engineers, is that
 11 correct?
 12 A. Yes, ma'am, I am.
 13 Q. Now that particular group has a number of
 14 different societies I believe they call them.
 15 A. Yes.
 16 Q. What specific societies are you a member of?
 17 A. Communication society.
 18 Q. Is that the only one? Are you a member of the
 19 Power Applications group, for example, or the
 20 Industry Applications Group for the electrical
 21 utilities -
 22 A. No, ma'am, I'm not. The reason I was thinking
 23 about it is that one time I was a member of
 24 the Computer society as well but I'm not sure
 25 if I stayed in that society, I may have

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1 dropped it last go around.
 2 Q. Which one was that, I'm sorry, I missed -
 3 A. Computer society, computing society.
 4 Q. But your involvement is in the
 5 telecommunications groupings and not in the
 6 electrical power?
 7 A. Yes, ma'am.
 8 Q. Are you familiar with the Electric Power
 9 Research Institute?
 10 A. No, ma'am, I'm not.
 11 Q. Yesterday you made some comments with respect
 12 to SCADA to an IP network and you expressed
 13 some comments or concerns with respect to the
 14 ability of putting SCADA on an IP network, is
 15 that correct?
 16 A. Yes, I did.
 17 Q. I take it then from your previous answers
 18 that--first I should ask you, I'm sorry, are
 19 you familiar with the protocol that has been
 20 published by the Utility Communications
 21 Architecture on dealing with SCADA and IP
 22 platforms for electrical utilities?
 23 A. No, ma'am, I am not.
 24 Q. Are you familiar with the protocol established
 25 by the Electric Power Research Institute for

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1 A. No, I'm not.
 2 Q. Thank you, that concludes my questions for
 3 this witness.
 4 CHAIRMAN:
 5 Q. Okay, thank you, Ms. Greene. Mr. Hayes, do
 6 you have any questions of this witness?
 7 MR. HAYES:
 8 Q. No, I don't, sir.
 9 CHAIRMAN:
 10 Q. Thank you. Mr. Kennedy.
 11 MR. KENNEDY:
 12 Q. Thank you, Chair.
 13 MR. STEPHEN BARRECA CROSS-EXAMINATION BY MR. MARK KENNEDY
 14 MR. KENNEDY:
 15 Q. Mr. Barreca, in your initial report that you
 16 filed, the one that's revised June 23, 2003.
 17 A. Yes.
 18 Q. Down at line 22 of that page, Mr. O'Reilly.
 19 Actually, you can scroll right so you start to
 20 get to 22, yes, that's good. You state, "We
 21 recognize the difficult challenge the Board
 22 must overcome. On the one hand it would serve
 23 no one to micro manage Hydro and on the other
 24 hand, the Board must meet its legislative
 25 responsibility to review and approve Hydro's

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1 utility communications architecture, for
 2 putting SCADA systems in IP networks?
 3 A. No, ma'am, I'm not.
 4 Q. Are you familiar with the protocol established
 5 by the IEEE Power Engineering Society for
 6 having SCADA on IP networks?
 7 A. No, ma'am, I am not.
 8 Q. Are you familiar with the fact that there are
 9 a number of utilities who currently have SCADA
 10 and IP networks?
 11 A. No, I'm not. But as I said yesterday, you
 12 could put it on an IP network, provided that
 13 you had some kind of guarantee of assurances,
 14 quality of service, necessary response times
 15 are met. And I mentioned one way of doing
 16 that is to put those circuits on an IP network
 17 that is not going to be in competition with
 18 other administrative data and other factors.
 19 But if you're going to change protocols and
 20 use a different protocol, then you would not
 21 be using an IP protocol, would you.
 22 Q. Yes, and I guess you're not familiar with the
 23 work then that's been done by IEEE showing the
 24 cost benefits of doing that, particularly
 25 putting SCADA on IP then, are you?

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1 capital program and provide regulatory
 2 oversight. In this review, I strived to avoid
 3 second guessing Hydro's decisions and limit my
 4 comments to issues relating to the Board's
 5 responsibility for informed judgment." Could
 6 you give me your general comments first on
 7 where you see the tide zone between those two
 8 concepts, one of micro managing which you seem
 9 to agree is not the role of the Board, to the
 10 regulatory oversight. And you describe it as
 11 reviewing and approving a capital program as
 12 is the subject matter in this hearing. How
 13 does the Board in an operational sense in its
 14 own operations arrive at where that spot is in
 15 a given project. Would you say it's on a
 16 project by project basis or is it a measure of
 17 an entire capital project or budget or so on?
 18 A. That's a very difficult question. It could be
 19 done on a project by project basis or possibly
 20 it could be done at a very high level looking
 21 at the overall capital budget and not
 22 reviewing specific projects. The benefit of
 23 that approach in my mind would be that it puts
 24 more of a burden on Hydro to be responsible
 25 for the prudence of its individual projects,

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1 which as we've seen from the survey we tried
 2 to conduct across Canada that that's typically
 3 how most jurisdictions oversee the capital
 4 budgeting process of the utilities is not
 5 through review and approval of the specific
 6 budget, but rather, allowing that issue to be
 7 dealt with in a general rate case. Here in
 8 Newfoundland it's unique in that there's
 9 legislative responsibility or legislative
 10 rules that have shifted some of that
 11 responsibility to the Board. If you're
 12 looking at the budget from a very high level,
 13 you know, in totality, then that would be more
 14 like the traditional approach of just allowing
 15 it to be handled as part of the general rate
 16 case process. Whereas if you're going to
 17 start looking at it project by project, now I
 18 think that that's where we might have some
 19 problems or at least the intervenors have some
 20 concerns that you can't tell from the
 21 individual projects if the prudent thing is
 22 being done. And if the Board is going to take
 23 a look at the individual projects by project
 24 and approve them individually, then the
 25 burden, some of the burden or some of the

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1 line 14. Page 1, there you go, line 14, you
 2 can just scroll down. Yes, that full
 3 paragraph there. Mr. Barreca, this is a
 4 description of the capital budget as submitted
 5 by Hydro and then it breaks it down by
 6 division. It's indicated here in the
 7 paragraph that of the 34.5 million dollar
 8 budget, line 16, there, approximately 5. 1
 9 million or 15 percent of it, and I'm going to
 10 abbreviate this paragraph. It's TRO--sorry
 11 Hydro's--the thermal and hydro plants, so
 12 generation. TRO accounts for 12.2 million or
 13 35 percent and general properties is 16. 2
 14 million of which 2.4 is for vehicles and then
 15 the rest is the communications and IT. Okay.
 16 I'm just wondering, would you see as part of
 17 an analysis of the budget, it being beneficial
 18 to look at the trends or percentages of
 19 expenditures in a given area for the utility.
 20 So, for instance, is there any rational
 21 benefit achievable by looking at the splits
 22 inside the budget on a per division basis
 23 within a utility like this?
 24 A. You mean similar to the way Mr. Roberts has -
 25 Q. Yes, would that be helpful, in your view, in

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1 responsibility for the capital budget does
 2 indeed shift to the Board, because now they
 3 are approving it and so in approval of that,
 4 they are giving testament to the economic
 5 prudence of the project, at least to some
 6 extent. So my opinion is that if you're going
 7 to do it project by project, if the Board is
 8 going to approve the budget project by
 9 project, then we have to have some discipline
 10 in regards to how the budgets are classified
 11 and documented so that you indeed can make a
 12 judgmental decision or an informed judgemental
 13 decision as to whether or not it's prudent to
 14 proceed with the capital initiative.
 15 (9:34 a.m.)
 16 Q. I guess, would you agree that there's at least
 17 some risk inherent in reviewing Hydro's
 18 capital budgets or any utility's capital
 19 budgets on a project by project basis of
 20 missing the forest because you're staring so
 21 closely at the trees?
 22 A. Absolutely.
 23 Q. I'm wondering if we could just go, Mr.
 24 O'Reilly, to the capital budget application
 25 itself, Mr. Roberts' direct testimony, page 1,

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1 an analysis of the budget's overall prudence?
 2 A. I think it would be. I think if we just took
 3 the classifications that Mr. Roberts has laid
 4 out here and you saw historical perspective on
 5 what the capital expenditures have been, I
 6 think that would be helpful to the Board. If
 7 you see one category jump way up or drop way
 8 down, that would be a cause for concern and
 9 also I think just having the historical
 10 perspective there would probably in and of
 11 itself result in additional documentation from
 12 Hydro when there was a significant change in
 13 the trends.
 14 Q. So we might see, for instance, that in the
 15 case of the telecommunication and IT division,
 16 if you will, of the budget, that that could
 17 jump in a given year as a result of a special
 18 project that Hydro is undertaking, the
 19 microwave interconnect or in this case, say
 20 the VHF project.
 21 A. Yes.
 22 Q. So we have to be mindful of that as well when
 23 we're looking at even an analysis from a
 24 divisional level to determine the
 25 reasonability of the budget.

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1 A. Yes.
 2 Q. And you used the word "prudence" a number of
 3 times in your testimony. And there's a
 4 principal in regulatory oversight, regulatory
 5 principals of accounting which would imply
 6 that in certain instances the utility is
 7 afforded a presumption of prudence when it's
 8 made its decisions. I'm wondering whether, in
 9 your view, a utility such as Hydro should be
 10 given the benefit of the doubt, if you will,
 11 and that a presumption of prudence apply to
 12 its decision making, which is reviewable, but
 13 nonetheless a presumption that they've acted
 14 in a prudent manner first?
 15 A. I guess the conflict that I have in my mind
 16 again deals with the level of review and
 17 approval authority of this Board. If there
 18 was no review and approval authority of the
 19 Board, you know, I would say then by all means
 20 afford Hydro the presumption of correctness or
 21 the presumption of prudence. I'm not an
 22 expert at the legislative responsibilities
 23 that the Board has here in Newfoundland. If
 24 there is a presumption that the Board's
 25 approval is a testament to the prudence of the

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1 Q. And if it's beyond your own, I'd suggest that
 2 it's certainly beyond mine. I can't imagine
 3 it's beyond the Panel's, but--in deference.
 4 But just foolishly thinking that it might be
 5 at a moment, clearly that makes it very
 6 difficult to conduct a meaningful project by
 7 project detailed technical analysis of
 8 anything that Hydro puts forward as part of
 9 its budget application, correct?
 10 A. I would certainly agree with that. Although,
 11 I tried not to second guess them, you know,
 12 certainly to some extent I did. But when I
 13 did, it was to make a more general point in
 14 that deals with the project descriptions in
 15 that the project descriptions, you know, in
 16 some cases there was essentially no economic
 17 justification given which, to me, you know,
 18 you're either going to approve it on blind
 19 faith, and if that be the case, then maybe we
 20 shouldn't even be here, none of us. And if
 21 the Board were to approve Hydro's budget on
 22 blind faith, perhaps that would be a way to
 23 shift all the responsibility back to them and
 24 be more consistent with the rest of the
 25 jurisdictions in Canada. However, if the

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1 project, then I think it would not be quite
 2 appropriate to afford all of the--to afford
 3 total presumption of prudence to Hydro since
 4 the Board has to make the decision. But if
 5 it's more of a review than approval
 6 responsibility of the Board, then I would lean
 7 toward giving them the presumption of
 8 prudence. So I don't know that helps.
 9 Q. You--I suggest by virtue of the difficulty in
 10 almost answering that question that it speaks
 11 to the difficulty of how far down into the
 12 trenches does the Board get when reviewing
 13 individual projects?
 14 A. Yes, it certainly does.
 15 Q. If we take, for instance, the VHF project,
 16 it's a particularly technical project?
 17 A. Yes, sir.
 18 Q. In its scope and nature?
 19 A. Yes, I would agree.
 20 Q. Clearly, trying to second guess as, to put it
 21 in your words, Hydro's decision making on a
 22 project such as B-71 would require someone
 23 with a skill set similar to your own?
 24 A. It would require someone with a skill set
 25 beyond my own.

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1 Board is going to review, then at least let's
 2 see some structure and discipline in the
 3 project, not to get into the details of second
 4 guessing them as to a central switch versus a
 5 discriminant switching architecture. I
 6 certainly don't want to do that. But perhaps
 7 if we had more consistent and maybe adopt some
 8 standards regarding the economic analysis
 9 that's provided, that would give the Board the
 10 ability to look at it, know exactly what's
 11 being done or, you know, in a general sense
 12 see the economics associated with it, afford
 13 them the presumption of correctness in their
 14 selection of alternatives in details and go
 15 ahead and approve the project. But it would
 16 also give them the ability to perhaps question
 17 some discretionary projects that are not
 18 needed to maintain the operations of the
 19 business, but they do add value to the Company
 20 and to the consumers of their system. It
 21 gives them the opportunity to look at those
 22 and if that happens to be a year when the
 23 budget is higher than the trends indicate, the
 24 question, well, maybe can we defer this one.
 25 Q. So if I gather your evidence correctly and

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1 your position in general, is that your main
 2 beef, if you will, with the budget application
 3 as proposed, in the manner that it's proposed,
 4 is that in some instances the projects cover,
 5 as you've described it, both essential and
 6 nonessential elements to it, aspects of an
 7 overall project that you feel would be easily
 8 warranted because of their essential nature
 9 involving safety or reliability, for instance,
 10 but that there are other aspects of the budget
 11 which are more discretionary in nature and
 12 that you can't sift between the two of them?
 13 There's no way to separate the wheat from the
 14 chaff from your perspective, because of the
 15 level of documentation provided?
 16 A. Yes, sir, that's how I felt.
 17 Q. But in a project like the VHF replacement
 18 project, B-71, that's not one of those
 19 examples, is it? It's a case of this is--
 20 there's no discretionary item in there? If
 21 you take the assumption that the VHF systems
 22 needs to be replaced, well, then, it's no
 23 longer discretionary, so now we're dealing
 24 with a particular objective that's being
 25 achieved with the whole project?

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1 extra flexibility afforded to the utility so
 2 that they can get the best price to
 3 performance ratio at the moment that they go
 4 to the supplier, that the technology is
 5 changing so fast that it requires that
 6 flexibility?
 7 A. Yes, I would agree with that.
 8 Q. The other question I was going to ask you is
 9 that in the case of--again, using B-71, that
 10 we're doing a replacement of VHF system,
 11 presumably it's going to have--the new system
 12 will have a expected life of something similar
 13 to the existing ones, say, 15 years. This
 14 also creates somewhat of a dilemma, doesn't
 15 it, where you're buying technology that is
 16 subject to rapid change and yet, what you're
 17 buying, because of its size, scope and
 18 expense, it's something that you've got to
 19 live with for the next 15 years?
 20 (9:49 a.m.)
 21 A. Yes. And that's a caution and concern that I
 22 personally have with this. But you know,
 23 that's not reflective of anything
 24 inappropriate on Hydro's part. It's just in
 25 general, you know, we do have a lot of things

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1 A. That's correct. That one is a concise project
 2 dealing with primarily non-discretionary--I
 3 say primarily because the aspect of expanding
 4 it could be considered discretionary, but we
 5 could address that within the same project
 6 with separate little, you know, economic
 7 analysis or perhaps if it is a significant
 8 inconvenience to the line crews maybe even
 9 without economic analysis that, you know, we
 10 just can't function, you know, with people on
 11 the hilltops relaying calls. But that portion
 12 of it is a small portion of it and that would
 13 be discretionary, but the bulk of the project
 14 would not be.
 15 Q. Just while we're on B-71, I asked one of the
 16 Hydro witnesses about the sort of best
 17 scenario thinking in the case of a project
 18 involving--that's technical in nature, as is
 19 B-71, and that you're always chasing the
 20 technology, if you will, trying to get the
 21 best price to performance ratio at the given
 22 moment where you go to tender, where you
 23 actually buy. So would you agree with the
 24 proposition that in the case of technical
 25 projects like B-71 that there needs to be

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1 changing in this field, and so exactly what
 2 you're saying should be a cause of concern.
 3 Q. And in that instance if I was Hydro and I was
 4 looking at needing to replace my VHF system,
 5 leaving everything else to the side, I could
 6 try to hedge my risk on technical obsolescence
 7 by leasing systems as opposed to buying
 8 systems, correct?
 9 A. Yes, that's a standard consideration that most
 10 people--a lot of companies look at, especially
 11 in high tech areas where things are changing
 12 rapidly.
 13 Q. That by leasing a system or technology,
 14 whatever it is, that I'm now down loading the
 15 risk of technical obsolescence on whoever
 16 ultimately is the owner of that equipment?
 17 A. That's correct. And you can structure those
 18 leases sometimes so that your leasing
 19 capability and functionality as opposed to
 20 leasing equipment and then as long as you, the
 21 consumer, get the services that you desire,
 22 you don't recall care how they accomplish it.
 23 Q. And so, in the case of where ownership of a
 24 technology or a system is being put forward as
 25 an objective, as is the case in B-71, that's

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1 something that should be taken into account,
 2 that the risk of technical obsolescence is
 3 coming with the ownership?
 4 A. Yes, sir.
 5 Q. Mr. Roberts' testimony included reference to
 6 using collars or financial indices for what an
 7 appropriate level of a capital budget is. He
 8 was cross-examined on this point by counsel
 9 for the Industrial Customers. And it's
 10 actually--Mr. O'Reilly, it's at page 4 of Mr.
 11 Roberts' direct testimony. This is the
 12 guideline that he refers to, Mr. Barreca.
 13 Right there on line 1, the guideline that has
 14 been used for several years is that the
 15 capital program should not normally exceed
 16 cash flow from operations that consist
 17 primarily of net income depreciation and some
 18 other non cash items. Then the target for the
 19 last couple of years has been to keep our
 20 capital expenditures to the level of
 21 depreciation, which is 34 million for 2004.
 22 He described the depreciation expense being 34
 23 million and then that would be the bottom of
 24 the range and then top end of the range would
 25 be the net income depreciation and then some

