- (9:34 a.m.) 1
- MR. NOSEWORTHY, CHAIRMAN: Thank you and good 2
- morning. Counsel, will there be any preliminary matters this 3
- morning? 4
- MR. KENNEDY: Not that I'm aware of, Chair, no 5
- preliminary matters this morning. 6
- MR. NOSEWORTHY, CHAIRMAN: Okay, thank you. 7
- Good morning, Mr. Budgell. 8
- MR. BUDGELL: Good morning. 9
- MR. NOSEWORTHY, CHAIRMAN: Are you ready to 10
- begin? 11
- MR. BUDGELL: Yes, I am. 12
- MR. NOSEWORTHY, CHAIRMAN: Thank you. I ask Ms. 13
- Henley Andrews to continue, please, with her cross-14
- examination. 15
- MS. HENLEY ANDREWS, Q.C.: Thank you, Mr. Chairman. 16
- My recollection, Mr. Budgell, is that when we finished 17
- yesterday we had agreed that if you looked at what was in 18
- place in 1991, and from a generation perspective, and what 19
- at that time was planned in terms of improvements in 20
- generation capacity, that you would expect that that should 21
- have been adequate to meet what was projected to be the 22
- 23 1995 demand and energy needs. Is that correct?
- MR. BUDGELL: I'm not ... when you say projected to be, I 24
- thought it was a hypothetical case we were putting ... 25
- MS. HENLEY ANDREWS, Q.C.: It is a hypothetical. 26
- MR. BUDGELL: ... case you were putting forward in 27
- regards to that particular forecast. I would agree on a 28
- hypothetical basis but going back to 1991 on an actual 29
- basis, one has to consider what the situation, the capability 30
- of the system was at that particular time looking forward, 31
- and I don't know whether '95 would have been an 32
- appropriate year that you would look at for deficits, but 33
- whatever year that is, if '95 is just as good as any, one 34
- would look for, based on the tables that Ms. Butler and I 35
- went through yesterday, and would determine the timing 36
- on the next source and focus decisions on making a 37
- decision to meet that deficit once we've convinced 38 ourselves that that's the proper timing. If it's beyond the 39
- construction timeframe, then there's time, there's more 40
- review of future forecast that one would have to look at,
- 41
- but recognizing, if we're talking 1991, we're talking a time 42 period of actual history where ERCO just shut down in 43
- 1989, so from the system perspective there wasn't a large 44
- requirement for capacity, and as we indicated yesterday 45
- that's why there was not a lot of commitment to that 46
- particular time in 1991. 47
- MS. HENLEY ANDREWS, Q.C.: And if you look at 48

- Schedule 8 to your testimony, I'm sorry, it should be
- Schedule 4 ...
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: ... would you agree that
- the system as it existed in 1991, with a few minor upgrades
- that we talked about yesterday, for example, there was some
- discussion at that point of minor replacements at Bay 55
- d'Espoir and some relatively inexpensive generation
- improvements, that what was in place in 1991 was expected
- to meet both the peak and the energy requirements forecast 58
- for 1995. 59
- MR. BUDGELL: Well, I don't know. I haven't done the
- 61 table. I thought we were just talking about a hypothetical
- 62
- MS. HENLEY ANDREWS, Q.C.: Yes, but now I'm asking
- you the specific question.
- MR. BUDGELL: I can't answer that right now whether ... I'd
- have to go back and look at the capability in 1995, for
- instance, the forecast at that particular time, and see how
- far it would go, but I know that shortly, in that timeframe,
- we were, projected deficits in the, in roughly that time 69
- period.
- MS. HENLEY ANDREWS, Q.C.: There were deficits, I 71
- think, projected ...
- MR. BUDGELL: I remember in around that time period.
- MS. HENLEY ANDREWS, Q.C.: ... for 1997. Yeah, okay.
- Could you go back and ...
- MR. BUDGELL: There was a table, I believe, filed in the
- 1991 evidence which would be helpful, I don't have that
- with me right now, if that's what you're relying on for that
- 79 statement.
- MS. HENLEY ANDREWS, Q.C.: Yes. Could you produce
- that table? Could you get that table?
- MR. BUDGELL: I would assume so, yes. It shouldn't be a
- 83 problem.
- MS. HENLEY ANDREWS, Q.C.: Thank you. Now if you
- look at the energy forecasts, the energy forecast for 2000 is
- actually ... now back and forth between Schedule 4 and
- Schedule 8 again. The actual energy, I'm sorry, for 2000,
- which was 8,057 gigawatt hours, is less than the forecast
- for 1994, which was 8,162 gigawatt hours. Is that right? So
- if you take Schedule 8 and the actual energy in 2000 of
- 8,057 ...
- MR. BUDGELL: Yes. This is all on Schedule 4, the same 92
- number.
- MS. HENLEY ANDREWS, Q.C.: Right. And you look at ...
- that's right, Schedule 4 shows that the ...