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1 rapidly than I probably should have been. So
 2 those things can influence the level of
 3 depreciation, how fast you've been
 4 depreciating in the past. And so, you could
 5 be in a situation where your current level of
 6 depreciation probably should be higher or
 7 lower, and so that would influence whether or
 8 not you want to--how firm that target should
 9 be. In addition, you have to look at growth.
 10 If you're in a growing economy requiring the
 11 additions of new plant, you would expect that
 12 you would out spend your depreciation,
 13 assuming your current depreciation level is
 14 appropriate and where it should be. Then you
 15 would expect that if I'm in a high growth
 16 area, that I need to--in all likelihood, I
 17 would need to out spend my depreciation to
 18 accommodate the new stuff, not just replace
 19 the imbedded stuff. And then I think the
 20 third factor that comes into play in dealing
 21 with that particular target had to do with
 22 technological change. If you're in an
 23 industry that is facing a major technological
 24 change, you may have to greatly exceed your
 25 current depreciation levels or your internal

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1 non cash items?
 2 A. Yes. But basically he's saying that the
 3 target is to be internally financed.
 4 Q. Correct. So would the use of such an indicia-
 5 -well, let me ask you this question first.
 6 Have you, in your travels, come across
 7 utilities or companies in general using
 8 similar indices to measure the prudence of its
 9 overall capital budget?
 10 A. Yes. I think as a general rule of thumb most
 11 utilities that I have been acquainted with
 12 over the years do consider being internally
 13 financed to be an objective. As Mr. Roberts
 14 pointed out, it needs to be treated as a rule
 15 of thumb. There are other factors that you
 16 have to consider, for instance, your past
 17 depreciation rates, were they higher than they
 18 should be or lower than they should be. And
 19 by should be I mean were they higher than what
 20 you eventually realized it should be. In
 21 other words, I made my economic lives, my
 22 depreciation lives, I guess at them that they
 23 were--I said--I used a 12 year life and it
 24 turned out the life was actually 15. Well, I
 25 would have been accruing depreciation more

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1 financing levels. A power utility does have
 2 technological change, as we saw in all these
 3 telecommunication projects. The kind of
 4 technological change that I'm talking about
 5 would be technological change similar to what
 6 telecommunication companies faced in the early
 7 90s where they had a metallic cable based
 8 analog network and they had a move to a fibre
 9 optics digital network, and also going from
 10 narrow band demand to broadband demand. This
 11 meant a major change in all of their
 12 infrastructure or the vast majority of their
 13 infrastructure, and that put pressure on
 14 capital budgeting in that they needed to spend
 15 a lot of money. I do know that the telephone
 16 companies tried very hard to stay internally
 17 financed, but when you're faced with that, I
 18 don't know that you can. So there are factors
 19 you have to consider in dealing with that
 20 particular target, but in general, that is a
 21 target that most utilities utilize, certainly
 22 all the ones that I'm familiar with utilize,
 23 and they treat it as Mr. Roberts suggested, as
 24 a rule of thumb.
 25 Q. So your example of a disruptive technology

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1 causing stranded assets is not something that
 2 would necessarily imply (sic.) directly to
 3 Hydro except insofar as that they do have a
 4 telecommunications part of their operations,
 5 for instance?
 6 A. Yes.
 7 Q. I guess, too, that there's in the case of a
 8 utility like Hydro, which is the main
 9 generator on the island, that sometimes
 10 generation projects such as one that's about
 11 to come on stream, Granite Canal or of such a
 12 size, that that's going to bring them, from a
 13 budgetary perspective, way offside of this
 14 rule of thumb guideline?
 15 A. Absolutely.
 16 Q. But generally, you would cotton to the idea of
 17 using financial indices of some sort in order
 18 to be able to see whether the budget is coming
 19 in at a reasonable level?
 20 A. Yes. I think it would be--it certainly would
 21 be appropriate to incorporate those type of
 22 indices into your decision making.
 23 Q. And is the one that Hydro is using, as
 24 detailed by Mr. Roberts there at page 4 of his
 25 testimony, in your view, a reasonable indicia

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1 discretionary in that if it needs to be done,
 2 it's critical, we have to do it.
 3 Q. Okay. Mr. Kennedy was asking you also about
 4 the notion of the presumption of prudence and
 5 so on, and you said that that was a concept, I
 6 think, that you had come across. Have you
 7 dealt previously with capital budgeting in a
 8 jurisdiction where the legislation required
 9 enforcement of the least cost alternative?
 10 A. I don't think so. However, I do know that in
 11 some of the jurisdictions that I was involved
 12 with when I was working at Bell South we were
 13 required, not by legislation, but by
 14 regulatory rules issued by the public service
 15 commissions to do the most economical. And
 16 so, that's somewhat related to what you're
 17 talking about. But I haven't worked with a
 18 jurisdiction that I know of where it was
 19 mandated that the least cost alternative be
 20 selected, at least not to my knowledge.
 21 Q. Okay. And just getting back to one point that
 22 Ms. Greene was discussing with you, there was
 23 reference to the SCADA system which I believe
 24 Mr. Downton told us was supervisory control
 25 and data acquisition. Now, is that a system

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1 to use, a collar to use?
 2 A. Yes. In the context at which he said it
 3 should be considered, I would agree.
 4 Q. Okay. That's all the questions I have, Chair.
 5 Thank you, Mr. Barreca.
 6 A. Thank you.
 7 CHAIRMAN:
 8 Q. Thank you, Mr. Kennedy. Mr. Hutchings,
 9 anything on redirect?
 10 MR. STEPHEN BARRECA RE-EXAMINATION-IN-CHIEF BY HUTCHINGS,
 11 Q.C.
 12 HUTCHINGS, Q.C.:
 13 Q. Just a couple of points, Mr. Chair. Mr.
 14 Barreca, Mr. Kennedy was asking you about the
 15 VHF project and you indicated that the bulk of
 16 that project was not in itself discretionary.
 17 Would the timing of that project be
 18 discretionary?
 19 A. Yes. Yes, the timing would be discretionary.
 20 How you achieve--how you achieve the objective
 21 would be discretionary in that you'd have to
 22 consider the alternative seeking the low cost
 23 or the most efficient alternative. I mean,
 24 that's a discretionary portion of it. But in
 25 general, the project is somewhat non-

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1 that generates or transmits electrical power
 2 or is that a communication system?
 3 A. To my knowledge, it's a communication system.
 4 Q. Yeah, that's what I thought. Thank you, sir.
 5 That's all I have, Mr. Chair.
 6 CHAIRMAN:
 7 Q. Thank you, Mr. Hutchings. Mr. Martin? Mr.
 8 Powell.
 9 MR. STEPHEN BARRECA, CROSS-EXAMINATION BY COMMISSIONER
 10 DONALD POWELL
 11 COMMISSIONER POWELL
 12 Q. I have a couple of comments. Thank you, Mr.
 13 Barreca. Obviously a person with quite a few
 14 expertise and skills. Interested--when legal
 15 counsel was questioning our expertise in
 16 communications and technology, I was smiling
 17 to myself because my greatest fame to those
 18 expertise is that I didn't buy a Beta, I
 19 bought a VHS. And I have friends of mine that
 20 keep wondering whether I have some expertise
 21 that--it's just like trying to pick the stock
 22 market, I guess, in telecommunications. You
 23 can get a whole lot of experts to tell you
 24 where you should go and then after the fact
 25 you'll know exactly where you're going. My

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1 question, like, the issue on the communication
 2 thing, this is more of a communication issue
 3 as opposed to a hydro electrical issue, is it
 4 not, the VHS (sic.) and--these things are more
 5 common to the communication industry as
 6 opposed to the part of providing--all the
 7 tools of providing least cost electricity.
 8 But the VH system, they're more of a
 9 communication issue as opposed to -
 10 A. Yes, I agree. I agree that they're more a
 11 communication issue. But as you pointed out,
 12 they are integrated into the delivery of the
 13 power services.
 14 Q. Obtaining a proper analysis of, from our
 15 perspective, the VHS--VHF system, you would
 16 seek out people with expertise in
 17 telecommunication as opposed to experts in
 18 hydroelectric?
 19 A. Yes, sir. I think it would certainly be
 20 prudent to do that.
 21 (10:04 a.m.)
 22 Q. The other area there reading through your
 23 testimony, that I gather the question is more
 24 of documentation rather than it's right or
 25 wrong or whether it--it was some question the

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1 use your expression, and it probably only
 2 would have confused the Panel more than it
 3 would have helped. So based on your
 4 experience, is there--and if Hydro is
 5 anticipating that problem, you know, how much
 6 sizzle and how much beef you get, would there
 7 be any group that Hydro could sent that plan
 8 off to come back and give the Board assurances
 9 that that's the way to go or is this just one
 10 of those judgmental things that we rely on
 11 their best effort and they've done their
 12 homework?
 13 A. If I understand your question, you're saying
 14 is there a group that Hydro could send their -
 15 Q. Yes.
 16 A. - project proposal to that could then go and
 17 evaluate -
 18 Q. Yeah. As respect to the telecommunication
 19 part and not the -
 20 A. No, sir -
 21 Q. Or would you always have that problem? If we
 22 could bring in five different experts and we'd
 23 get five different opinions and then we'd--
 24 faced with the dartboard mentality in the
 25 sense of -

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1 IRU's, I think, whether they existed, but from
 2 your perspective of the process in terms of
 3 documentation?
 4 A. Yes, sir. My principal point is a
 5 documentation issue. To be quite frank, I
 6 don't--I can't make a judgment on any of these
 7 projects, whether they're right or wrong. My
 8 main point is that in many of these projects
 9 that I looked at, I could not tell from the
 10 documentation if it was a good project or a
 11 bad one. I could not tell. In some cases
 12 there was no--very sketchy economic analysis.
 13 And in some cases I thought they were throwing
 14 out terms and stuff, internet, integrated
 15 systems or platforms, whatever, and all that
 16 sounds wonderful, but where's the beef, you
 17 know, where's the meat of it, why should I
 18 approve this expenditure? And in some cases I
 19 have very difficult--I personally had
 20 difficulty in trying to see if I was in your
 21 position, could I approve this or not. That
 22 was my beef, was primarily documentation.
 23 Q. Also I think as legal counsel just mentioned,
 24 that Hydro could have come in here and they
 25 could have laid down an awful lot of beef, to

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1 A. Yes, just confuse the issue even more, yes.
 2 What I was trying to suggest, with respect, I
 3 was trying to suggest to the Board was that
 4 there are a couple of things the Board could
 5 do that would not necessarily overburden Hydro
 6 or the Board, especially with a lot of detail
 7 and minutia, would be to establish some
 8 classification for budget items. And I used
 9 the Manitoba, I used their three
 10 classifications. I think Mr. Roberts,
 11 although he was answering a different
 12 question, he has suggested safety is number
 13 one. I believe next was legal and
 14 legislative--legal and regulatory compliance,
 15 followed by maintaining the operations of the
 16 business. I think the last one, although he
 17 never put a term on it, I think probably was
 18 more discretionary, something along those
 19 lines as far as classification. I think in
 20 and of itself just having the classification
 21 is going to improve the documentation. But we
 22 could argument--augment that with one
 23 additional clarification in that for some of
 24 these items that are routine in nature, like
 25 handling new growth or movement of customers

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1 from one area to another in the normal
 2 replacement of the operations we wouldn't--the
 3 Board may not require an economic analysis,
 4 but maybe a historical track record of
 5 movement or growth versus capital
 6 expenditures. For safety and maintaining
 7 legal and regulatory compliance, you don't
 8 have to have an economic analysis that tells
 9 you you have to do it, because we know we have
 10 to do it. The only thing you have to see is
 11 some support for the least cost option that
 12 they've selected. And then going down the
 13 list to the last one, the discretionary type
 14 expenditures where it's not necessary but it
 15 does improve the efficiency of the operation
 16 in some way, it's additional spending so give
 17 us the economic justification for making the
 18 additional spending. I think those two
 19 things, by having--by subdividing the projects
 20 into classifications and then trying to
 21 outline the type of justification that the
 22 Board would like to see for each
 23 classification, that would, in my mind, it
 24 would greatly enhance the process without
 25 putting you in a position of having to go

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1 Q. Getting back to our telecommunication which
 2 is--and the upgrading electric control centre
 3 and other IT initiatives that's in this
 4 budget, going back to my Beta/VHS, these are
 5 sort of decisions sometimes you got to go
 6 ahead a few years before you find out whether
 7 you've gone down the right path or not. And
 8 even then I probably get 100 tapes, another
 9 year, I'm not going to be able to play them
 10 anyway, so. By the end of the scheme of
 11 things, I probably did make the right
 12 decision. I should have waited 20 years and I
 13 would have been up to date. So, you're always
 14 going to have to make those decisions and
 15 hopefully if you fall into a hole, it's not
 16 too big, but given the market now from what
 17 you read and being informed, probably not the
 18 level that Hydro is, but low interest rate
 19 environment, right time, if you had to spend
 20 money beyond your depreciation model Mr.
 21 Roberts suggested would be the time, would
 22 appear to be the time to be doing this. The
 23 tech industry is in a bit of a valley in terms
 24 of--there seems to be more sellers or
 25 expertise out there looking for--if you're

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1 through all the technical details or examine
 2 all the technical details and also allow you
 3 not to stray too far into micro managing
 4 Hydro's business, which I think would be a
 5 mistake. So I think that we can do something
 6 that would improve the process significantly
 7 without going to the extreme of seeing all the
 8 details and having to have consultants like
 9 myself hired to come out here and talk to you.
 10 It'd be better if you didn't have to do that,
 11 and I would hope that going forward you
 12 wouldn't have to.
 13 Q. It's rare to find a consultant that's trying
 14 to talk himself out of a job. One other item
 15 there, you mentioned about adding value as an
 16 issue, I can't remember what context. When
 17 you used adding value, would that sort of be a
 18 coverall for increasing efficiency or -
 19 A. Yes, sir. In some way, shape or form you are
 20 adding value to the corporation by increasing
 21 efficiency or improving a process or providing
 22 a higher reliability or even providing more
 23 services, but in some way adding value to both
 24 the Company and the consumers of their
 25 services.

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1 going to venture, you decided you have to make
 2 that decision, wouldn't this be the
 3 environment, taking the risk on the other side
 4 that you probably would get value at a lower
 5 cost than you may get, say, three or four
 6 years ago when tech was booming and interest
 7 rates are higher or should that matter?
 8 A. Well, certainly, the interest rate, the timing
 9 of a discretionary project, the interest rate
 10 will impact that. I know myself I often did
 11 economic analysis that solely dealt with the
 12 timing of the discretionary project. Do I do
 13 it today, tomorrow, five years from now? And
 14 if the interest rate change, then the outcome
 15 of that analysis would change, moving the
 16 project either forward or backward in time.
 17 So, the interest rate certainly plays into the
 18 timing of discretionary projects. It's a
 19 little more difficult in dealing with the
 20 technological issue. Certain aspects of
 21 telecommunications, the market is certain
 22 depressed. There are indications that we're
 23 moving out of that, but it's certain depressed
 24 or has been for the last three years.
 25 However, even though the market for services

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1 has been depressed, the technologies have been
 2 evolving just as rapidly during the depressed
 3 period as they did prior to it. So, as far as
 4 timing to take advantage of technological
 5 issues, I don't know that this is any better
 6 time than any other time. It's a tough one
 7 that you have to deal with. I think, you
 8 know, the important considerations for a
 9 utility like Hydro, I think, is don't bet on
 10 proven technologies. Even to the point that
 11 you might spend a little bit more. I would
 12 tend to lean toward getting the newest proven
 13 technology. And that technology should be in
 14 service, should be operating at more than just
 15 one or two places so that you are confident
 16 that what you buy, even though it may be
 17 obsolete five years from now, but that what
 18 I'm buying is going to work and provide the
 19 functionality I need for the next 15 years or
 20 whatever the life cycle is going to be. So, I
 21 think it's a rule of thumb in a utility like
 22 Hydro, you wouldn't want to get on the leading
 23 edge. We used to use a term, the bleeding
 24 edge. If you want to be first with the latest
 25 and greatest, you're going to pay a price;

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1 all the IS&T projects and when they gave me
 2 the material, the VHS wasn't even mentioned.
 3 As a matter of fact, I was hesitant to even
 4 take the assignment, told them they needed to
 5 go find a consultant with more utility
 6 experience than myself, but I did agree to
 7 look it over, over a weekend, and respond back
 8 to them on the following Monday. And I don't
 9 recall the VHS project being mentioned at all.
 10 (10:19 a.m.)
 11 Q. Okay. Well then, that we're on the subject,
 12 in relation to the project and bearing in mind
 13 what you're expertise has been, do you have
 14 any comment in respect of the age of the
 15 system that Hydro has in place right now and
 16 the condition of it? Have you any familiarity
 17 with that at all?
 18 A. Yes and no, I'm not that familiar with VHS,
 19 mobile radio systems.
 20 Q. But you're only familiar with respect to the
 21 record that we have, the evidence that's been
 22 -
 23 A. Yes, I am.
 24 Q. Yes, you haven't done any examination of the
 25 system outside of what's taken place here in

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1 you're going to pay a price in service; you're
 2 going to pay a higher price in maintenance
 3 because the new technology always has bugs;
 4 you're going to pay a price in cost and other
 5 factors. So, you don't want to be on the
 6 bleeding edge, you don't want to be too far
 7 behind, but you want to buy the latest proven
 8 technology, I think, is a general rule of
 9 thumb.
 10 Q. My VHS system cost me almost \$2,000.00. Thank
 11 you.
 12 A. I bought a camera that cost \$1,500.00, it's a
 13 very nice digital camera and the very next
 14 year it was a \$1,000.00 cheaper.
 15 Q. That's all, Chair.
 16 CROSS-EXAMINATION BY MR. CHAIRMAN
 17 CHAIRMAN:
 18 Q. Okay, thank you, Mr. Powell. Mr. Barreca, in
 19 relation to the plan of Hydro which is
 20 basically stated in B71 and the VHF and mobile
 21 radio system. That is, I guess, primarily the
 22 reason you're here as opposed to the other
 23 elements of this budget, would that be a fair
 24 statement on my part?
 25 A. I don't know that. I was asked to consider

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1 this room?
 2 A. No sir, I haven't. It's a telecommunication
 3 system with switching equipment, controllers,
 4 repeaters. It's not totally foreign to me.
 5 You'd be surprised how common the life cycles
 6 are between this type of equipment and other
 7 types of telecommunication equipment. So,
 8 insofar as the age, the equipment is aged,
 9 there's no doubt about it. It's near at its
 10 average life expectancy. As I've noted, that
 11 doesn't necessarily mean that you need to
 12 replace the whole thing, but then it doesn't
 13 mean that you don't need to replace the whole
 14 thing. Certainly you had need to take a look
 15 at that.
 16 Q. And when you talk about and this, I think, was
 17 in response to a question on re-direct by Mr.
 18 Hutchings, that timing would be discretionary
 19 in relation to this project. What did you
 20 mean by that?
 21 A. What I meant was that we had, in my
 22 discussions, questioning, earlier I had
 23 conceded that it appears this is not a
 24 discretionary project in that it needs to be
 25 done, but the timing of what needs to be done