- 1 MR. BUDGELL: Actual was 8,057, in the far right column.
- 2 MS. HENLEY ANDREWS, Q.C.: In 2000, that's right. And
- that the forecast which was filed in 1991 for 1994 was
- 4 actually greater than that.
- 5 MR. BUDGELL: That's correct.
- 6 MS. HENLEY ANDREWS, Q.C.: And would you agree that
- the forecast, which we now have for 2001, of 8,316 gigawatt
- 8 hours ...
- 9 MR. BUDGELL: That's 2002, I believe.
- MS. HENLEY ANDREWS, Q.C.: Sorry, for 2002 rather, is
- less than the forecast filed in 1991 for 1995, which was
- 12 8,331.
- MR. BUDGELL: That's correct.
- 14 MS. HENLEY ANDREWS, Q.C.: And if you look at the
- forecast for 2010, which is shown on Schedule 8, which is
- the 8,929 gigawatt hours, that that is actually less than
- what in 1991 had been forecast for the year 2000.
- 18 MR. BUDGELL: That's correct.
- 19 MS. HENLEY ANDREWS, Q.C.: Now, if you look at
- Schedule 4, in 1991 Hydro's forecast for energy growth
- over the period 1991 to 2000 was from 7,547 gigawatt hours
- 22 to 9,065.
- 23 MR. BUDGELL: I'm not sure that ... what was the first
- number you ...
- MS. HENLEY ANDREWS, Q.C.: 7,547 from 1991, would
- have been the starting point.
- MR. BUDGELL: Yes, you're correct.
- MS. HENLEY ANDREWS, Q.C.: And the finishing point
- was expected to be 9,065 gigawatt hours?
- 30 MR. BUDGELL: That's correct.
- 31 MS. HENLEY ANDREWS, Q.C.: Which was an expected
- growth by my calculation of roughly 1,500 gigawatt hours
- or 20 percent of the starting point.
- MR. BUDGELL: I'll have to accept that, your calculation.
- 35 MS. HENLEY ANDREWS, Q.C.: But if you look at the
- actual energy growth over the same period, it was, it went
- 37 from 7,464 gigawatt hours in 1991 to 8,057.
- 38 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: Which is only roughly 100
- gigawatt hours, 500 gigawatt hours?
- 41 MR. BUDGELL: Roughly.
- 42 MS. HENLEY ANDREWS, Q.C.: Okay. Which is roughly
- 43 .

- 44 MR. BUDGELL: Roughly 600 gigawatt hours, I guess, from
- 45 1991.
- 46 MS. HENLEY ANDREWS, Q.C.: Okay. Or about eight
- 47 percent.
- 48 MR. BUDGELL: Yes.
- 49 MS. HENLEY ANDREWS, Q.C.: Okay. At page seven and
- eight of your testimony you show the plant and the
- 51 equipment which has come into service since 1992 to meet,
- I guess, both demand and energy requirements.
- MR. BUDGELL: Yes, I do.
- 54 MS. HENLEY ANDREWS, Q.C.: When you look at the
- 55 three things that have been done or the three projects that
- 56 have been carried out, were they primarily to meet demand
- or to meet energy requirements?
- 58 (9:45 a.m.)
- 59 MR. BUDGELL: Two of these items were to meet demand
- and energy. One was to meet demand only.
- 61 MS. HENLEY ANDREWS, Q.C.: And the one to meet
- 62 demand only would have been the Interruptible B
- 63 Contract?
- 64 MR. BUDGELL: That's correct.
- 65 MS. HENLEY ANDREWS, Q.C.: So since 1992 Hydro
- 66 gained 12 megawatts in capacity from the replacement of
- the turbine runners at Bay d'Espoir?
- 68 MR. BUDGELL: That's correct.
- 69 MS. HENLEY ANDREWS, Q.C.: And got 46 megawatts of
- 70 interruptible power from Abitibi in Stephenville?
- 71 MR. BUDGELL: That's correct.
- 72 MS. HENLEY ANDREWS, Q.C.: And also contracted to
- 73 purchase energy from Star Lake and Rattle Brook?
- 74 MR. BUDGELL: That's correct.
- 75 MS. HENLEY ANDREWS, Q.C.: So what you have
- 76 effectively achieved is 31 megawatts of additional
- 77 production from a demand perspective from the Bay
- d'Espoir and the Star Lake and Rattle Brook?
- 79 MR. BUDGELL: Yes, over the period 1991, as we
 - referenced before, to 1998.
- 81 MS. HENLEY ANDREWS, Q.C.: Yeah. And in addition
- 82 you have acquired a certain amount of energy, additional
- 83 energy capacity through those two projects.
- 84 MR. BUDGELL: Yes, we have.
- 85 MS. HENLEY ANDREWS, Q.C.: But it's not quantified here
- in your, in this part of your evidence.

- MR. BUDGELL: No. 1
- MS. HENLEY ANDREWS, Q.C.: And with respect to Item 2
- 2 that's shown on page seven, you're familiar with the, 3
- what's called the Interruptible B Contract for Stephenville, 4
- aren't you? 5
- MR. BUDGELL: Yes, I am. 6
- MS. HENLEY ANDREWS, Q.C.: And could you describe 7
- for the Board how that works? 8
- MR. BUDGELL: I think Mr. Henderson has already 9
- described it but I hope I give the same story he does. 10
- What this is, that we have purchased the right from Abitibi 11
- Inc.'s mill in Stephenville, the right to interrupt 46 12
- megawatts of their firm power, and we can exercise that 13
- right with one-hour notice and it occurs during the time 14
- period of December of one year to March of the next year, 15
- and we have 25 occasions which we can call on that in that 16
- time period. The maximum length is ten hours per day, I 17
- believe, and we pay Abitibi for that right a ... there's a 18
- discount actually from their demand bill of roughly on an 19
- annual basis of 1.2 or between 1.2 and \$1.3 million a year, 20
- and I think the calculation of that is in one of the RFIs, but 21
- we'll call on that when the system is short on demand and 22
- one of the conditions of the contract is that we can't call on 23
- that until we're down to our last gas turbine, so it's a, sort 24
- of our penultimate choice. 25
- MS. HENLEY ANDREWS, Q.C.: And with respect to that 26
- ability to interrupt demand, what that really means is that 27
- for that period of time Abitibi takes less demand? 28
- MR. BUDGELL: Yes. 29
- MS. HENLEY ANDREWS, Q.C.: In order that that demand 30
- is made available to the system? 31
- MR. BUDGELL: The period of time once we've made the 32
- request, until we've discontinued the request. 33
- MS. HENLEY ANDREWS, Q.C.: 46 megawatts is a fairly 34
- decent chunk of demand, isn't it? 35
- 36 MR. BUDGELL: It's certainly appreciable, yes.
- MS. HENLEY ANDREWS, Q.C.: Now, with respect to 37
- Newfoundland Power's generation in Port aux Basques, 38
- probably got the town wrong, but anyway in terms of the 39
- ability to ask Newfoundland Power to utilize its various 40
- generation for demand for which they get the generation 41
- credit, you're familiar with that as well. 42
- MR. BUDGELL: Yes, I am. 43
- MS. HENLEY ANDREWS, Q.C.: And with the exception of, 44
- well, I guess, even in emergencies, that operates pretty 45
- much the same way, would you agree? 46
- MR. BUDGELL: Not exactly. We will call upon it in a ... 47