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1 is discretionary in the sense of, do I need to
 2 replace the whole thing now. Do I need to
 3 replace the switching controllers, one or two
 4 repeaters now or do I need to replace the
 5 whole thing now or maybe not do nothing now
 6 and replace the whole thing in 2005. That's
 7 what I meant by the timing is somewhat
 8 discretionary.
 9 Q. So, Hydro has determined, in their judgment
 10 that the system should be replaced now. Do
 11 you have any comment on that decision by
 12 Hydro?
 13 A. I guess my concern would deal with replacing
 14 all the repeater equipment, even though the
 15 repeaters are near the end of their or at the
 16 end of the average life, that doesn't
 17 necessarily mean that many of those repeaters
 18 could not provide adequate functional service
 19 for another ten years. If you're going to
 20 totally change the architectures, as they're
 21 suggesting may be done, and it forces you to
 22 replace all the repeaters, then you're
 23 spending all of the money up front. If you
 24 were to maintain the same or similar
 25 architecture, you could effectively replace

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1 Q. Mr. Hutchings?
 2 MR. HUTCHINGS:
 3 Q. I have nothing further, thank you, Mr.
 4 Chairman.
 5 CHAIRMAN:
 6 Q. Thank you, Mr. Barreca.
 7 A. Thank you for allowing me to speak before that
 8 Board.
 9 Q. We appreciate your testimony and it's been
 10 very informative and very enlightening and
 11 certainly gave us a lot of food for thought.
 12 A. Thank you, sir.
 13 Q. Thank you.
 14 A. I hope I get to come back here perhaps under a
 15 better circumstance.
 16 Q. Thank you. If you stay around for the rest of
 17 the week, you might see the caplin rolling
 18 down in Middle Cove. That's an experience in
 19 itself.
 20 MS. HENLEY ANDREWS:
 21 Q. And that much more fog.
 22 CHAIRMAN:
 23 Q. That's right. It's 10:25, a good place to
 24 probably do some kind of assessment of where
 25 we are. You have a panel to call consisting

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1 the components that are defective now and
 2 possibly defer replacement of other components
 3 until you had an indication that they needed
 4 to be replaced, however long into the future
 5 that was going to be. And so in that context,
 6 I do have some concerns about the whole thing
 7 now. I wasn't convinced in reading it that
 8 they had made a case, a strong case for
 9 replacing it all now. I just don't know. It
 10 may be that that is what needs to be done, I
 11 just don't know.
 12 Q. Okay. Thank you, Mr. Barreca.
 13 A. Thank you, sir.
 14 Q. Ms. Greene, any questions arising?
 15 GREENE, Q.C.:
 16 Q. No, Mr. Chair. Thank you.
 17 CHAIRMAN:
 18 Q. Mr. Hayes?
 19 MR. HAYES:
 20 Q. No, Mr. Chair.
 21 CHAIRMAN:
 22 Q. Mr. Kennedy?
 23 MR. KENNEDY:
 24 Q. No, Chair.
 25 CHAIRMAN:

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1 of Mr. Reeves and Mr. Martin, both of them are
 2 here?
 3 GREENE, Q.C.:
 4 Q. Yes.
 5 CHAIRMAN:
 6 Q. We'll now break for 15 minutes and that will
 7 give you an opportunity to set up the room for
 8 that. It looks probably that we may very well
 9 finish this by 1:30, is that a likelihood or
 10 am I being too optimistic.
 11 GREENE, Q.C.:
 12 Q. That's possibly doable, probably doable.
 13 CHAIRMAN:
 14 Q. Okay.
 15 MR. KENNEDY:
 16 Q. If you're not optimistic, Chair, then it's not
 17 hope for the rest of us to be.
 18 CHAIRMAN:
 19 Q. Well, let's aim at that and if we're going to
 20 have some difficulty, we'll know about it
 21 around 1:00 and then we'll deal with it.
 22 GREENE, Q.C.:
 23 Q. Yes.
 24 CHAIRMAN:
 25 Q. Thank you. 15 minutes.

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1 (BREAK - 10:25 A.M.)
 2 (RESUME - 10:44 a.m.)
 3 CHAIRMAN:
 4 Q. Okay, Ms. Greene, are you ready to proceed?
 5 I'll swear in the panel.
 6 MR. FRED MARTIN (SWORN)
 7 MR. DAVID REEVES (SWORN)
 8 CHAIRMAN:
 9 Q. Thank you. Ms. Greene.
 10 EXAMINATION-IN-CHIEF BY MAUREEN GREENE, Q.C.
 11 GREENE, Q.C.:
 12 Q. Thank you. Mr. Reeves, what is your current
 13 position with Hydro and what are the
 14 responsibilities of that position?
 15 MR. REEVES:
 16 A. My current position with Hydro is the Vice-
 17 president of Transmission and Rural
 18 Operations. I have responsibility for the
 19 operations, the engineering and the corporate
 20 environment as well. Under operations, I have
 21 responsibility for the three regions which
 22 span the full province, right from on the
 23 island and in Labrador, and they have
 24 responsibility for the transmission lines, the
 25 distribution lines, the standby generation and

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1 A. That's correct. For a number of Capital
 2 hearings and also for the last General Rate
 3 Application.
 4 Q. And I understand unfortunately this'll be your
 5 last appearance before the Board, at least for
 6 Hydro?
 7 A. That's correct, yes.
 8 Q. And that is because you've submitted your -
 9 A. I've submitted my resignation and I'm retiring
 10 the end of July.
 11 Q. And in fact, agreed to extend for this hearing
 12 at my request.
 13 A. Yes. I was debating whether it was June, but
 14 I extended to July.
 15 Q. When the hearing got postponed. Mr. Martin,
 16 what is your current position with Hydro?
 17 MR. MARTIN:
 18 A. I am currently the Director of Engineering and
 19 Transmission and Rural Operations.
 20 Q. And what are the responsibilities of that
 21 position?
 22 A. My group is responsible for the design,
 23 construction, and ongoing technical support of
 24 all of Hydro's transmission, distribution and
 25 generation systems, diesel generation. We are

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1 the isolated diesel plants.
 2 Q. How long have you been in your current
 3 position?
 4 A. I've been in my current position approximately
 5 eight years.
 6 Q. How long have you been with Hydro?
 7 A. I've been with Hydro in excess of thirty-one
 8 years.
 9 Q. And what positions have you held prior to your
 10 current position?
 11 A. Back in 1972, when I joined Hydro, I was a
 12 graduate engineer in a two-year training
 13 program. I moved to Bay D'Espoir where I
 14 eventually became the plant superintendent,
 15 which is the equivalent to manager today,
 16 where I had responsibility for hydro
 17 generation. In 1985, I went to Churchill
 18 Falls as a vice-president of operations and
 19 engineering. And in 1991, I moved back to St.
 20 John's as the vice-president of engineering
 21 and construction, and other duties. And in
 22 1995, I became in my current position.
 23 Q. And, Mr. Reeves, you've appeared before this
 24 Board on a number of occasions? Is that
 25 correct?

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1 also responsible for revenue metering
 2 activities and corporate drafting services.
 3 Q. How long have you been in your current
 4 position?
 5 A. I've been the Director of Engineering for
 6 seven and a half years.
 7 Q. How long have you been with Hydro?
 8 A. I've been with Hydro almost twenty-nine years.
 9 Q. And what positions have you held prior to your
 10 current position?
 11 A. I started as plant engineer in Bay D'Espoir in
 12 1971. From there I went to the Protection and
 13 Control Department in Bishop Falls. From
 14 there I became plant engineer at the Holyrood
 15 Thermal Generating Station. I've been the
 16 Senior Protection and Control Engineer in both
 17 the operations and engineering divisions. In
 18 1988, I became the manager of telecontrol, and
 19 in November, 1995, I took the position of
 20 Director of Engineering.
 21 Q. And in August 1 of this year, you will assume,
 22 be promoted to Mr. Reeves' current position?
 23 Is that correct?
 24 A. Please God, I will.
 25 Q. So the Board will see you on future occasions?

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1 A. I hope so.

2 Q. Mr. Reeves, specifically looking at the 2004

3 Capital Budget, Mr. O'Reilly, if we could

4 bring up page A-1 on the screen, please. On

5 page A-1, there's a high level summary of the

6 2004 Capital Budget. Mr. Reeves, could you

7 indicate what are the areas of responsibility

8 shown on page A-1 that you are responsible

9 for?

10 MR. REEVES:

11 A. I have responsibility for the transmission and

12 rural operations, a budget of \$12.1 million in

13 2004. Also, under general properties, it's

14 not broken out here, but it will be later, I

15 have responsibility for the vehicles of \$2. 2

16 million of the \$16.2 million.

17 Q. Now if we turn to page A-2 of the Application,

18 is it correct, Mr. Reeves, that you are

19 responsible for all the headings shown under

20 the main heading of Transmission and Rural

21 Operations?

22 A. That's correct.

23 Q. Totally \$12.1 million, \$12.2 million?

24 A. That's correct, yes.

25 Q. Now if we could turn to page A-3? What

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1 A. Yes, I was.

2 Q. And do you accept those as your evidence for

3 the purpose of this hearing?

4 A. Yes, I do.

5 Q. And similarly, with respect to the pre-filed

6 evidence, was this prepared with your input

7 and direction?

8 A. It was.

9 Q. And do you accept this evidence as your

10 evidence for the purposes of the hearing?

11 A. I do.

12 Q. Mr. Reeves, I wonder if you could briefly

13 outline what is your role as a vice-president

14 of transmission and rural operations in the

15 Capital Budget process at Hydro, up to the

16 approval stage and then after, once it's

17 approved by this Board?

18 MR. REEVES:

19 A. The Capital Budget process starts in the

20 regions and in engineering and also in

21 planning with respect to our projects. The

22 projects are developed either by asset

23 managers or engineers for improvements related

24 to reliability, safety, and they bring forward

25 those to their regional managers or to the

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1 heading are you responsible for on page A-3,

2 Mr. Reeves?

3 A. I'm partially responsible under the heading of

4 administrative, the \$2.3 million. Vehicles is

5 a portion of that of \$2.2 million.

6 Q. Mr. Reeves, in section B to the Application,

7 project justifications are provided for

8 projects over \$50,000 that are in the areas of

9 responsibility that we just reviewed. Were

10 those project justifications prepared under

11 your direction?

12 A. Yes, they were.

13 Q. And do you accept these as evidence for the

14 purposes of the hearing?

15 A. Yes, I do.

16 Q. Pre-filed evidence was filed for the

17 transmission and rural operations panel in May

18 of 2003. Do you accept that as your evidence

19 for the purpose of this hearing, Mr. Reeves?

20 A. Yes, I do.

21 Q. Mr. Martin, were you involved in the project

22 justifications provided in Section B of the

23 Application for those projects within

24 transmission and rural operations?

25 MR. MARTIN:

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1 Director of Engineering. It is reviewed at

2 that point in time and the information is then

3 consolidated and it is reviewed by myself and

4 our directors in TRO, and we go through all of

5 the projects to determine which ones we will

6 bring to management. These are all then

7 consolidated as part of the Hydro budget and

8 it is presented to management and I, along

9 with my staff, support, justify these to

10 management, and as I said a second ago, these

11 are based on safety, environmental,

12 reliability and possibly cost effectiveness,

13 if there are any that apply.

14 Q. And once the budget is approved, what will be

15 your role?

16 A. Our role, once the budget is approved, is to

17 ensure that these projects are implemented as

18 they are recommended and that the dollars are

19 spent accordingly as we're approved.

20 Q. And Mr. Martin, as director of engineering,

21 what role did you play in the preparation of

22 the 2004 Capital Budget?

23 MR. MARTIN:

24 A. In addition to, as Mr. Reeves said, developing

25 some of the actual proposals themselves, my

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1 group is responsible for preparing the Capital
 2 Cost estimates, the cash flow schedules and so
 3 on, as well as looking at any potential
 4 alternative there may have been to the
 5 project. I am then responsible with the
 6 review of the overall budget package with the
 7 regional managers and Mr. Reeves prior to it
 8 going to the management committee for
 9 approval.
 10 Q. Turning now then to page A-6 please of the
 11 Capital Budget application, Mr. O'Reilly.
 12 There are two projects there under
 13 transmission. The first, upgrade TL-214 in an
 14 amount requested for 2004 of \$2.8 million. I
 15 wonder, Mr. Martin, if you could give a brief
 16 overview of that project please?
 17 A. Yes. This is a project that we intend to
 18 undertake to resolve significant problems that
 19 we've assessed with transmission line TL-214.
 20 It's a 138 kV line that goes from Bottom Brook
 21 Terminal Station to the Doyles, Port aux
 22 Basque area. An assessment that was completed
 23 in 2002 indicated there were problems with the
 24 original design because of the criteria that
 25 had been used. This project will resolve

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1 A. Yes, this is a recurring project that we've
 2 had in our budget forever, I guess, it's to
 3 look after the low growth that we have in our
 4 rural systems. It's for new customers,
 5 service extensions and street lighting.
 6 Q. The next one there is upgrade distribution
 7 systems in the amount of \$1.5 million for
 8 2004. Is this a similar type project to the
 9 one you just described on service extensions?
 10 A. That's correct. This is again a recurring one
 11 and it's to look after the replacement of
 12 equipment that we find to be defective during
 13 our maintenance inspections, either
 14 deteriorated poles, damaged conductors. It's
 15 also used after say lightning storms to
 16 replace transformers which are abnormally--
 17 sorry, which are replaced due to higher than
 18 normal failure rates.
 19 Q. The next project there under distribution is
 20 pole replacement of just under a million
 21 dollars for next year, in 2004. Mr. Martin,
 22 could you describe that project please?
 23 MR. MARTIN:
 24 A. Yes. This is a project that's intended to
 25 replace approximately 250 distribution poles

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1 those problems by installing mid-span
 2 structures, looking at putting in extra creep
 3 insulators in areas where we anticipate salt
 4 contamination and replacing the CLB insulators
 5 that we've had a universal problem with in the
 6 electrical utility industry because of the
 7 cement growth problem.
 8 Q. The second project, under the same heading, is
 9 replace insulators on TL-233 in the amount of
 10 \$1 million for 2004. Could you please briefly
 11 describe that project, Mr. Martin?
 12 A. This is again a project to address the
 13 insulator growth problem that we've
 14 experienced with CLB insulators. It's the
 15 second last of our 230 kV circuits that have
 16 these insulators installed on them, and it's
 17 our intention to replace those next year under
 18 this Capital Budget.
 19 Q. Turning now to page A-7 of the Application,
 20 under the heading of Distribution, the first
 21 project there is provide service extensions in
 22 the amount of \$1.6 million for 2004. Mr.
 23 Reeves, could you please briefly outline what
 24 this project is?
 25 MR. REEVES:

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1 on two of our distribution systems, namely at
 2 Bottom Waters and the St. Anthony system.
 3 These have been identified through our
 4 preventative maintenance program as requiring
 5 replacement next year, and that's what that
 6 particular budget proposal covers.
 7 Q. The last project on that page that I'd like to
 8 ask you about is the next one, insulator
 9 replacement for \$945,000 for 2004. Mr.
 10 Martin, could you describe that project
 11 please?
 12 A. Yes. Again, this is a project that's intended
 13 to replace the CLB problem insulators that we
 14 have on three distribution systems, namely at
 15 Bottom Brook, Fleur de Lys and South Brook.
 16 Q. If we could now please turn to page A-10 of
 17 the Application? Under the heading of
 18 administrative, there are two projects
 19 described as replace vehicles, one for 2003
 20 and one for 2004. Mr. Reeves, could you
 21 please give an overview of the vehicle
 22 replacement program as described there?
 23 MR. REEVES:
 24 A. Yes. First of all, I guess, what we call
 25 2003, this was presented to the Board last

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1 year and it was to look after expenditure in
 2 2003, this year, for the vehicles that we
 3 could tender and purchase in this year. It
 4 was also to look after the vehicles that we
 5 would tender this year, but because of long
 6 delivery times, could not be received until
 7 next year. So that's the portion in 2004 of
 8 \$1.1 million. So that's the first one. The
 9 item which is titled 2004 is the same
 10 principle, but what we have in 2004 is the
 11 vehicles that we plan to buy next year, the
 12 ones that we can tender next year and to buy
 13 next year, and the second part of that is in
 14 2005 is for the longer delivery vehicles which
 15 we will tender for next year and not have
 16 delivery until the following year.
 17 (10:59 a.m.)
 18 Q. So I understood from your answer that because
 19 of long delivery times, you have to make a
 20 commitment in one year with the vehicle not
 21 arriving until the next year? Is that
 22 correct?
 23 A. That's correct, yes.
 24 Q. And what type of vehicles would they be?
 25 A. They would be typically our larger vehicles,

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1 project and I just have a few questions on
 2 B27, and this deals with the issue with the
 3 CLB insulators.
 4 MR. MARTIN:
 5 A. Right.
 6 Q. If I understand correctly from the operating
 7 experience information that's here, you have a
 8 preventative maintenance program which goes
 9 out and tests these devices and it is this
 10 testing that has shown up the four percent in
 11 2000 and six percent in 2001 as defective? Is
 12 that correct?
 13 A. That is correct.
 14 Q. Okay. Have there been any actual failures?
 15 A. Of insulators on that line?
 16 Q. Yes.
 17 A. Yes, there have.
 18 Q. Okay. And what does that entail if there is,
 19 in fact, a failure?
 20 A. If there are individual failures and they're
 21 found before they become a problem in a
 22 particular insulator stream, there is probably
 23 no problem. The problem is if you get a
 24 couple of these insulators that fail during
 25 switching or lightning or any other high