- well, it certainly will occur before we go to, I think,
- Stephenville instance, but it's different in one respect, is that we don't pay for it in advance as we do, so in other
- words, in the case of Abitibi, the customer who provided that service has been paid up front for that service. In the
- 52 case of Newfoundland Power, we, through arrangements or 53
- agreement with Newfoundland Power, can call upon their
- generation, and we're referring here of course to the thermal 55
- generation because their hydroelectric is operating in any
- event to the extent possible. We will call upon that
- generation and then pay for the energy portion of that generation by the event. The capacity credit given to
- Newfoundland Power, which is similar to the payment that
- Abitibi receives, is given to Newfoundland Power through
- the cost of service as a credit. That's the difference
- between the two, but essentially they're both at times called
- upon to meet peak.
- MS. HENLEY ANDREWS, Q.C.: To meet peak.
- MR. BUDGELL: In a similar way.
- MS. HENLEY ANDREWS, Q.C.: In a similar way.
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: And while the
- compensation structure is set up differently in that the
- Newfoundland Power's is a generation credit versus
- Abitibi's being a direct payment, the effect is that
- Newfoundland Power is paid for that extra demand.
- MR. BUDGELL: Yes. They're paid for that demand
- through the credit.
- MS. HENLEY ANDREWS, Q.C.: And for the availability of
- that equipment.
- MR. BUDGELL: Through the credit, yes.
- MS. HENLEY ANDREWS, Q.C.: So again when you look 79
- at the, at page seven, as a result of the three initiatives that 80
- Hydro has taken since 1992, there is 31 megawatts of extra
- demand and associated energy available and there's 46 82
- megawatts of additional demand on an interruptible basis
- to meet system peaks?
- MR. BUDGELL: That's correct. I should point out too, just
- coming back to an earlier conversation you and I had, when
- you look at the timing here, this is a good example of where
- we talked about the scheduling or looking forward on
- generation and when we'd look for deficits. The last item, 89
- which is number three, for the two small hydro projects, if 90
- people remember, this was started in 1992 looking at an
- earlier timeframe and as forecasts in the 1990s fell off, our
- forecast would have progressively gotten lower as we do
- our two times a year or our official, like, forecast in the fall and then the review. Our forecast would have fallen off as

 - the economic climate in the province deteriorated. So in

- this particular case, this is why these particular projects
- that were originally in that RFP schedule for the, I think
- around '94 to '96 period, had been moved off to 1998 to
- 4 reflect that that fall off occurs.
- 5 MS. HENLEY ANDREWS, Q.C.: Uh hum, alright. But from
- 6 those three projects you have achieved an additional 77
- 7 megawatts of demand capability since 1992?
- 8 MR. BUDGELL: Yes.
- 9 MS. HENLEY ANDREWS, Q.C.: And would you agree
- with me that if you look at 1991 as shown in Schedule 4, the
- 11 1991 forecast ...
- MR. BUDGELL: As filed?
- MS. HENLEY ANDREWS, Q.C.: As filed. It doesn't matter
- which one from my perspective. In 1991, since there was
- no planned additional capacity to be put in operation
- before 1993, you would have to agree that the system as it
- was in existence in 1991 was expected to meet the demand
- of 1,591 megawatts expected for 1993?
- MR. BUDGELL: Again I'd have to see that table that we
- 20 talked about earlier on in the undertaking to see what the,
- I guess, back at that day, what the LOLE indices were for
- 22 1993.
- 23 MS. HENLEY ANDREWS, Q.C.: And you can verify that
- for me then.
- MR. BUDGELL: Yes. I'm expecting that what you're saying
- is correct because we, obviously we went ahead with a
- 27 contract with Abitibi ...
- MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: ... for the interruptible in 1993, so this must
- 30 have recognized that shortfalls in demand were imminent.
- 31 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: Whether it was '93 or '94, I can't say right
- 33 now.
- 34 MS. HENLEY ANDREWS, Q.C.: Now if you look at
- 35 Schedule 8 again, there's one thing that really struck me
- 36 about your demand forecast, and that's that you're
- 37 forecasting an increase of 133 megawatts in demand
- 38 between 2000 and 2001.
- 39 MR. BUDGELL: Yes. Well, one is an actual.
- MS. HENLEY ANDREWS, Q.C.: Yeah. Well ...
- 41 MR. BUDGELL: It's not ...
- 42 MS. HENLEY ANDREWS, Q.C.: ... 2001 over 2000.
- 43 MR. BUDGELL: Yes.
- 44 MS. HENLEY ANDREWS, Q.C.: Which is a 9.2 percent