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1 like our line trucks, which are not off the
 2 assembly lines and that type of vehicle.
 3 Q. Thank you. That concludes my direct
 4 examination of the panel.
 5 CHAIRMAN:
 6 Q. Okay. Thank you, Ms. Greene. Mr. Hayes?
 7 MR. HAYES:
 8 Q. I have no questions, Mr. Chair.
 9 CHAIRMAN:
 10 Q. Thank you. Mr. Hutchings or Ms. Henley
 11 Andrews?
 12 HUTCHINGS, Q.C.:
 13 Q. We'll be splitting this again, Mr. Chair.
 14 I'll have a few questions on general matters
 15 and Ms. Henley Andrews will be dealing with
 16 the last couple of projects involving vehicles
 17 that Mr. Reeves just spoke to.
 18 CROSS-EXAMINATION BY JOSEPH HUTCHINGS, Q.C.
 19 HUTCHINGS, Q.C.:
 20 Q. Good morning.
 21 MR. MARTIN:
 22 A. Good morning.
 23 MR. REEVES:
 24 A. Good morning.
 25 Q. I think Mr. Martin probably spoke to this

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1 voltage activity, you could have a flash over
 2 of the insulator stream and a trip or failure
 3 of the line.
 4 Q. Okay. And has any such incident occurred to
 5 date?
 6 A. I'm sure there was incidents that happened.
 7 Our performance on that particular line to
 8 date has been very good. The budget is based
 9 on the fact that we have seen increasing
 10 failure rates of individual insulators and
 11 we're trying to be proactive here to rectify a
 12 problem that we know is going to become a
 13 major issue and result in major outages to
 14 that line.
 15 Q. So in order to have a significant impact from
 16 a failure, I take it you would have to have
 17 failures in two adjoining insulators? Is that
 18 what you're telling me?
 19 A. Not necessarily adjoining, no.
 20 Q. But close to one another?
 21 A. Well, in the string.
 22 Q. Okay. And when you say a string, how many
 23 insulators are in the string?
 24 A. Thirteen insulators. On a 230 kV system,
 25 typically there's thirteen insulators in a

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1 string.
 2 Q. Okay. And how many insulators are we
 3 replacing here?
 4 A. We're replacing approximately 15,000.
 5 Q. Okay. In this project or all -
 6 A. No, in this project.
 7 Q. Just in this project?
 8 A. Yes.
 9 Q. So 15,000 insulators and you would have to
 10 have a failure within a string of thirteen in
 11 order to cause a significant problem on the
 12 system, two failures?
 13 A. Yes. Well, I would say two or more, yes.
 14 Q. Yes.
 15 A. Yes.
 16 Q. Okay.
 17 A. The problem that we've noticed in our
 18 preventative maintenance program is that we
 19 are obviously seeing an increasing failure
 20 rate overall, but we're actually finding
 21 failed discs now where insulators themselves,
 22 in strings that we've tested before and
 23 replaced other discs in. So it is apparent
 24 that this is becoming an increasingly
 25 significant problem, and we want to try to be

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1 Q. Yes. Assuming that -
 2 A. No, not necessarily.
 3 Q. No.
 4 A. I can't say that for sure, no.
 5 Q. No, no. But you did your testing and you came
 6 up with six percent defective?
 7 A. Overall.
 8 Q. Okay.
 9 A. Out of that sample of about 2,000 insulators
 10 that we tested.
 11 Q. Right.
 12 A. Yes.
 13 Q. So if you applied that percentage to all the
 14 ones that are being replaced now, you'd have
 15 potentially 900?
 16 A. Sure.
 17 Q. Okay. Out of--900 insulators out of 11 or
 18 1200 strings, I guess, of 13?
 19 A. Yes, sure.
 20 Q. So have you worked out the probability of
 21 there being two defective insulators in a
 22 string?
 23 A. No, we have not.
 24 Q. All right. If we could look for a moment then
 25 to B29, and this is the project that deals

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1 proactive on this before we start tripping
 2 this 230 kV line unnecessarily.
 3 Q. Yes. I'm sorry, I didn't quite follow your
 4 reference to the disc. You say some lines on
 5 which the insulators have already been
 6 replaced have shown up -
 7 A. On some strings. On this particular line, we
 8 have found insulators that have already failed
 9 that we've replaced. Other insulators in the
 10 string that were good at the time, over the
 11 last five years, they themselves have failed.
 12 Q. Okay.
 13 A. In that same string. When I say a disc, I'm
 14 referring to an individual insulator, in that
 15 string of insulators.
 16 Q. So in this group of 50,000 insulators that
 17 we're talking about -
 18 A. I'm sorry, it's 15,000.
 19 Q. - 15,000, I'm sorry, yes, 15,000. In the
 20 group of 15,000 insulators that we're talking
 21 about, you have--if your program is correct,
 22 you're showing a potential, if we have six
 23 percent, then that's potential of 900
 24 defective insulators in the 15,000?
 25 A. That are defective right now?

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1 with the protection on the transmission lines
 2 on the west coast, and we're moving here from
 3 an electromechanical device to an electronic
 4 device. Is that fair?
 5 A. That's correct.
 6 Q. Okay. Are you aware of other people who
 7 operate transmission lines in the province
 8 using the same electromechanical devices on
 9 their lines?
 10 A. Yes, and we do as well.
 11 Q. Yes, okay. And how is it that this project
 12 now, at this date, has a requirement to
 13 proceed in the year 2004?
 14 A. What we've experienced with these 30-year-old
 15 relays is a problem with calibration. We've
 16 had, I believe, ten trips, inadvertent trips
 17 of these relays, misoperation of these relays
 18 in the last nine years that have resulted in
 19 outages. We have been having an extensive
 20 program over the last several years of trying
 21 to upgrade our protection and control systems
 22 from the old electromechanical type relays to
 23 state of the art, solid state or
 24 microprocessor based relays, and this is an
 25 ongoing part of that initiative, to try and

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1 keep improving and updating the protection and
 2 control systems on our network.
 3 Q. Are you planning to remove the existing ones
 4 or will you leave those on as backup?
 5 A. Yes, we will. They will be removed.
 6 Q. They'll be removed?
 7 A. Yes.
 8 Q. Has there been a pattern to these failures
 9 that you've referred to over the past nine
 10 years? Are they equally spread out over the
 11 past number of years?
 12 A. I honestly can't speak to that. I know we
 13 have had incidents within the last couple of
 14 years where we had misoperation of these
 15 relays. But to give you a feel and a sense
 16 for exactly when each of these happened, I
 17 really don't know that.
 18 Q. Okay. So there's no indication that the
 19 situation is getting worse, is it?
 20 A. I don't have any information to arrive at that
 21 conclusion.
 22 Q. Okay. Turning to B30, this is the replacement
 23 of the digital fault recorder in Bay D'Espoir.
 24 The operating experience simply indicates that
 25 there are continuing problems with the

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1 switch. Would these switches be used both for
 2 live wire and live line and dead line
 3 switching?
 4 A. These switches are basically used for the
 5 isolation of a breaker. So when a breaker is
 6 taken out of service for maintenance, for
 7 argument sake, the breaker is tripped to break
 8 the load.
 9 Q. Right.
 10 A. Or de-energize the line, if you will. The
 11 disconnection on both sides of the switch are
 12 then--or the breaker, are then opened to
 13 isolate the breaker, so our personnel can go
 14 in and work on the breaker in a de-energized
 15 state. The line is typically taken out of
 16 service then as well, in the case of a load
 17 bus. In a ring bus, you could isolate that
 18 breaker, keep the line in, work on the breaker
 19 while this line is energized. So they're
 20 basically used for isolation of breakers, high
 21 voltage breakers.
 22 Q. Okay. So it is, in fact, the tripping of this
 23 switch that kills the line? Am I
 24 understanding that correctly?
 25 A. No. If you wanted to kill the line, we would

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1 operation of the unit?
 2 A. That's right.
 3 Q. What's been the nature of these problems?
 4 A. The problem is that this particular technology
 5 has individual adjustments for each of the
 6 analog inputs, the voltages and currents into
 7 the unit, and our experience recently, and
 8 over the last several years, is that these
 9 keep continually drifting off calibration.
 10 The other problem that we've had is numerous
 11 times when we've required this thing to
 12 operate, it may operate, it may not. Many
 13 times when it does operate, we only get
 14 partial information, either pre-fault, fault
 15 or post fault, and you need all three bits of
 16 information to do a proper analysis of the
 17 system disturbance so that you can try and
 18 ascertain what happened.
 19 Q. The next project is B31, which involves the
 20 motor drive mechanisms on the disconnect
 21 switches, and I believe we had some of those
 22 last year as well, didn't we?
 23 A. We are doing the first phase this year, yes.
 24 Q. You've identified a potential safety issue
 25 here with respect to the operation of this

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1 not kill the line by just opening a
 2 disconnect. We would open a breaker.
 3 Q. Okay.
 4 A. The line will be isolated by tripping breakers
 5 and then the breakers themselves would be
 6 isolated by opening these switches.
 7 Q. Okay. So basically, the switches are used
 8 essentially for dead line switching?
 9 A. Yes, if you will, sure.
 10 Q. Okay. So I'm just trying to relate that to
 11 the degree of potential harm that could result
 12 to an employee in this situation and I think -
 13 A. Well, as I said, if a breaker is opened and
 14 the breaker is isolated, it is possible that
 15 one side of the switch is energized.
 16 Q. Okay. In the project justification, you refer
 17 to regular inspections being carried out to
 18 identify faulty insulators and having them
 19 replaced prior to in-service failure. You say
 20 "this practice will not completely eliminate
 21 the risks associated with manual switching."
 22 Why does that not completely eliminate the
 23 risk?
 24 A. Because, I mean, in the interim of actually
 25 going in and inspecting the insulator stack

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1 itself, any number of problems could arise
 2 that could damage the insulator stack, that
 3 you would not know about until somebody
 4 actually went in to manually open that
 5 disconnect, and potentially have the stack
 6 crash down around your ears.
 7 Q. So is the safety issue that you've identified
 8 here simply a physical one in the sense that
 9 equipment may come loose and harm the operator
 10 at the time he's doing the switching?
 11 A. I think it's both. We could potentially have
 12 an energized stack come down around somebody,
 13 or you could potentially have just the
 14 insulator stack fail and then the flying glass
 15 could come down around you, either one. We
 16 have had incidents of this, by the way.
 17 Q. Okay. And the motor drive mechanism basically
 18 allows you to do that from a more remote
 19 location? Is that-
 20 A. We would operate it remotely from our control
 21 room in the terminal station.
 22 Q. Project B33, replacement of the instrument
 23 transformers, I take it this is essentially an
 24 annual allotment. There are half a dozen of
 25 these things that need to be replaced each

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1 funds with respect to vehicles that were
 2 ordered in 2003 for delivery in 2004?
 3 MR. REEVES:
 4 A. That's correct, because of long deliveries.
 5 Q. And with respect to the "replace vehicle Hydro
 6 system, 2004" you're asking for approval of
 7 the entire \$2.262 million?
 8 A. Basically, we're directly asking for approval
 9 of the one million eighty-one dollars, with
 10 the understanding that we will be tendering
 11 next year for vehicles the following year,
 12 which will not come in place or we will not
 13 receive until 2005, and by that time, we
 14 anticipate having approval for those dollars
 15 prior to receiving and paying for them.
 16 Q. Okay. But the question that I have is that is
 17 it anticipated, with respect to the \$1,181,000
 18 shown for future years -
 19 A. Yes.
 20 Q. - is it anticipated that they will actually be
 21 ordered in 2004 or will they be ordered in
 22 2005?
 23 A. 2004.
 24 Q. Okay. So once they're ordered, they have to
 25 be paid for?

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1 year?
 2 A. It is.
 3 Q. And that's based on your historical records of
 4 how this comes about?
 5 A. That's right.
 6 Q. Yes, okay. And B35, equally, the surge
 7 arresters are essentially the same type of
 8 thing?
 9 A. Same thing.
 10 Q. Okay. Thank you, gentlemen. Those are all
 11 the questions I have, Mr. Chair.
 12 CHAIRMAN:
 13 Q. Thank you, Mr. Hutchings. Ms. Henley Andrews.
 14 CROSS-EXAMINATION BY JANET HENLEY ANDREWS, Q.C.:
 15 (11:14 a.m.)
 16 HENLEY ANDREWS, Q.C.:
 17 Q. Thank you, Mr. Chairman. Mr. Reeves, could we
 18 go to, first of all, to page A--the general
 19 properties page, which is A-10, and this is
 20 the vehicle--I'm focusing on the two vehicle
 21 replacement projects, one of which is called
 22 the "replace vehicles Hydro system, 2003" and
 23 the other is "replace vehicles Hydro system,
 24 2004." Am I correct that with respect to the
 25 2003 project, the \$1,142,000 that's shown are

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1 A. Well, if by some stretch of the imagination,
 2 the Board did not approve our second
 3 allotment, we would most likely have to try to
 4 cancel those and there would be a cancellation
 5 fee.
 6 Q. So do you build in potential for cancellation
 7 into your tender specifications?
 8 A. Not specifically, no, because we have not had
 9 a problem, I guess, in getting the two-year
 10 approval from the Board in this manner. And
 11 why we did this is that up until a couple of
 12 years ago, we had trouble with carry overs, as
 13 you will remember.
 14 Q. Yes.
 15 A. And what we are anticipating trying to do here
 16 is to forecast the actual cash flow, the way
 17 the vehicles would come in.
 18 Q. Okay. So with respect to the 2003 Capital
 19 Budget items, the \$1,142,000 that's to be
 20 spent in 2004, have those vehicles already
 21 been ordered?
 22 A. They are currently--we're getting the--as I
 23 understand it, we're currently getting the
 24 requisitions ready to order those.
 25 Q. Okay. Now I'd like, first of all, to go to

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1 IC-9. Do you have that there?
 2 A. Yes, I do.
 3 Q. Okay. And if you'd look at page 2 of 2 -
 4 A. Yes.
 5 Q. - this is the breakdown of projects contained
 6 in the 2004 Capital Budget where the costs
 7 would be specifically assigned to one class of
 8 customers, correct?
 9 A. That is correct, yes.
 10 Q. So when I look at vehicles, I can see that
 11 under Labrador Interconnected, there's
 12 \$197,000 worth of vehicles in total?
 13 A. That's correct, yes.
 14 Q. I don't see anything for vehicles in Isolated
 15 Rural?
 16 A. That's correct, yes.
 17 Q. And there's nothing for vehicles in Island
 18 Interconnected Rural or for Newfoundland
 19 Power?
 20 A. No.
 21 Q. Are there any vehicles associated with the
 22 Southern Labrador?
 23 A. L'anse-au-Loup system?
 24 Q. Yes.
 25 A. Not that I recall, but I would have to check.

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1 ourselves and the environment that we also
 2 have to service our customers in the winter
 3 and whatnot, in the cold weather, that we find
 4 that this is a reasonable criteria.
 5 Q. So however, with respect to each class of
 6 vehicle, you've got an age criteria and an
 7 other criteria?
 8 A. That's correct, yes.
 9 Q. And the other is 150,000 kilometres plus
 10 maintenance cost and condition of the vehicle?
 11 A. That's correct, and typically we try to stay
 12 within those criterias, yes.
 13 Q. But when I looked back at the 2003 Capital
 14 Budget, it replaced 28 cars, vans and light
 15 trucks and 17 line and boom trucks. Does that
 16 sound about right?
 17 A. That's correct. That's my numbers.
 18 Q. And included in those 17 line and boom trucks
 19 are some of the vehicles that were to be
 20 ordered in 2003 and delivered in 2004, right?
 21 A. Yes.
 22 Q. Now in the areas that are common, like so I'm
 23 only focused on vehicles that are treated as
 24 common.
 25 A. Yes, appreciate that.

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1 Q. Okay. Well, could you check that and check
 2 the dollar value? (UNDERTAKING)
 3 A. Yes, we can check that, yes.
 4 Q. So subject to that check that you have to do,
 5 is it fair to say that only \$197,000 of the
 6 projects that are at B81 and B82--or B81 and
 7 B83 is specifically assigned? Everything else
 8 would be assigned common?
 9 A. That's correct, yes.
 10 Q. Now if you go to page B81 for a moment, you
 11 have your replacement criteria at the bottom
 12 of the page?
 13 A. That's correct.
 14 Q. And I seem to recall having a fair number of
 15 questions with respect to the replacement
 16 criteria at the last hearing, but am I correct
 17 that this replacement criteria was developed
 18 by Hydro?
 19 A. Yes. If my memory serves me right, our
 20 transportation people in charge of
 21 transportation, the assets people, I guess,
 22 went and talked to a lot of the other
 23 utilities, similar business, and from that we
 24 developed this criteria, and I guess, it's
 25 also based on a judgment that we find

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1 Q. Are there any locations where there is only
 2 one car or minivan?
 3 A. One car or one minivan, in the common areas?
 4 Q. Yes.
 5 A. I wouldn't say that there is, off the top of
 6 my head.
 7 Q. Now generally speaking, where are these
 8 vehicles? Are they sort of centralized at the
 9 various depots that you have across the
 10 island?
 11 A. Cars and minivans?
 12 Q. Yes.
 13 A. There would be a number of vehicles here in
 14 St. John's -
 15 Q. Yes.
 16 A. - at our head office for people to travel
 17 either around the City or bring our staff to
 18 other parts of the province. There would be a
 19 small number in Whitbourne of cars and
 20 minivans, probably more minivans than cars, or
 21 no, probably not, probably there's both,
 22 because we have technicians that go out and
 23 they could either take a vehicle or a minivan.
 24 Q. Yes.
 25 A. We have them in Bishop Falls. We have them in

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1 Whitbourne. Sorry, Stephenville, and I guess,
 2 on the common systems, we may have one in Baie
 3 Verte, but I'm not sure. I'd say mostly there
 4 are line trucks and pickups and that. There
 5 may be something there for the technologists.
 6 Q. Okay. And is it fair to say that with respect
 7 to the cars and the minivans, the primary
 8 purpose of these is for transporting people
 9 from one of your offices to another of your
 10 offices?
 11 A. That would be a fair assumption, but we also
 12 use those for our technicians.
 13 Q. Yes.
 14 A. And our technicians when they go, they have to
 15 bring a lot of equipment for testing.
 16 Q. Okay.
 17 A. And that would be either say protection and
 18 control technicians or it may even be some of
 19 the telecontrol technicians as well, or some
 20 of the people who are servicing computers.
 21 Q. And where are those technicians located?
 22 A. We have technicians in Whitbourne, Bishop
 23 Falls, Stephenville.
 24 Q. And St. John's?
 25 A. St. John's would be the telecontrol

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1 A. It's not easy to follow, and that's why we
 2 tried to put the dates on it, so it'd be
 3 easier to follow.
 4 Q. Yes, and that's good. So when I'm looking at
 5 IC-36, I'm looking at page 2 of 2, and I'm
 6 looking at that group called replace vehicles
 7 2004, page B-83, \$1,081,000.
 8 A. Yes, I'm there.
 9 Q. Okay. And when I count the number of vehicles
 10 under that category, I come up with 37.
 11 A. I haven't counted them, so I'd trust you.
 12 Q. Okay.
 13 A. 37, okay.
 14 Q. And of those 37, four, at the bottom, are
 15 light trucks?
 16 A. That's right, category 3000.
 17 Q. And the remainder of them are cars and mini
 18 vans or pickups and service vans?
 19 A. Correct.
 20 Q. And whether they're in category 1000, the cars
 21 and mini vans, or in category 2000, which is
 22 pickups and service vans, the replacement
 23 criteria that you're utilizing is basically
 24 the same, five to seven years and 150,000
 25 kilometres to maintenance and condition?

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1 technicians, yes, that's right.
 2 Q. So -
 3 A. And probably here in St. John's, as well,
 4 where we have a number of other like
 5 properties, may use a panel van or a vehicle
 6 or something to bring some of their
 7 instruments or whatever.
 8 Q. And in all of those locations that you've
 9 mentioned, St. John's, Whitbourne, Bishop
 10 Falls, and Stephenville, there would be more
 11 than one car or minivan at any given point in
 12 time?
 13 A. I would venture to say there would be more
 14 than one that we would have in service there.
 15 Yes, that's right.
 16 Q. Okay. Now if we go to IC-36, having replaced
 17 28 cars, minivans and light trucks in 2003 or
 18 as part of the 2003 Capital Budget project,
 19 let's look at it that way, so some of them
 20 were in 2003, some of them are technically in
 21 2004. I'm going to ignore that part.
 22 A. Um-hm.
 23 Q. So I'm just going -
 24 A. It's not easy to follow.
 25 Q. Pardon?

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1 A. That's correct, yes. That's what we normally
 2 drive our self by.
 3 Q. So what is the total number in the fleet of
 4 cars, mini vans, pickups and light trucks?
 5 A. We have 281 vehicles. Category 1000, 59;
 6 category 2000, 152; category 3000, 13;
 7 category 4000, 57.
 8 Q. Okay. And some of those, 59, for example, in
 9 category 1000, some of those would not be in
 10 the common group? Do you know how many you
 11 have -
 12 A. No, I'm sorry, I don't have that breakdown.
 13 Q. Okay. And I don't need that.
 14 A. Okay.
 15 Q. At least I don't think so. So you have--if we
 16 go to IC-36 and we look at the very first item
 17 in the second heading, the "Replace Vehicles
 18 2004"?
 19 A. Yes.
 20 Q. There is a car from 1995, which would make it
 21 eight years old?
 22 A. That's correct, yes.
 23 Q. And it's got 127,000 kilometres on it?
 24 A. Yes.
 25 Q. Which, by my calculation, is 15,880 kilometres

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1 a year?

2 A. Again, I'll take your math.

3 Q. Okay. But from a usage point of view on a

4 vehicle, that's not a lot per year, wouldn't

5 you agree?

6 A. No.

7 Q. You don't agree?

8 A. Oh, I agree, that's not a lot, but it's in

9 Happy Valley-Goose Bay, which is a very

10 restricted area for travel.

11 Q. Okay. Okay. I wasn't--my question was more

12 directed at the usage, rather than the

13 location of the vehicle, so -

14 A. Yeah. But see, what happens in a lot of our

15 vehicles is that the usage that you see in

16 kilometres is sometimes slanted by where

17 they're actually located.

18 Q. Okay.

19 A. Because when you get down to No. 3, which is

20 80,000 kilometres, that's also in Happy

21 Valley-Goose Bay.

22 Q. No, and I recognize that.

23 A. Yes. Because I had these same questions when

24 I was getting ready to come on the stand today

25 and I was talking to my person in charge of

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1 got here? If you go down to the 2486.

2 Q. Yeah.

3 A. That one there is also in Happy Valley.

4 Q. Okay.

5 A. If you go to the--there's two, 2452 and 2453

6 are also in Happy Valley.

7 Q. 2452. The two vans?

8 A. Two vans, yes.

9 Q. Okay.

10 (11:30 a.m.)

11 A. That's correct. That's all I've got in that

12 category, actually. The other category, 4409

13 is in Fogo, so that wouldn't be on the common

14 system.

15 Q. Um-hm.

16 A. And the last one, 4457 would be in Flower's

17 Cove, and that wouldn't be on the common

18 system, either. Some of the others may be,

19 but I'm not sure. That's only the ones that I

20 looked when I was getting ready to get ready

21 for the stand.

22 Q. Okay. If we look at the ones, the replaced

23 vehicles in that group that are basically in

24 the 1000 and the 2000 and 3000 group?

25 A. Yes.

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1 the vehicles. And while they use the

2 guideline that you keep referring to and we've

3 given you as a guideline, there is also some

4 judgment that we have to make in the selection

5 of which vehicles we're actually going to

6 replace.

7 Q. Okay. So since you seem to know where each of

8 these is -

9 A. Well, I don't know where all of them are. I

10 know where some of them are.

11 Q. Okay. And can you tell me, with a reasonable

12 degree of certainty, which one of these are

13 not common?

14 A. I know that the second one is--oh, so which

15 are not common?

16 Q. Not common.

17 A. Okay. I hadn't marked down all of them, but

18 like, number one and number three are both in

19 Happy Valley.

20 Q. Okay.

21 A. Okay. And I was doing something like you did,

22 looks like you did, is looked at where we--the

23 criteria may be in jeopardy.

24 Q. Um-hm.

25 A. That's the ones I looked at. What else have I

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1 Q. Of the 37 vehicles that are there, only 12 of

2 them have over 150,000 kilometres on them?

3 A. At the current time, that's right. But we had

4 to account for another year's usage.

5 Q. And many of these vehicles are--like, for

6 example, if we look at the first one, the

7 1226, the 1237, some of these vehicles have

8 obviously already been in service for more

9 than five to seven years?

10 A. That's correct.

11 Q. And others have only just been in service for

12 five to seven--for five years?

13 A. Um-hm.

14 Q. Correct?

15 A. That's correct, yes.

16 Q. So when you're applying your criteria, is the

17 age or the kilometres predominant?

18 A. As when I talked to my asset manager, because

19 they make the decision as to which vehicles

20 should be up for recommendation for

21 replacement, they take all things into

22 consideration, take the age, they take the

23 condition that it's actually in, some vehicles

24 that we have may rust a lot, others don't rust

25 at all because of where they are in the

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1 environment, and the last one is the actual
 2 kilometreage on the vehicles. They take all
 3 of those and they may find sometimes that one
 4 or more of those vehicles don't meet all the
 5 criteria, so they then use judgment. And
 6 obviously, we like--we don't want to use
 7 judgment any more than we got to. On the same
 8 hand, we don't want to replace vehicles any
 9 more than we got to just because they met the
 10 criteria. If a vehicle is up in Labrador and
 11 because it's very--they got a restricted road
 12 access, that we don't want to have to replace
 13 that--you know, it'll be a lot of time
 14 replacement where conversely, you know, where
 15 you get a lot of kilometres on a vehicle, you
 16 will be replacing them earlier, type thing.
 17 So we try to use a little bit of judgment
 18 there, as well.
 19 Q. But would you agree that the average
 20 household--I mean, if you look at your own
 21 experience with your personal vehicle, that
 22 it's not at all unusual for a vehicle to have
 23 20 to 30,000 per year put on it?
 24 A. Some, yes, for some households that's correct.
 25 I have a car, as well, and I use it for

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1 Q. Is there any magic to 150,000 kilometres?
 2 A. No. Just that what we find, or what we--our
 3 assets people have found is that if you tried
 4 to extend the life of a vehicle beyond a
 5 reasonable amount, either an age or driven,
 6 you will get into a lot of maintenance costs.
 7 Q. And -
 8 A. And we try to avoid, on the end or close to
 9 the end of the service life of a vehicle,
 10 having to spend a lot of dollars on it just to
 11 keep it in service because we're not buying a
 12 new one until next year.
 13 Q. In the capital budget explanation that you
 14 have provided at B-81 and B-82 as well as B-83
 15 and B-84?
 16 A. Yes.
 17 Q. There's no information contained in there on
 18 maintenance costs, is there?
 19 A. No, there's not.
 20 Q. Or any historical information on what
 21 maintenance costs have been with respect to
 22 vehicles over 150,000 kilometres, for example?
 23 A. No, there's not.
 24 Q. And no comparison to type of information
 25 versus maintenance costs on vehicles that are

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1 business as well as pleasure, and I put 20
 2 plus thousand kilometres on it per year.
 3 Q. Um-hm.
 4 A. My other car that I have, I put less than
 5 20,000 kilometres on a year.
 6 Q. Now, if only 12 of the 37 vehicles that are
 7 listed here are over 150,000 kilometres, does
 8 that mean that judgment has been used with
 9 respect to all of the rest?
 10 A. What they've looked at is that they look at
 11 the average kilometres driven each year, and
 12 when it brings them up close to the
 13 kilometreage, then that will kick in. You'll
 14 see in some of these vehicles here are like a
 15 '99, 1266?
 16 Q. Um-hm.
 17 A. Like, that's got--that's a what, a three year
 18 old vehicle?
 19 Q. Yeah.
 20 A. Divided by three into 100 and -
 21 Q. 42,000 kilometres.
 22 A. 42,000. So you're going to add another 42,000
 23 before we're able to buy it, because it's next
 24 year's budget, we're going to be in excess of
 25 150,000 kilometres.

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1 more than seven years old?
 2 A. We haven't given that evidence, no.
 3 Q. So how do we know that it's more economical to
 4 replace these vehicles than to keep them?
 5 A. We've done a study, as I indicated earlier on,
 6 with the other utilities to see what other
 7 utilities are doing. We've also--our asset
 8 people have looked at the average they get out
 9 of the vehicles before they run into major
 10 expenses and they've made a judgment call or
 11 developed this criteria which we use.
 12 Q. But, how do you know that the information that
 13 you got from other utilities shows a least
 14 cost option?
 15 A. The only way that I guess you could find a
 16 least cost if after you retire the vehicle,
 17 whether you've had to spend a lot of money on
 18 it or not. Some vehicles, I guess, as we've
 19 all experienced, some vehicles you get have
 20 very little maintenance, others have a lot of
 21 maintenance. And I guess what we try to go on
 22 is the average for the vehicles that we
 23 purchase and for the average use that we give
 24 our vehicles.
 25 Q. Do you keep track of your maintenance costs on

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1 your 1000 category vehicles versus your 2000,
 2 your 3000 and your 4000?
 3 A. We keep maintenance costs on each vehicle that
 4 we have.
 5 Q. So, over the years Hydro has had a lot of
 6 vehicles, right?
 7 A. Yes, we have.
 8 Q. So you have a lot of historical information as
 9 to what average maintenance costs would be for
 10 vehicles in various years of use or various
 11 numbers of kilometres if you choose to put it
 12 together, right?
 13 A. Yes, if there was benefit in doing. But in
 14 doing the development of criteria they have
 15 used this information, to the best of their
 16 ability, to develop a criteria whereby they
 17 think, from what the analysis that they done,
 18 that we are going least cost for our
 19 customers.
 20 Q. But that information is not here?
 21 A. No, that information is not here, and some of
 22 it is judgment, as well.
 23 Q. Now, when we look at the bottom of IC-36?
 24 A. Yes.
 25 Q. We've got the category 4000 vehicles, is that

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1 A. There is some judgment in it, yes, that's
 2 correct. But it's also taken in consideration
 3 the criteria. You can't always--because of
 4 our usage, you can't always meet all the
 5 criteria that you have set, whether it's age
 6 or distance driven.
 7 Q. Now, from a system perspective, from a
 8 maintenance of the system perspective all the
 9 category 4000 vehicles are used for system
 10 repair or system upgrade, they're directly
 11 related to the system, correct?
 12 A. That's correct. They're either line trucks or
 13 heavy trucks used for hydro generation or the
 14 like.
 15 Q. And would all of the light trucks fall into
 16 that category?
 17 A. The ones that are here would--in the 2004
 18 budget, would be--fall into the line truck
 19 category, yes, or a 3000.
 20 Q. What about the pickups, what are they used
 21 for?
 22 A. Pickups could be used for, it would be mostly
 23 service staff that would use those.
 24 Q. Yeah.
 25 A. Some construction, as well.

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1 right?
 2 A. That's correct, yes.
 3 Q. And those vehicles, the criteria is seven to
 4 nine years and 200,000 kilometres?
 5 A. That is correct.
 6 Q. When I look at those numbers that are provided
 7 on page 2 of 2 of IC-36, there are two
 8 vehicles that are fairly close to the 200, 000
 9 kilometre, which is 4407 from 1991 and 4428
 10 from 1995?
 11 A. That's correct.
 12 Q. But none of the vehicles are over 200, 000
 13 kilometres, right?
 14 A. That's correct, yes.
 15 Q. And several of the vehicles--well, two of the
 16 vehicles, 4442 and 4457 aren't even seven
 17 years old?
 18 A. That's correct.
 19 Q. Although, '97 will be seven--the one 4442 will
 20 be seven years old by 2004?
 21 A. Um-hm.
 22 Q. So again, can I assume that a considerable
 23 amount of judgment had been utilized with
 24 respect to deciding that these vehicles are to
 25 be replaced?

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1 Q. Okay. Now would--are pickups usually located
 2 in St. John's, Whitbourne, Bishop's Falls and
 3 Stephenville?
 4 A. The ones that we would have in St. John's
 5 would be primarily to do with the services,
 6 like the engineering service and that where we
 7 have capital projects that they look after.
 8 There may be a pickup for the IS&T I'm not
 9 sure, but there may be one, but they also
 10 would be located in Whitbourne and Bishop
 11 Falls and Stephenville, yes.
 12 Q. And any other places where pickups would be
 13 located within the common -
 14 A. Baie Verte, I guess. I think part of that
 15 loop around the--the second loop, the 138 is
 16 also common, so there would be a pickup there,
 17 as well.
 18 Q. Okay. But at all of these sites that we've
 19 talked about, there's more than one vehicle
 20 available?
 21 A. There could be more than one vehicle available
 22 for the--if there's--in the sites that we're
 23 talking about, there would be more than one
 24 crew, as well, so yes, there would be more
 25 than one vehicle.

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1 Q. Okay. Now, if a vehicle, let's take a car as
 2 an example, if a car--if there's no car
 3 available in St. John's when somebody needs to
 4 travel from St. John's, let's say, to
 5 Whitbourne or St. John's to Holyrood, how do
 6 they get there?
 7 A. If there's no car available, typically the
 8 staff out of St. John's here does have some
 9 flexibility in the schedules that they do if
 10 there's no cars available, so what they would
 11 most likely to is to reschedule to a time when
 12 there is a car available. If there is an
 13 emergency, then what they will do if there's
 14 no car available, they'll look for a truck or
 15 look for anything that is mobile to go.
 16 Q. Okay.
 17 A. If they had to go.
 18 (11:44 a.m.)
 19 Q. And will people occasionally use their own
 20 vehicles?
 21 A. Not so much here in St. John's, but we do have
 22 some people use their own vehicles here in St.
 23 John's, but -
 24 Q. What about other locations?
 25 A. Not so much in the maintenance part. I'm

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1 A. In some locations, that's right.
 2 Q. Okay. And in which locations would there not
 3 be alternatives?
 4 A. Like, for instance, I'm not sure how readily
 5 available a rent a car is in Whitbourne, Baie
 6 Verte.
 7 Q. Yeah.
 8 A. Okay.
 9 Q. But they are in Stephenville, they are in St.
 10 John's -
 11 A. I assume that they're available in
 12 Stephenville. Bishop Falls they would be
 13 available, but they would be available from
 14 either Grand Falls or the airport in Gander.
 15 Not that convenient, but.
 16 Q. And some of the uses for the vehicles, there's
 17 also some flexibility in terms of timing of
 18 the use of the vehicle?
 19 A. For some of the non-critical services, that's
 20 correct.
 21 Q. Okay.
 22 A. Where you're talking cars, in particular.
 23 Q. Yeah.
 24 A. But once you go above that, if you build very
 25 much flexibility trying to rely on other

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1 thinking, like, in the meter readers where we
 2 do provide a limited number of vehicles for
 3 our meter readers who are fulltime. But,
 4 where they're not fulltime--but, you know,
 5 here again, this is in the rural area, not the
 6 common area, so this wouldn't apply to you
 7 people.
 8 Q. That's right.
 9 A. Okay. But normally for the common areas where
 10 we have our--our employees would not use their
 11 own vehicles to do their work.
 12 Q. And have you ever had to rent a car or a mini
 13 van or a pickup?
 14 A. Yes. Matter of fact, in many discussions with
 15 our assets people, our transportation assets
 16 people we try to maintain our fleet and with
 17 the understanding that there may be certain
 18 times of the year where we may have to rent
 19 some type of vehicle to get a--if there's a
 20 certain critical schedule that needs to be on
 21 the go, then we will sometimes rent, either
 22 short term or long term just to get us over
 23 that bind.
 24 Q. So if a vehicle in category 1000 or 2000 group
 25 is out of service, there are alternative?