- 45 increase.
- 46 MR. BUDGELL: Yes, and the issue here is, the situation,
- you have to look at both numbers and what underlies both
- 48 numbers.
- 49 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: The 2000 actual is based on a weather
- 51 condition that existed at that particular time and the
- 52 coincidence of utility and industrial demand. The forecast
- assumes a coincidence of demands from the industrial and
- utility group that are based on normal averages or mediums
- of what actually occurs between the two, so what actually
- occurred in 2000 is not an event that you can directly
- compare to the year 2001 because 2000, for instance, was, you never had weather conditions that drove the utility
- 59 demand, despite the fact, I might say, that the industrial
- 60 demand was high at that particular time. This occurred in,
- 61 I think I indicated yesterday, a December time period.
- 62 MS. HENLEY ANDREWS, Q.C.: Yes.
- 63 MR. BUDGELL: December 10th, I believe I said.
- 64 MS. HENLEY ANDREWS, Q.C.: Yes.
- 65 MR. BUDGELL: The industrial demand in the 1,443 is
- actually higher in that event, on that occasion, than we're
- 67 projecting in the 1,576, you might ...
- 68 MS. HENLEY ANDREWS, Q.C.: Okay.
- 69 MR. BUDGELL: But what's happening here is the 1,576
- reflects the weather conditions that I indicated yesterday
- 71 that we project ahead for normal demand, which was on a
- 72 normal peak day.
- 73 MS. HENLEY ANDREWS, Q.C.: Okay. Now, one of the
- 74 things we talked about yesterday was how you define the
- normal peak day for the purpose of that number.
- MR. BUDGELL: Yes, and I can give you an indication of
- 77 that today ...
- 78 MS. HENLEY ANDREWS, Q.C.: Okay.
- 79 MR. BUDGELL: ... if you would permit.
- 80 MS. HENLEY ANDREWS, Q.C.: Yes.
- 81 MR. BUDGELL: The demand is based on historic average
- 82 wind speed and temperature condition, which we derive a
- wind chill factor, and the wind speed is 46 kilometers per
- 84 hour and the temperature is minus 13.6, and I should also
- point out that the wind speed is an average of eight hours
- prior to the peak and the temperature is an average of 20
- 87 hours prior to peak. You have to build up peak on the
- 88 system.
 - MS. HENLEY ANDREWS, Q.C.: Yeah.

- MR. BUDGELL: So those ... and these are derived from 1
- statistics dating back to 1976. So what we're looking at a 2
- little earlier on the table, 1,443, you'd have to look at that in 3
- 4 light of the conditions that occurred on that particular day
- relative to the temperature sensitive demand that occurred 5
- on that particular day for the utility load, which has the 6
- majority of the temperature sensitive demand, as we 7
- indicated yesterday, and if the temperature didn't occur and 8
- a peak did occur, it's because of industrial loads, it's a 9
- coincidence between the two. 10
- MS. HENLEY ANDREWS, Q.C.: Yes. 11
- MR. BUDGELL: And you have to combine the two 12
- quantities to quantify the load. On a go-forward basis 13
- we're assuming average peak conditions and we assume the 14
- customer load forecast. It just happens to be in this 15
- particular forecast that we're looking at a year when, 2001, 16
- the actual year was, we didn't meet or, let's say, come up to 17
- the level of average peak conditions. 18
- MS. HENLEY ANDREWS, Q.C.: Okay. So when we 19
- discussed yesterday whether you use your worst-case 20
- scenario and you indicated it wasn't your absolute worst-21
- case scenario but it was sort of closer to worst-case, it was 22
- 23 one of the sort of things, that was not correct, is that right?
- MR. BUDGELL: No. What we ... 25
- MS. HENLEY ANDREWS, Q.C.: It is in fact average? 26
- $(10:00 \ a.m.)$ 27

24

- MR. BUDGELL: Yeah. What we actually do is go to each 28
- peak day that occurred each and every year in the history 29
- and look at those conditions that I just outlined for that 30
- day, and then it's the average of that. 31
- MS. HENLEY ANDREWS, Q.C.: Okay. So that if you go 32
- back to 1976, I'm not going to do this, but if you went back 33
- to 1976 and you got that information that you just 34
- indicated, which is the average wind speed for the eight 35
- hours prior to the peak and the average, and the 36
- 37 temperature for the 20 hours prior to the peak, and you got
- that for every one of those years and then averaged it, that
- 38 would be the input data for coming up with the starting 39
- number for your forecast? 40
- MR. BUDGELL: Yes. It would derive a wind chill that 41
- would then feed into an equation that's in the load forecast 42
- and used for projecting future peaks. 43
- MS. HENLEY ANDREWS, Q.C.: Now when you look again 44
- at Schedule 4, and you look at the actuals in the period 45
- 1991 to 2000, there's not a single year in that time period 46
- when the peak reached the 1,576 megawatts that you're 47
- showing as projected for 2001. 48

- MR. BUDGELL: That's correct. The closest to it would
- have been, I guess, 1996, 1,563.
- MS. HENLEY ANDREWS, Q.C.: And there was in fact, as
- you look down that column on Schedule 4, there was only
- one year in the period from 1991 to 2000 where the peak
- exceeded 1,500 megawatts.
- MR. BUDGELL: Yes, and that reflects the fact that the 55
- weather conditions that we've had in the mid to late 1990s 56
 - have been, from a peak perspective, warmer than average.
- MS. HENLEY ANDREWS, Q.C.: When you look at the 58
- experience with respect to your forecasting over the period
- 1991 to 2000, both on the peak side and the demand side,
- which, as I said by my calculation, with a forecast of 26.2
- percent for peak growth, with an actual of only 5.04
- percent, if you look at the highest number which was in 1996, and a forecast of 20 percent energy growth, which
- translated into 7.94 percent, again looking at the highest
- year, which was 2000 over 1991, is it really reasonable to
- project 20 percent demand growth and 11 percent energy
- growth in the period from 2001 to 2010?
- MR. BUDGELL: I can only answer your question in this
- way. If we were to accept that we should go with actuals 70
- and ignore all the underlying principles that affect customer 71
- demand and energy and just go with trend analysis, we'd 72
- 73 be going back to methodology that was used about 20
 - years ago, and we can do that if you're, if that's what you're
 - headed for, but I thought the, from a utility perspective, we
 - try to understand and get into the load growth and try to
- understand what is actually driving the peak. We have no
- control over the weather. We don't know what next year is
- going to be, what it's going to hold for us. It could be 79
- warmer; it could be colder. You have to realize that utility
- demand, the heat sensitive part, can vary upwards 70
- megawatts, downwards 70 megawatts. There's a 140
- megawatt swing can happen on that demand and we have 83
- 84
- MS. HENLEY ANDREWS, Q.C.: But you were ...
- 86 MR. BUDGELL: We have to forecast with that
- environment and have a system that can meet the demand.
- We can't forecast a system and have a system available
- that meets history or the growth or the lack of growth that's
- occurred. We have to make some projection on what's
- occurring and what drives customer demand.
- MS. HENLEY ANDREWS, Q.C.: But the information that
- you put into your program, into your computer program,
- that generates ... I presume it's a computer program that
- generates these forecasts, from what you said yesterday.
- MR. BUDGELL: There is a model, yes.
- MS. HENLEY ANDREWS, Q.C.: The outcome of your

- 1 forecast is largely dependent upon the information that's
- 2 put into it.
- 3 MR. BUDGELL: That's correct.
- 4 MS. HENLEY ANDREWS, Q.C.: And from the economic
- 5 point of view, and the economic factors that go into that,
- every one of those economic factors is somebody's
- 7 assumption, isn't that right?
- 8 MR. BUDGELL: Oh, yes, of course, yes.
- 9 MS. HENLEY ANDREWS, Q.C.: And you can apply a
- certain amount of subjectivity in one sense, if you look at
- the accuracy of how those projections have translated in
- the past versus how they appear to translate in the future,
- isn't that right?
- MR. BUDGELL: Oh, yes, yeah. I think you have ... I'm not
- saying that you ignore totally the past, but the current
- methodology within ... we're talking about the total island
- 17 load forecast here, so this is not the forecast that's put
- forward for rate-setting purposes. We're talking about the
- 19 forecast that's been used to schedule and to plan plant and
- $\,$ generation on the system. This particular forecast ensures
- 21 that we have the sufficient capability to meet customer,
- 22 current customer load under a set condition, and we've
- outlined what the conditions are, recognizing what the
- 24 industrial customers' requirements are, and provides a
- suitable level of reserve to assist them, so ...
- MS. HENLEY ANDREWS, Q.C.: And I realize that, but
- that's really where I'm focusing at the moment is this issue
- of projected capital expenses, because when you add
- 29 capacity to the system, you are, there's an expense that
- 30 ultimately gets passed on to the consumer.
- 31 MR. BUDGELL: That's correct.
- 32 MS. HENLEY ANDREWS, Q.C.: Whether that consumer is
- an industrial customer or a utility customer, correct?
- 34 MR. BUDGELL: That's right.
- 35 MS. HENLEY ANDREWS, Q.C.: So what I'm trying to get
- a handle on is the system as it is now, first of all, as it was
- in 1991 at the time that those projections were done, what's
- been added to it, what's going to be added to it because it's
- 39 already approved and the projects are already underway
- over the next number of years, and then your evidence that
- even with all of that there is a projection that there would
- be a need for additional capacity by 2007.
- 43 MR. BUDGELL: That's the current projection but that may
- not be the projection six months from now. As I indicated,
- as we move through the 1991, each and every year there'll
- be a new economic outlook, you'll have additional history
- so the forecast will essentially, it lags a little bit. We have
- to pick up history, we have to pick up the indications in the