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1 parties to provide vehicles, then what will
 2 suffer in some cases will be reliability.
 3 Q. And that's why I'm focusing on cars, mini vans
 4 and pickups and not on light trucks and heavy
 5 trucks.
 6 A. Yeah. You have to realize, as well, like,
 7 pickups, for instance, sometimes what happens
 8 is that if we got a crew out there in their
 9 big vehicle and need a piece of equipment to
 10 do a repair, rather than bring that big one
 11 back, they'll probably--you know, the
 12 supervisor will probably go out in the pickup
 13 that they have and bring out the equipment to
 14 them.
 15 Q. Yeah. But you have more than--I mean, based
 16 upon this list here, and that's just the ones
 17 proposed to be replaced in 2004, you've got
 18 more than one pickup at most locations with
 19 the possible exception of Baie Verte?
 20 A. We have more than one pickup, but every pickup
 21 has a function to carry out.
 22 Q. Okay. Those are all my questions. Thank you.
 23 CHAIRMAN:
 24 Q. Thank you, Ms. Henley Andrews. Mr. Kennedy?
 25 MR. DAVID REEVES AND MR. FRED MARTIN, CROSS-EXAMINATION

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1 BY MR. MARK KENNEDY
 2 MR. KENNEDY:
 3 Q. Thank you, Chair. Gentlemen, I just have
 4 three small areas I wanted to cover. The
 5 first one was relating to some of your rural
 6 operations. And we can use as the launching
 7 pad for that project, B-48. And B-48 is the
 8 replacement of a transformer in Rigolet. I'm
 9 not sure who wants to handle the question.
 10 But, Mr. Reeves, you were a participant in
 11 Hydro's 2001 general rate application?
 12 MR. REEVES:
 13 A. That's correct.
 14 Q. And there was some evidence lead during that
 15 hearing concerning the growth rates being
 16 experienced by Hydro in some of its rural
 17 isolated communities?
 18 A. That's right, yes.
 19 Q. Do you recall that?
 20 A. I recall some parts of it, yes.
 21 Q. And I think the--if I could fairly summarize
 22 the evidence, that there were, in many cases,
 23 an experienced level of fairly significant
 24 growth and demand in energy use in some of
 25 these small rural communities. Would you

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1 A. That's correct, yes, in Labrador.
 2 Q. Okay.
 3 A. With the exception L'Anse-au-Loup which is
 4 down right below that.
 5 Q. Just above it, you mean?
 6 A. Just below that. Oh, Labrador less L'Anse-au-
 7 Loup.
 8 GREENE, Q.C.:
 9 Q. Table 10.
 10 MR. KENNEDY:
 11 Q. Table 10 I'm looking at.
 12 A. Okay. I'm sorry. I got you. Sorry.
 13 Q. Got me?
 14 A. Yes, I have.
 15 Q. Okay. Yeah, because L'Anse-au-Loup is broken
 16 out in Table 10.
 17 A. Yes, it is, yes.
 18 Q. And that's, I assume, because at one point it
 19 was, as we know, converted over from being an
 20 isolated to being interconnected, correct?
 21 A. We still consider it to be an isolated system
 22 because we buy secondary energy from Hydro
 23 Quebec.
 24 Q. Right. What years was that took place?
 25 A. That took place, trusting memory now, that

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1 accept that or -
 2 A. Yeah. And we have evidence filed here today
 3 where you can see some of that, actually.
 4 Q. And the evidence you're referring to, is that
 5 in reply to P.U.B. 16 or -
 6 A. P.U.B. 16, that's correct.
 7 Q. Yeah. Let's just have a look at that, then.
 8 And P.U.B. 16 has got an attachment, there is
 9 it on our screen, operating load forecast for
 10 the Hydro rural systems, 2002 to 2007. The
 11 only thing is I couldn't really find a chart
 12 in here which would have shown the sort of--
 13 you have systems peaks, right, in Table 7? If
 14 we could just go to Table 7?
 15 A. Yes.
 16 Q. And now, if I recall correctly, there's--yeah,
 17 it's a load growth summary on Table 10,
 18 actually, is probably as good a place to go as
 19 any.
 20 A. That's right.
 21 Q. Okay. And so the--am I looking at the right
 22 spot if I look at that Labrador isolated row?
 23 A. That's correct, yes.
 24 Q. Okay. So these are your rural diesel supplied
 25 locations, correct?

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1 would be the mid '90s, probably '95, '96.
 2 Q. Right.
 3 A. I'm not sure of the date, but somewhere around
 4 that.
 5 Q. And the rate structure -
 6 A. Probably a bit later than that, actually.
 7 Q. I'm sorry. And the rate structure for L'Anse-
 8 au-Loup was adjusted accordingly, correct?
 9 A. There was a hearing whereby the Board ruled
 10 that even though it was an isolated system and
 11 the fact that we were able to buy secondary
 12 energy from Hydro Quebec, we would charge
 13 interconnected rates to our customers there.
 14 Q. Right. But as we know, the Labrador isolated
 15 group has a preferential rate afforded to it?
 16 A. Pardon me?
 17 Q. The -
 18 A. Labrador -
 19 Q. - Labrador isolated group.
 20 A. Yes.
 21 Q. Receive a 700 lifeline block allotment?
 22 A. Yes.
 23 Q. Okay.
 24 A. They do that, yes. All of our isolated
 25 systems are like that.

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1 Q. And that, in effect, means that the users pay
 2 less than true cost, correct?
 3 A. That is correct.
 4 Q. All right. And with the exception of the
 5 L'Anse-au-Loup figures, do you agree with me
 6 that the growth rates being experienced in
 7 your Labrador isolated territory far exceed
 8 any of the growth rates being experienced
 9 anywhere else in Hydro's operations?
 10 A. L'Anse-au-Loup is up 4.2 but we just talked
 11 about that one there. Labrador east is 3.5
 12 percent over the six year period, and Labrador
 13 isolated is 3.3 percent. So it's among the
 14 higher ones, yes.
 15 Q. Right. And I guess when the topic came up in
 16 the 2001 GRA, it was indicated that Hydro was
 17 aware of these higher growth rates being
 18 experienced in its rural isolated systems and
 19 was monitoring it, I think, was the way that
 20 it was put. Is there--can you provide any
 21 update on what, if anything, Hydro has done by
 22 way of attempting to govern the--or put a
 23 governor on the growth being experienced in
 24 the rural isolated system?
 25 A. I guess the most that we attempt to do, I

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1 A. That's correct, that's correct, yes. It's
 2 attached--say it's B-50.
 3 Q. And if we could, ultimately that analysis
 4 demonstrated to Hydro that there was no demand
 5 side solution to--economic solution to
 6 replacing the transformer at this time. Is
 7 that -
 8 A. That's correct, yes.
 9 Q. And there was further details provided about
 10 the individual calculations in response to
 11 P.U.B. 18, but the question I--one of the
 12 questions I had was in this calculation you've
 13 got load forecast predictions for 2004 to
 14 2007, correct?
 15 A. That's correct.
 16 Q. And if I have it right, you've got Domestic
 17 Customers have a load forecast year over year
 18 increase of 2.3 percent?
 19 A. I'll have to trust your math.
 20 Q. Okay. Would you consider that to be--in light
 21 of the fact that it seems to be a higher
 22 growth rate than being experienced in,
 23 according to Table 10 of the document we were
 24 just looking at, higher growth rates than
 25 what's being experienced in most of your

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1 guess we find--like, whether a new fish plant
 2 would go in there or not, it's difficult for
 3 Hydro to determine whether that should go
 4 there or not. We normally don't have say in
 5 that. Where Hydro tries to do its best is for
 6 the customers that we have primarily are
 7 Domestic and General Service customers, is
 8 that they use their energy wisely. And we
 9 have a program which we recently kicked there,
 10 I guess, earlier this year which is called
 11 Hydro Wise, and again, there's information
 12 filed on that program, as well.
 13 Q. And the Hydro Wise program, you'd consider
 14 that to be a form of DSM, I take it, would
 15 you?
 16 A. Somewhat, yes. But it's really intended to
 17 educate our customers on the wise use of
 18 electricity, yes.
 19 Q. Right. So in response to P.U.B.--or I guess
 20 initially in furtherance of your application
 21 on Project B-48, replacing the substation
 22 transformer at Rigolet, there was a Demand
 23 Side Management Analysis completed and offered
 24 by Newfoundland Power, correct--or Hydro,
 25 sorry?

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1 territory?
 2 A. If I can take you to page 29 of IC--or P.U.B.
 3 16?
 4 Q. Sure.
 5 A. That's the page that gives the explanations
 6 for the low growth in Rigolet. And not all of
 7 the--like, the first item here, they said that
 8 there is a possible shrimp plant extension
 9 going in there. We have not factored that
 10 into our calculation. But you will see that
 11 there is a new 14 lot subdivision going in
 12 there, there's a new store announced and
 13 there's also work being done on some of the
 14 buildings there. So this would account for
 15 the load growth that we've got there.
 16 Q. Okay. But I was following Domestic Customers.
 17 They would be general service, wouldn't they?
 18 A. Okay. They would be--yeah, Domestic Customers
 19 would just be the households, that's correct,
 20 yes.
 21 Q. Yeah. So regardless of the fish plant and the
 22 14 lots--well, I guess the 14 lot subdivision
 23 would be Domestic, correct?
 24 A. That's correct, yes.
 25 Q. The store, though, that ACOA is sponsoring and

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1 net loft (phonetic) building, for instance,
 2 they're all general service?
 3 A. They would be general service, that's correct,
 4 yeah.
 5 Q. So year over year increases among your
 6 Domestic Customers of 2.4 percent when the
 7 experience of the Company overall is much
 8 lower -
 9 A. It's lower than that, that's correct, yes.
 10 Q. And in turn, that's what, in this case, in
 11 Rigolet, driving the requirement for
 12 replacement of a transformer?
 13 A. That's correct, yes.
 14 Q. So does that concern Hydro, at all, is there
 15 any Company based initiative or policy to try
 16 to see what can be done about these higher
 17 than--higher growth rate?
 18 A. I guess other than try to ensure that our
 19 customers are fully educated about the cost of
 20 electricity, how they can save electricity,
 21 give them tips and that, you're really getting
 22 into--I think if you go outside that, you're
 23 into socioeconomic issues which, I guess, we
 24 find difficult to take up.
 25 Q. Okay. And in the case of the DSM calculation

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1 unlikely?
 2 A. Because the way the prices are, people are not
 3 normally into those other than electric--or
 4 hot water heat or whatever.
 5 Q. Right. So there's not a whole lot of
 6 opportunity in these rural communities to
 7 achieve demand side management initiatives to
 8 forego growth?
 9 A. No. Other than a we say here. Like, I think
 10 in one of our sites before we did some
 11 florescent lighting and we also did some cover
 12 up of the hot water tanks. So there's not a
 13 lot of other opportunities, no.
 14 Q. Okay. The next project I just want to discuss
 15 with you was the TL-214 upgrades. I believe
 16 you had some questions on that already, which
 17 is Project B-25. Now, here we go. Thank you,
 18 Mr. O'Reilly. As is indicated in the first
 19 sentence, it says, "This project for 2004 is
 20 the continuation of a project which the Board
 21 has approved funds for 2003." And then
 22 they're detailed as per filing there of
 23 \$110,700, correct?
 24 A. Correct.
 25 Q. Okay. And 78,000 of that 110 was for

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1 that you performed shown on B-50, if I gather
 2 correctly, the focus was on the Domestic hot
 3 water load control, is that correct?
 4 A. That's the one that they used for comparison
 5 because it's the cheapest one.
 6 Q. Right.
 7 A. And if you can't meet that one, you can't meet
 8 the ones above it.
 9 (11:59 a.m.)
 10 Q. Well, I understood from, again, from the
 11 previous document on your rural forecast,
 12 there's a chart here showing the percentage of
 13 customers using--where is that? There we go.
 14 Table 3. That in the case of your Domestic
 15 Customers for Labrador diesel you'll see it
 16 over the second-last column, less than five
 17 percent of those use electric heat. So
 18 demand side initiatives on electric heat is
 19 not going to generate any gains, correct?
 20 A. That's right, yeah.
 21 Q. So in the case of the Labrador diesel you have
 22 to focus on hot water or cooking, I guess,
 23 pretty much?
 24 A. Um-hm.
 25 Q. Or tell them to unplug their TV's, which is

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1 engineering?
 2 A. That's correct.
 3 Q. And I take it that the idea here, as has been
 4 discussed in previous witnesses, is that with
 5 this approval of \$110,700 in 2003 that the
 6 objective was for--or intent was for Hydro to
 7 go out and perform this engineering so that it
 8 could get a firmer fix on exactly what it was
 9 going to do in 2004 by way of the actual
 10 upgrade, is that correct?
 11 A. That's correct.
 12 Q. Okay. And I see by the revised F-6 in capital
 13 budget application--thank you, Mr. O'Reilly.
 14 Right on the ball there today. You'll see
 15 transmission, the last one there, upgrade TL-
 16 214, P.U.B. approved budget, 2003, 111. So
 17 that's just a round. And then 2003
 18 expenditures to May 31, 72,000?
 19 A. That's right.
 20 Q. So, can I take it from that, that much of the
 21 engineering work has already been completed as
 22 proposed on the TL214 upgrade?
 23 A. What we have done to date or to the end of May
 24 is basically finalize design concepts. We
 25 made another site visit, actually flown again,

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1 TL214 to finalize our design concepts and had
 2 started the initial design and specifications
 3 for materials and so on. More or less
 4 planning for the project, if you will.
 5 Q. The reason I ask is because there's reference
 6 made in your B25 project description, it's
 7 actually referenced on page B26 how this was
 8 under the project specification that a full
 9 report on this upgrade was filed with the
 10 Board as part of it's 2003 budget application,
 11 Section G, Appendix 3. And I gave Mr.
 12 O'Reilly a heads up that this was a document
 13 that I was going to quickly refer to. I was
 14 wondering if you could pull it up. Yes. In
 15 that document that was filed, there was an
 16 estimate made at that time of how much the
 17 project was going to cost at the time you
 18 sought the approval for the 2003 funds.
 19 A. Correct.
 20 Q. And the number that you sought approval for
 21 was the same number that you now have in B25,
 22 correct, \$2,836,200.00?
 23 A. That is correct.
 24 Q. So, there hasn't been any adjust made in that
 25 figure from the 2003 budget application to the

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1 yes, B25, you will see on the line engineering
 2 there for 2004 of \$570,000.00.
 3 Q. Yes.
 4 A. With an asterisk that indicates below that,
 5 that includes the cost of alternative
 6 generation. That's where we put that money.
 7 Q. Right.
 8 A. That estimate is now roughly \$520,000.00.
 9 Q. Okay.
 10 A. The problem there was in the original estimate
 11 we had included taxes against a rental of the
 12 diesel generators we were going to use and we
 13 also have, we understand now, there will be a
 14 credit against the energy produced from those
 15 diesels as an offset to the potential running
 16 of Holyrood. So, because we have proposed
 17 (inaudible - coughing) into the system, we're
 18 going to be basically credited with that
 19 energy on the incremental cost of generation
 20 of Holyrood.
 21 Q. Okay.
 22 A. But again in reviewing the entire estimate and
 23 looking at our exposures and risks there with
 24 regards to how this load profile is actually
 25 going to work, when we determine it's going to

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1 2004 budget application?
 2 A. That's correct.
 3 Q. Now, if we just go to--and I just pick this as
 4 an example--part of the upgrade involved in
 5 TL214 requires that an alternate power source
 6 be obtained because you need to take this line
 7 out of service which you're upgrading it,
 8 correct?
 9 A. Right.
 10 Q. Okay. And if we go to, it's page 18 actually,
 11 Mr. O'Reilly and just scroll to the bottom,
 12 yes, alternative power supply. And it reads,
 13 all solutions will result in additional cost
 14 for power generation while TL214 is out of
 15 service. The estimated cost of alternative
 16 power is \$754,258.00. And that being booked,
 17 I presume, to the \$2,836,200.00.
 18 A. That actual number has not.
 19 Q. The alternative power supply figure of
 20 \$754,258.00, that's not part of your two
 21 million eight?
 22 A. That particular number is not, no.
 23 Q. Okay.
 24 A. The number that we have in the budget now, if
 25 I can refer you back to B25 or, I'm sorry,

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1 be done, looking at the Rose Blanche plant,
 2 the diesels at Port aux Basques, the mobile
 3 gas turbine at Grand Bay. There are still
 4 some issues there that we're trying to resolve
 5 with our sister utility of Newfoundland Power
 6 and our own planning people, we felt the
 7 estimate was still in that same order that we
 8 said we had previously.
 9 Q. Okay. Because the curiosity, of course, is
 10 that, yes, your fuel charge is what you had
 11 estimated it to be at the time you sought
 12 approval for 2003 expenditure, was 754. It's
 13 now been lowered, as you indicated to 520.
 14 A. Right.
 15 Q. But the total budget figure is -
 16 A. Is the same.
 17 Q. - exactly the same.
 18 A. It is exactly the same. I can change it if
 19 you wish, but our planners and engineers and
 20 reviewed this again and we are satisfied that
 21 that is still a reasonable estimate to execute
 22 this project.
 23 Q. Okay. So, it's just a coincidence that
 24 happens to be exactly the same or is it that
 25 you took part of that budget and rolled it

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1 into another contingency fund in case, you
 2 know, you saved money here, 250 roughly or
 3 220, that you may lose that 220 somewhere
 4 else. So, is that booked into another line
 5 item of your budget, is it -
 6 A. It's not booked into another line item.
 7 Again, we're reviewed it and we're satisfied
 8 that overall this project, as estimated now is
 9 similar to what we or the same actually of
 10 what we presented last year.
 11 Q. Okay. Counsel for the Industrial Customers
 12 was asking you some questions about vehicles.
 13 I'm just wondering generally if Hydro has had
 14 completed recently a fleet optimization study
 15 by a third party?
 16 A. Not by a third party. However, we are doing
 17 one internally right now. And earlier this
 18 year we started a two phase approach, I guess,
 19 one was types of vehicles that we actually use
 20 for the lighter vehicle and also some of our
 21 heavy equipment. And the other one is the
 22 number of vehicles that we currently have.
 23 So, the conclusion of those is coming fairly
 24 soon.
 25 Q. Would you consider a, sort of, outside the box

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1 so to speak, to obtain the device or services
 2 of opinion of an outside consultant regarding
 3 your own fleet optimization?
 4 A. Not at this point in time, no.
 5 Q. Now, the last question is actually going to be
 6 a bit of a switch up and this has to do with a
 7 question I asked, it's a topic near and dear
 8 to my heart, Chair, with your indulgence. It
 9 relates to something called the Dark Skies
 10 Initiative and I can actually the capital
 11 budget to trigger this. It won't be but a
 12 moment. And we can use B39 just so we can
 13 talk about it, surrounding a topic, B39,
 14 members of the panel, is service extension
 15 project for all service areas. It falls under
 16 the TRO budget in their distribution aspect.
 17 Project description is, this project is an
 18 annual allotment based on past expenditures to
 19 provide service connections including street
 20 lights to new customers. So, what I'd like to
 21 do, I gave your counsel a copy of an article
 22 out of a Discover magazine. What I found was
 23 that the photocopy of the picture that's in
 24 the article doesn't really do justice. So,
 25 what I decided to do was buy some magazines so

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1 opinion on your fleet optimization? There's a
 2 number of companies, I know, that specialize
 3 in that very thing.
 4 A. Yes. One of the things that we're looking at
 5 is the line trucks, for instance, is the type
 6 of vehicle that we're actually using and right
 7 now, similar to, I guess, other utilities,
 8 we're probably using two vehicles, one to
 9 place poles and lift transformers and what
 10 not. And we're using another to life the line
 11 work up on the pole. There is a truck out
 12 there now which is, I think it's called a
 13 material handler and I think if you look
 14 around the city here, you'll see Newfoundland
 15 Power has gone to a number of those as well.
 16 We're looking at replacing some of our
 17 vehicles with those. The difficulty is, is
 18 that they're fairly expensive and a lot of our
 19 rural areas, it may be cheaper to stay with
 20 what we have, rather than go with one of these
 21 more expensive units.
 22 Q. Yes.
 23 A. So, we are currently looking at that. So,
 24 that's one example of what we're looking at.
 25 Q. Sure, but there's no initiative on the books,

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1 that members of the panel could look at the
 2 actual--I have one for the panel too actually.
 3 You all owe me \$8.50. There are other good
 4 articles in there too, but -
 5 CHAIRMAN:
 6 Q. Yes, I noticed.
 7 MR. KENNEDY:
 8 Q. The magazines are tabbed to the article
 9 itself, Chair.
 10 CHAIRMAN:
 11 Q. This advertisement that keeps popping out is
 12 not part of this, is it?
 13 MR. KENNEDY:
 14 Q. No. By way of explanation, members of the
 15 panel, the Dark Skies Initiative is an effort
 16 growing in popularity, I might add in North
 17 America in particular addressing concerns
 18 about light pollution. And this article
 19 explains the down side to poor design in
 20 lighting, that it can affect your health by
 21 affecting your ceratium rhythm, it affects
 22 environment by affecting wildlife, birds, our
 23 moth population is decreasing dramatically
 24 apparently, but it also has an economic angle
 25 as well and I wanted to explore that with the

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1 panel members, but the picture itself, I
 2 think, speaks volumes about--people assume
 3 that in Newfoundland, we're in the dark and we
 4 don't have to worry about light pollution, but
 5 I think if you look at the map and this is the
 6 reason why I handed out the magazines
 7 themselves because it doesn't show up on the
 8 photocopy that well, is that St. John's and
 9 surrounding area and I believe the second
 10 light right next to it would be Mount Pearl
 11 are like two headlights staring at you. And
 12 that's a direct result of poor ambient
 13 lightening that spills out up where we don't
 14 need the lighting instead of down which is
 15 what the intention is. So, I can start my
 16 questions now with the panel members. In
 17 reply to PUB 13, gentlemen, you indicated that
 18 Hydro was unaware of the Dark Skies
 19 Initiative. Can I ask you whether you're now
 20 aware of the Dark Skies Initiative?
 21 A. I'm more of the aware of the Skies issues
 22 right now, yes.
 23 Q. And can I ask you, in areas where Hydro is
 24 responsible for street lighting, can I ask you
 25 what you typically use in your street lights

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1 considerations of the Dark Skies Initiatives?
 2 A. I think that's a question for Mr. Reeves.
 3 Personally speaking, I would yes, we would
 4 certainly be prepared to look at it.
 5 MR. REEVES:
 6 A. Yes, we would.
 7 Q. What would be -
 8 MR. MARTIN:
 9 A. I might just want to clarify that, is that you
 10 have to realize that a lot of our areas are
 11 rural areas where the lighting intensity is
 12 probably not at severe as into an urban
 13 setting here like St. John's and this is why
 14 on the map that you've passed out, you can
 15 also pick other services are in Newfoundland
 16 and Labrador, they're the ones that do not
 17 have lights, because we do not have the same
 18 intensity of lights, okay, because population
 19 is not so severe.
 20 Q. Sure, but you can make out and I think as
 21 counsel for one of the parties indicated, was
 22 astounded that some aspects of our province
 23 are still lit up which you would have
 24 otherwise considered to be so rural and
 25 isolated that they wouldn't so up on a map

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1 at the present moment. Do you use high
 2 pressure sodium or low pressure sodium.
 3 MR. MARTIN:
 4 A. We use high pressure sodium.
 5 Q. And are you aware that high pressure sodium
 6 causes the loss our sky scape, night scape in
 7 particular and that low pressure sodium bulbs
 8 would not?
 9 A. I wasn't until you brought this article to our
 10 attention.
 11 Q. Okay. And were you aware that low pressure
 12 sodium bulbs use less energy?
 13 A. Yes, I was.
 14 Q. And so, were you aware that the City of
 15 Calgary, for instance, as indicated in the
 16 article, by switching to lower wattage street
 17 lighting bulbs is, at a cost of four and a
 18 half million dollars for capital, saving 1.3
 19 million in electricity each year?
 20 A. Not until you brought it to our attention.
 21 Q. Okay. And would Hydro, in light of the
 22 information it has now, commit itself to, at
 23 least, exploring the possibility of designing
 24 a street lighting program and other lighting,
 25 where appropriate to take into account of the

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1 like this. For instance, St. Anthony is a
 2 beacon there up on your Northern Peninsula. I
 3 believe that's inside Hydro's territory.
 4 A. Yes, but there's only one exception to that
 5 and that's probably as most utilities do, when
 6 they have a substation, okay, where we have a
 7 terminal of a line, we normally design our
 8 lights so that they do point up so that we can
 9 what is overhead. So, when the line workers
 10 go in, in the middle of the night to do
 11 trouble calls, that they can actually see the
 12 lights and see the equipment that's there.
 13 And that's why in the middle of Labrador you
 14 can Churchill Falls. I suspect that that's
 15 the switch yard in Churchill Falls.
 16 Q. Okay. So, in certain times it's unavoidable
 17 because of safety considerations.
 18 A. Yes, exactly.
 19 Q. But you'd agree with me that in many cases,
 20 for normal street lighting requirements that a
 21 low pressure sodium bulb is a perfectly
 22 reasonable solution.
 23 A. Yes.
 24 Q. And would, in actual fact save whatever two or
 25 municipality is footing the bill for those

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1 street lights.
 2 A. Yes, if there are savings to be got, they
 3 should be getting them.
 4 Q. Okay. That's all the questions I have, Chair.
 5 Thank you very much gentlemen.
 6 CHAIRMAN:
 7 Q. Okay, thank you, Mr. Kennedy. Do you have re-
 8 direct, Ms. Greene.
 9 MR. KENNEDY:
 10 Q. We'll need to put that as an exhibit, Chair,
 11 so Exhibit No. 3.
 12 MS. HENLEY ANDREWS:
 13 Q. It's going in as to its existence, but not as
 14 to the truth of its content?
 15 MR. KENNEDY:
 16 Q. Yes, I won't be calling the author of the
 17 report.
 18 CHAIRMAN:
 19 Q. Exhibit 3. Okay, I think we need a break at
 20 this point in time for 10 or 15 minutes and we
 21 then will come back and hopefully we can
 22 finish before 1:30. Thank you.
 23 (BREAK - 12:17 P.M.)
 24 (RESUME - 12:37 P.M.)
 25 CHAIRMAN:

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1 CHAIRMAN:
 2 Q. Thank you, Ms. Greene. Any questions,
 3 Commissioner Powell.
 4 COMMISSIONER POWELL:
 5 Q. Just a couple of short ones, Mr. Chair. Just
 6 one little note. On the dials upgrade you're
 7 doing, if memory serves correct, a couple of
 8 years ago Newfoundland Power did an upgrade,
 9 had their line down that way, I guess, were
 10 you aware of it and any thought of, sort of,
 11 combining the initiatives at the same time in
 12 terms of saving?
 13 MR. MARTIN:
 14 A. I'm not aware of any upgrade that Newfoundland
 15 Power did. A year or two ago we did so some
 16 upgrades to our 69 kV transmission line from
 17 Doyles to Port aux Basques, TL215. We
 18 replaced some wood pole structures there.
 19 Q. The only reason I mention that, we had a tour
 20 of the Rose Blanche facility and when we were
 21 coming up, they were talking about they were
 22 upgrading their lines all the way up the south
 23 west coast because they were moving them from
 24 the road bed for environment purposes and they
 25 talked about their problems with salt and

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1 Q. Okay, Ms. Greene.
 2 GREENE, Q.C.:
 3 Q. Mr. Chair, I have no re-direct arising from
 4 cross-examination, but we are in a position to
 5 respond to the undertaking provided to Ms.
 6 Henley Andrews during the cross-examination.
 7 And that related to IC36 and Ms. Henley
 8 Andrews asked us to advise whether any of the
 9 vehicles that were listed in IC 36, page 2 of
 10 2 were to be used in the L'anse-au-Loup
 11 system. Mr. Reeves, have you been able to
 12 determine the answer to that question over the
 13 break?
 14 MR. REEVES:
 15 A. Yes, I've checked with our assets people in
 16 transportation and there is one vehicle on
 17 this page which is for L'anse-au-Loup and it's
 18 under the first category.
 19 Q. When you say first category, you mean replaced
 20 vehicles, 2003?
 21 A. 2003, yes. And it's the last vehicle
 22 actually, vehicle 4438, that one is being
 23 purchased for L'anse-au-Loup.
 24 Q. Thank you, Mr. Chair, that concludes what I
 25 wanted to do.

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1 various things.
 2 A. I'm not familiar with those upgrades, I'm
 3 sorry.
 4 Q. B83, there was just an item there that struck
 5 me as being--in your corporate overhead, the
 6 things, the cost use of funds. 2004, you have
 7 51,000 on a million dollar supply item and in
 8 2005, you're projecting a supply item of less
 9 than a million dollars, 259,000. Do you have
 10 a significant contingency value built in
 11 there. Why would you put it there?
 12 MR. REEVES:
 13 A. We have about, it's around a ten or less
 14 percentage of contingency--if my memory serves
 15 me right and what is, is that as we discussed
 16 with the Industrial Customers, because of the
 17 criteria the way that it is, we try to get as
 18 long out of vehicles as we can, but there may
 19 be one that fails in service or we may have an
 20 accident that we had to replace the vehicle
 21 and that's why that contingency is a bit
 22 large.
 23 Q. So, when we see the 2004 budget, that 250 may
 24 shrink which will be more -
 25 A. It may or may not because you can't predict

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1 these things.
 2 Q. Okay. So, the type of vehicle 2005 can be
 3 significant?
 4 A. 2005 would be the larger vehicles, the line
 5 trucks.
 6 Q. Okay. Do you, as a policy, have time logs for
 7 your vehicles' use?
 8 A. Do we--sorry?
 9 Q. Have a time log system or some system to see
 10 what, you know -
 11 A. On the truck itself or the vehicle itself?
 12 Q. All vehicles, what each vehicle is being used
 13 for in terms of -
 14 A. On the--to answer your question specifically,
 15 I guess, we do not on all of our vehicles, no.
 16 We don't have any electronic equipment or do
 17 we keep a daily log of our vehicles either.
 18 Q. I'm thinking more of a daily log as opposed to
 19 -
 20 A. No, like a line truck that we would have to
 21 put a line crew, you know, they'd be working
 22 on lines all the time. So, we don't have a
 23 book in the truck that tells where they went
 24 on a particular job. My recollection is that
 25 we don't have that.

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1 would typically have a two-person crew.
 2 Transmission line crews, typically are six
 3 people, but you'd have less crews in
 4 transmission. The most crews that we would
 5 have is distribution crews.
 6 Q. As far as personal use of vehicle, the
 7 liability would be--liability insurance
 8 questions would be--you using your own vehicle
 9 for company -
 10 A. Well, yes, liability is covered for myself,
 11 yes.
 12 Q. We were talking about replacing a transformer
 13 in Rigolet, the media has been carrying--
 14 Petites is doing a Harbour Deep, is there any
 15 savings that Hydro can get from that for,
 16 capital budget in terms of equipment that they
 17 won't have to buy now, because they'll be able
 18 to transfer.
 19 A. Very little of it, I would say, because
 20 Petites, if I remember correctly, it's
 21 probably a community that's been there for
 22 quite a while and we've been servicing for
 23 quite a while and much of the equipment is
 24 probably at the end of its useful life anyway.
 25 We may be able to transfer some of it, but not

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1 Q. Okay. Your speciality vehicles, do you do any
 2 sharing with Newfoundland Power?
 3 A. We have an arrangement with Newfoundland Power
 4 that in the eventuality that either one or the
 5 other parties got a major outage or whatever
 6 or a special requirement, that we have a
 7 mechanism in place where we can share, yes.
 8 Q. The 281 vehicles, just a quick and dirty
 9 calculation, that works out to 3.5 to 4
 10 employees for every vehicle.
 11 A. Well, when you consider that a lot of our
 12 vehicles, like the 3s and 4000s, I guess, and
 13 even some of the, a lot of the 2000s, that
 14 there'd be one, maximum of two people in those
 15 vehicles. Like a technician would use a panel
 16 van to go into a site. A lot of cases, they
 17 would go by themselves. Many of our line
 18 trucks would only have two people on them.
 19 So, that would drive the ratio down.
 20 Q. Do you have any idea how this would compare
 21 with other utilities or does that -
 22 A. No, to be honest, I don't have that off the
 23 top of my head, no. I'd be surprised if it's
 24 much different because most other utilities,
 25 for line crew, like on distribution, they

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1 a lot of it. If I can just indicate, when we
 2 decommissioned Harbour Deep a couple of years
 3 ago, I think we were only able to use one of
 4 the diesels because the rest were at the end
 5 of their useful life.
 6 Q. That's all my questions, Chair.
 7 CHAIRMAN:
 8 Q. Thank you, Mr. Powell.
 9 COMMISSIONER POWELL:
 10 Q. Good retirement, Mr. Reeves.
 11 A. Thank you very much.
 12 CHAIRMAN:
 13 Q. Mr. Reeves, I had a couple of questions and
 14 really they had to do with your vehicle
 15 policy. But before I get into that one, if
 16 you would go to B84 and B82. There's a
 17 contingency included in both and that is in
 18 the case of 82, it's three forty one nine and
 19 in the case of 84, it's 310,400. Would you
 20 explain why that is there?
 21 A. When I said the contingency percentages to Mr.
 22 Powell was around 10 percent, actually it's a
 23 little bit higher than that. The notes that I
 24 got here in my file. Why we put a contingency
 25 is for a number of reasons. One is that the

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1 prices that we would be charged could be off,
 2 but that's really probably more--we have a
 3 better handle on that one because the prices
 4 of vehicles don't go up that great. I guess
 5 why we put a contingency in there is that if
 6 we have accidents on our own vehicles, we are
 7 self insured and if the vehicle is written
 8 off, we would have to replace that vehicle.
 9 Also, if there are high maintenance items in a
 10 particular year, we might consider--you know,
 11 if a vehicle, say, required--it was close to
 12 the end of its service life and going to be
 13 replaced next year, we may even consider
 14 moving it up a year or something. But that is
 15 the oddity, rather than the -
 16 Q. I wonder, because there is a contingency of a
 17 million dollars allowed normally in the
 18 budget, and you've applied to have that
 19 approved again for 2004. Would you expect
 20 that an example like you just gave, the
 21 replacement of a vehicle, would be able to be
 22 covered by that contingency and the conditions
 23 that apply to that contingency?
 24 A. It possibly could, but what we've done in the
 25 past, rightly or wrongly, is that we carry

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1 Q. But you say each year you've been -
 2 A. My recollection -
 3 Q. - your experience is that you use it up?
 4 A. - my recollection is that we've been spending
 5 fairly close to the money that we've requested
 6 for vehicles.
 7 Q. If it's something that happens regularly every
 8 year, I just wonder why it still can't--you
 9 know, it still -
 10 A. Well, the trouble is -
 11 Q. - it still has the name contingency attached
 12 to it.
 13 A. Yes. I guess, the trouble is that we, from
 14 earlier on, we went through the review and we
 15 can tell you exactly what vehicle we plan to
 16 replace next year, due to mileage, condition
 17 and whatnot and we try to do that at least
 18 one, if not two years in advance, depending on
 19 the timing that we got. So that's fairly
 20 rigid. But the other ones are the ones that
 21 we are basically, you know, we don't know
 22 what's going to happen. You know, this is--
 23 right now, this is July. This budget is for
 24 next year. If we have a vehicle involved in
 25 an accident next year, then we'll have to do

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1 that contingency in our vehicles and
 2 typically, we have, in the past, used fairly
 3 close to all of our money on our vehicles.
 4 Q. You mean the contingency?
 5 A. The contingency as well, yes. Whether it's a
 6 price escalation or whether it's a failure of
 7 vehicles in service.
 8 Q. Yes. I'm having a bit of difficulty wondering
 9 why it's necessary to have the contingency in
 10 respect of the vehicles as opposed say to the
 11 insulators that we talked about earlier, \$2
 12 million, you know. Can you explain the
 13 difference, why there is a need to have a
 14 contingency here?
 15 A. Most of our projects, we do carry a small
 16 amount of contingency. It can vary, you know,
 17 depending on the--I guess on the -
 18 Q. Yes, and which is normally covered in that, I
 19 suppose, that item called corporate overhead,
 20 et cetera, and contingency?
 21 A. That's correct, yes.
 22 Q. Yes. I just wondered why, in the case of the
 23 vehicles, it seemed to be a higher amount than
 24 normal. That's all.
 25 A. Yes.

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1 something with that one.
 2 Q. Okay, that explains it. I'm not sure I agree
 3 with it, but that explains it. Just go to B 81
 4 and keep your finger in B83. At the very last
 5 paragraph, you start describing category and
 6 one and 2000 vehicles being replaced with an
 7 average age of six years and 150, 000
 8 kilometres. And if you look up at the table
 9 those numbers seem to match the numbers on
 10 their age and other.
 11 A. Um-hm.
 12 Q. Now, when you go to 3000, the average age of
 13 11 years and 100,000 kilometres.
 14 A. Um-hm.
 15 Q. And the same with respect to 4000, an average
 16 age of 10 years and 200,000 kilometres, my
 17 question is what is the difference between
 18 that statement and what the information is
 19 that, sort of, comes through from the table.
 20 A. Well, the one that's really off line there, I
 21 guess, is the light trucks where we kept the
 22 vehicles for an average 11 years. And what it
 23 is, is that we were replacing two trucks there
 24 for the Bishop Falls site actually. One is in
 25 transportation which is 12 years old and the

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1 other one is a salt truck which is ten years
 2 old. So, because I think, I guess, the use
 3 that they got, we were able to keep the
 4 longer.
 5 Q. Okay. So, the statement you have in the last
 6 paragraph is in relation to the purchases that
 7 you intend to do this year?
 8 A. For the vehicles -
 9 Q. The statements in the table are in relation to
 10 the fleet.
 11 A. Are in relation--and these are the guidelines
 12 that we use. And what's in the paragraph is,
 13 for the vehicles being replaced under this
 14 project.
 15 Q. Ms. Henley Andrews was asking you some
 16 questions about the maintenance and so on, and
 17 one of the factors that I thought you might
 18 have thrown in there, in your answer, is the
 19 increase in maintenance that comes about as a
 20 result of more than one driver being--or using
 21 a particular vehicle. Now I don't know what
 22 your experience has been. I know I asked you
 23 that question, I think, before and I don't
 24 recall the answer. But it is a significant
 25 factor, in terms of what impact it has on

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1 the same vehicle all the time.
 2 Q. Do you have a fleet manager?
 3 A. We have what we call an asset manager, yes.
 4 Q. And is he responsible for more than your
 5 vehicles?
 6 A. Is he responsible for more than the vehicles?
 7 Q. Like is he responsible for fixed plant as
 8 well? What I'm wondering is if you have a
 9 person--you know, you have a fleet of 281, I
 10 think it is -
 11 A. Yes.
 12 Q. - which is a considerable size.
 13 A. Yes.
 14 Q. And there wouldn't be many fleets in
 15 Newfoundland greater than that in number.
 16 There are some, of course. But there's a fair
 17 number of dollars tied up in those vehicles
 18 and I'm just wondering about your approach,
 19 you know, Hydro's approach to taking care, if
 20 you like, of that asset or those assets?
 21 A. Up until, I guess, the late 90s, we were
 22 probably a little looser managed of our fleet
 23 then, like the different areas have more
 24 control of their vehicles. With the asset
 25 manager, he works more closely with each

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1 maintenance?
 2 A. Probably does, yes. It most definitely does,
 3 I would say.
 4 Q. So most of your vehicles that are out in the
 5 field, would they be driven by more than one
 6 person?
 7 A. The majority of them would be. Some of the
 8 ones, like if we got one technician in an area
 9 like--or two technicians in an area, it might
 10 be two drivers on a particular vehicle, like a
 11 panel van or something. Line trucks, the
 12 heavy line trucks, we may have a designated
 13 driver or two, but other than that, like fleet
 14 vehicles, whoever -
 15 Q. Yes.
 16 A. - requires a vehicle will use them.
 17 (12:52 p.m.)
 18 Q. So the vehicle is not assigned to a person in
 19 all cases? It's sometimes assigned to a
 20 location?
 21 A. A location, and there are some vehicles which
 22 we would say, I'm going to use the word,
 23 loosely assigned, like to a front line
 24 supervisor, where they might have three or
 25 four crews out. That person would be using

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1 section, whether it's in hydro generation or
 2 thermal generation or the three regions which
 3 I have to work with the labour managers, who
 4 primarily their staff that run the vehicles.
 5 So he would be involved in the selection of
 6 vehicles, trying to get consensus amongst the
 7 users of the vehicles, and also, he would have
 8 access to all the maintenance costs on each
 9 vehicle and even if there's particular
 10 problems on a particular vehicle, he will deal
 11 with the user and he'll have the general
 12 knowledge of the other vehicles in the fleet
 13 which are like that one. So we try to
 14 consolidate as much as we can without taking
 15 away the responsibility of the day-to-day
 16 operations of the vehicle for the particular
 17 region.
 18 Q. All of your maintenance, purchasing, is all
 19 done in-house, isn't it?
 20 A. That's correct. We do have a PHH card,
 21 whereby we buy our--we purchase our gas
 22 through PHH cards, and also, that's used to
 23 track the expenses of our vehicles, but
 24 normally, we would manage the replacement or
 25 parts on vehicles or whatever and the purchase

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1 of vehicles.

2 Q. Have you looked at going outside? Have you

3 talked to any of the companies out there that

4 do this, that do your vehicle or your fleet

5 maintenance as a business? There is one that

6 I can't recall the name of, but I think it's

7 used by Newfoundland Power.

8 A. I'm not sure, from talking to--I can't

9 remember either. But my recollection is that

10 they do a lot of their maintenance in-house as

11 well, but we have not passed over the full

12 control of our fleet to a third party, you're

13 right, and we have looked at it, I guess,

14 generally in the past, but we haven't hired on

15 a consultant or anybody to review it, in my

16 recollection.

17 Q. But not only have you not handed it over to a

18 third party, if I recall what you said a few

19 minutes ago, you haven't deemed it to be

20 important enough to assign the responsibility

21 of fleet operations to a particular person

22 exclusively?

23 A. Well, I must have misstated myself then,

24 because we have--all of our fleet now is under

25 the one person, which is the asset manager,

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1 support staff of one person.

2 Q. When you declare that a vehicle is no longer

3 useful to you and you're going to replace it,

4 what do you do with the vehicle? What's your

5 policy in terms of disposal?

6 A. We usually have--several times a year, we have

7 an auctioneer come in and we auction off our

8 vehicles.

9 Q. Do you salvage or do you make use of the

10 equipment that's contained on some of these

11 specialty vehicles?

12 A. Yes. Matter of fact, on some of our line

13 trucks, we will reuse the boom for several

14 chassis.

15 Q. So they'll outlast, say, the life of the

16 vehicle itself?

17 A. Of the chassis, yes.

18 Q. In normal circumstances, yes. Just one more

19 question, Mr. Reeves. What portion of the

20 fleet are you proposing to replace this year,

21 either in terms of dollars or in terms of

22 numbers of vehicles? I just want to get some

23 fix on--because it seems to be that this

24 amount occurs annually, doesn't it?

25 A. Yes, it does. And I just did it straight on

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1 which is actually located in Bishop Falls, our

2 largest location, I guess. He coordinates all

3 the purchasing of our vehicles. He

4 coordinates the -

5 Q. Yes.

6 A. - the repairs, all that kind of stuff, but

7 what he doesn't have responsibility for, if

8 he's got a vehicle say in Happy Valley, and it

9 runs into problems tomorrow morning, the

10 people in Happy Valley has some authority to

11 go out and get that piece of equipment fixed.

12 If it's a major fix, then they get back to

13 assets before they spend any amount of

14 dollars, because it may be a common problem.

15 It may be one that got to make a different

16 decision on.

17 Q. What else does that person in Bishop Falls do?

18 A. Right now, I think his primary role is

19 vehicles.

20 Q. But what else does he do? You say primary.

21 A. Prior to '99--I'm here thinking, I think prior

22 to '99, he had responsibility for the civil

23 section, but he doesn't have that right now.

24 If I'm not mistaken, he's got the--that's his

25 full responsibility. He's got a very small

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1 numbers. We have 281 and we're replacing 44

2 vehicles in 2004, so that's about 15 percent.

3 Q. And that's normal?

4 A. That's about on par, I think, yes.

5 Q. Yes.

6 A. If I remember correctly.

7 Q. Okay. Any questions arising, Ms. Greene?

8 GREENE, Q.C.:

9 Q. No, Mr. Chairman, thank you.

10 HENLEY ANDREWS, Q.C.:

11 Q. Mr. Chairman, I have a couple of questions

12 arising.

13 CHAIRMAN:

14 Q. Yes. I'm going to get to you.

15 HENLEY ANDREWS, Q.C.:

16 Q. Okay.

17 CHAIRMAN:

18 Q. Mr. Hayes, do you have any questions arising?

19 MR. HAYES:

20 Q. No, Mr. Chair.

21 CHAIRMAN:

22 Q. Okay. I'm looking at the order that I have

23 here. I guess I'm reading from the wrong

24 list, and that's my problem, and I guess

25 that's why you interrupted me, Ms. Henley

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1 Andrews.
 2 HENLEY ANDREWS, Q.C.:
 3 Q. No. In fact, that's not correct. I was just
 4 afraid you weren't coming to me at all.
 5 CHAIRMAN:
 6 Q. I will. Matter of fact, I'm about ready now.
 7 GREENE, Q.C.:
 8 Q. I think I'm supposed to have been last on
 9 this.
 10 CHAIRMAN:
 11 Q. Yes, you're last.
 12 HENLEY ANDREWS, Q.C.:
 13 Q. Yes, I know that.
 14 GREENE, Q.C.:
 15 Q. So you can ask me again.
 16 CHAIRMAN:
 17 Q. Yes. So Ms. Henley Andrews, you carry on.
 18 It's a good thing it's Friday.
 19 GREENE, Q.C.:
 20 Q. And we're almost at the end.
 21 RE-CROSS-EXAMINATION BY JANET HENLEY ANDREWS, Q.C.
 22 HENLEY ANDREWS, Q.C.:
 23 Q. There are just three things arising out of the
 24 questions, and that is, in answer to the
 25 Chairman's questions, you said that if you

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1 vehicles are multi-driver vehicles, so I just
 2 know my own car at home, that if there's more
 3 than one vehicle driver, then normally, your
 4 maintenance could be higher, yes.
 5 Q. It -
 6 A. That's just a subjective comment on my part.
 7 Q. Okay. So Hydro hasn't done a study that
 8 indicates that its vehicle life or its vehicle
 9 maintenance is higher as a result of the
 10 number of drivers on any given class of
 11 vehicles?
 12 A. No, we have not, and I really don't see the
 13 intent of doing that, because it just would
 14 not suit our business. We could not assign
 15 particular individuals to drive vehicles. We
 16 would need more vehicles.
 17 Q. And if we go to the last question that was
 18 asked, in terms of the percentage of vehicles
 19 that are being replaced in 2004, while it's
 20 true that it's 15 percent overall, wouldn't
 21 you agree that if you looked at each
 22 subcategory, which is the 1000, the 2000, the
 23 3000 and the 4000, that, for example, if you
 24 take the 3000 level vehicles, which are shown
 25 on IC-36, page 2 of 2, there is four of them,

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1 have accidents, you're self-insured on your
 2 vehicles?
 3 A. For the vehicle damage themselves, that's
 4 correct, yes. That's my recollection.
 5 Q. Okay. So you don't carry -
 6 A. The liability we cover with an outside party,
 7 but the vehicles themselves, my recollection
 8 is that we self-insure ourselves.
 9 Q. So you can't carry any collision?
 10 A. How is collision covered? Glass and that, no.
 11 All we cover for our vehicles, and I stand to
 12 be corrected, is liability.
 13 Q. And is that based upon a study of a cost
 14 benefit with respect to the insurance versus
 15 replace--versus self-insurance?
 16 A. I'm not aware that there was one done, but
 17 that's not my area of expertise, I'm sorry.
 18 Q. And the second thing is the Chairman suggested
 19 to you that--or asked you your opinion as to
 20 whether having more than one driver has a
 21 significant impact on maintenance, and I
 22 thought your answer was that it might. Was
 23 that correct?
 24 A. My answer would only be subjective at this
 25 point in time, and I guess, most of our

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1 four light trucks that are mentioned?
 2 A. That's correct.
 3 Q. Out of a total of 13?
 4 A. 13, yes.
 5 Q. So that's roughly 30 percent of the light
 6 trucks?
 7 A. Yes.
 8 Q. So the percentages for the different
 9 categories may be different than the 15
 10 percent that -
 11 A. That's correct. That depends on their service
 12 life.
 13 Q. Those are my questions. Thank you.
 14 CHAIRMAN:
 15 Q. Thank you, Ms. Henley Andrews. Mr. Kennedy?
 16 MR. KENNEDY:
 17 Q. Nothing arising, Chair.
 18 CHAIRMAN:
 19 Q. Nothing arising. Ms. Greene?
 20 GREENE, Q.C.:
 21 Q. Before we concluded today, Mr. Chair, I do
 22 have the responses to two undertakings that I
 23 can file at this time.
 24 CHAIRMAN:
 25 Q. You have nothing arising, I gather.

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1 GREENE, Q.C.:

2 Q. No, sorry. I'm too anxious to finish, I

3 guess. No, sorry, Mr. Chair. Moved on to the

4 next point.

5 CHAIRMAN:

6 Q. Okay.

7 GREENE, Q.C.:

8 Q. We have three undertakings that are

9 outstanding, and the secretary has passed--or

10 the Clerk has passed around a list of the

11 undertakings. So I will use that list in

12 responding. The first one that is indicated,

13 with no response, is undertaking No. 28, which

14 arose from questions by Mr. Hayes and it

15 related to the escalation factor used in the

16 calculation of the mobile radio replacement

17 project, and which related to the escalation

18 factor of 1.8 percent. So I do have a written

19 response to that to distribute at this time.

20 So this is a response to Undertaking 28.

21 CHAIRMAN:

22 Q. After you've had a look at those, I'll give

23 you an opportunity if there are any questions

24 that you have, for clarification purposes

25 anyway.

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1 have that ready for today, but I will file it

2 next week, assuming that we can get that from

3 Mr. Cook. Thank you, Mr. Chairman. That

4 completes our responses to the undertakings,

5 except for Undertaking No. 30.

6 CHAIRMAN:

7 Q. Okay. Are there any questions arising from

8 the information contained in those last three

9 or last two undertaking?

10 GREENE, Q.C.:

11 Q. Now the only thing I should point out is these

12 arose from the previous panel. Mr. Martin and

13 Mr. -

14 CHAIRMAN:

15 Q. Sure, it was, yes.

16 GREENE, Q.C.:

17 Q. - Mr. Martin and Mr. Reeves were not involved

18 in the preparation of the information.

19 CHAIRMAN:

20 Q. No.

21 MR. HAYES:

22 Q. I have one observation, Mr. Chair, and I just

23 wonder if maybe Ms. Greene could clarify, and

24 I just read the undertaking which was U-28, in

25 response to my question, and at the end, it

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1 GREENE, Q.C.:

2 Q. The next undertaking is Undertaking No. 31,

3 which related to the cost of the Think Centre

4 S50 and we had undertaken yesterday to file a

5 copy of the website page from IBM, as well as

6 a setting out of the cost for the Hydro

7 product versus the same product at the IBM

8 website, and I have a copy of that to

9 circulate at this time.

10 CHAIRMAN:

11 Q. That was No. 31, you said?

12 GREENE, Q.C.:

13 Q. That was No. 31, Mr. Chair. And I just notice

14 that the paper clip did not go through all of

15 the copies. I have sufficient copies here,

16 it's just, as I said, for some reason--oh,

17 thank you, Barbara--the paper clip is on the

18 bottom, not on the top, for half of them.

19 Sorry. I have more copies, Barbara, if you

20 need them. So Mr. Chair, our records would

21 indicate that that leaves one undertaking

22 outstanding, which is Undertaking No. 30,

23 which is to provide a CV with respect to

24 Custom Services Electronics, Mr. Norman Cook

25 of that company, and we have been unable to

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1 gives a range of escalation rates of 1.9 to

2 1.4 percent, and that's a descending order, so

3 I just wondered if there might have been a

4 typo or if that really, in fact, is it?

5 GREENE, Q.C.:

6 Q. No, there are different percentages each year,

7 and I don't think it's actually done

8 chronologically, is my memory from our

9 discussions last night, Mr. Hayes. This was

10 actually prepared by Mr. Downton and Mr.

11 Dunphy, and they just did it to illustrate

12 that there is a different escalation factor

13 each year that Hydro analyses, and during that

14 period of time, that was the range for that

15 period of time.

16 MR. HAYES:

17 Q. No, my only point was that I would have

18 thought that that might have been expressed

19 1.4 to 1.9, so I just wondered if it didn't

20 mean to say 1.9 to 2.4 or something like that.

21 GREENE, Q.C.:

22 Q. No, the actual numbers are 1.4 to 1.9.

23 MR. HAYES:

24 Q. All right.

25 CHAIRMAN:

1 Q. Maybe the same person that put the clips on
 2 the bottom of the pages.
 3 GREENE, Q.C.:
 4 Q. It wasn't me last night, sir.
 5 CHAIRMAN:
 6 Q. Okay. Anything else, Ms. Greene?
 7 GREENE, Q.C.:
 8 Q. No. Thank you very much, Mr. Chair. That
 9 concludes what Hydro wanted to provide.
 10 CHAIRMAN:
 11 Q. Okay. I'd like to thank the panel for their
 12 contribution, and I wish you well, Mr. Reeves,
 13 in your retirement, and I wish you success in
 14 your new appointment, Mr. Martin.
 15 MR. MARTIN:
 16 A. Thank you, Mr. Chairman.
 17 MR. REEVES:
 18 A. Thank you.
 19 CHAIRMAN:
 20 Q. This concludes the evidence and cross-
 21 examination portion of the hearing. We've
 22 already agreed on the dates for written
 23 argument and oral argument, and I'd like to
 24 thank all counsel for their cooperation and
 25 their contributions. We will await, I guess,

1 the arrival of the July 28th date, and having
 2 said that, we'll adjourn, and we did it on
 3 time too. Look at that. Amazing how much
 4 speed you can make at the end of the week.
 5 Upon conclusion at 1:15 p.m.

1 CERTIFICATE
 2 I, Judy Moss, do hereby certify that the
 3 foregoing is a true and correct transcript in the
 4 matter of Newfoundland and Labrador Hydro, 2004
 5 Capital Budget Application, heard before the Board
 6 of Commissioners of Public Utilities, Prince
 7 Charles Building, St. John's, Newfoundland and
 8 Labrador on the 11th day of July, A.D., 2003 and
 9 was transcribed by me to the best of my ability by
 10 means of a sound apparatus.
 11 Dated at St. John's, Newfoundland and Labrador
 12 this 11th day of July, A.D., 2003
 13 Judy Moss