- economy that what's going on at the immediate time, but it
- lags a little bit but eventually it picks it up, so if you saw
- our forecast going through the, and I think that's in one of
- the RFIs, going through the 1990s, I think you'd see that
- they're progressively decreasing, the projections would
- have been, and if, by the same token, if the economy
- 55 heated up, if we're ever blessed with that situation, you'd
- -- incated up, if we're ever blessed with that situation, you'd
- see the opposite occurring, but it may not occur
- 57 immediately.
- 58 MS. HENLEY ANDREWS, Q.C.: So what we've been
- dealing with this morning so far and what we were dealing
- 60 with late yesterday afternoon is the long-term forecast,
- 61 correct?
- 62 MR. BUDGELL: Yes.
- 63 MS. HENLEY ANDREWS, Q.C.: And the shortfalls that
- 64 might be anticipated if you, in generation capacity, based
- 65 upon that forecast over time.
- 66 MR. BUDGELL: Yes, and can I make one more point?
 - There's a cost-effectiveness study that's been filed in
- evidence for the decision to go ahead with Granite Canal,
- and I think you should look at the, one of the appendices
- to that where in making that decision in 1998/99 period, I
- 71 think it's '99, we did a Monte Carlo analysis on the years,
- the sensitive years. We looked out and we said 2002, and
- 73 I think it was 2003, are the years that we're targeting. What
- is the probability that load will be lower or higher than that?
- 75 So we recognize that and that's one of the means that we
- currently use to reflect that when we make this decision it's
- 77 just not arbitrarily on one point load estimates. We do
- 78 have a very, very close look at the deficit years to ensure
- 79 that the decision we're making is prudent in regards to the
- 80 timing.
- 81 MS. HENLEY ANDREWS, Q.C.: Now when you look at
- 82 Schedule 10, 11 and 12, and it's Schedule 10 first, that
- 83 indicates that forecast, using the LOLH, is for a deficit in
- 84 2002.
- 85 MR. BUDGELL: Well, it's actually in 2001. It's a little bit
- 86 over the 2.8.
- 87 MS. HENLEY ANDREWS, Q.C.: Yes.
- 88 MR. BUDGELL: 2002, it's starting to get a little bit higher.
- 89 MS. HENLEY ANDREWS, Q.C.: Based upon ... now, I
- 90 know that peak, the actual system peak could occur in
- 91 December, but having taken that as known, based on 2001
- to date is there, has there been a shortfall?
- 93 MR. BUDGELL: No. Under the ... this shortfall ... are you
- 94 talking in capacity?
- 95 MS. HENLEY ANDREWS, Q.C.: Yes.
- 96 MR. BUDGELL: No, there hasn't been a shortfall because

- our system always has roughly around ... we plan to have
- a minimum of about 18 1/2 percent reserve on the system.
- 3 MS. HENLEY ANDREWS, Q.C.: Yes.
- 4 MR. BUDGELL: So we don't get to a shortfall where it's
- 5 zero unless something very catastrophic on the system
- 6 happens, a loss of a major plant like Holyrood or Bay
- 7 d'Espoir or a number of units, very large units, that add up
- 8 in excess of 18 1/2 percent. Now I'm not saying we ride a
- 9 curve and sort of say each and every year we add one or
- two megawatts in discreet lumps to make sure that we stay
- exactly at 18 1/2. It goes above and as load grows it
- decreases down to 18 1/2, so ideally it's a saw tooth
- function of adding load and, or adding generation to meet
- load as load grows, but there has not been a deficit or a
- requirement for additional capacity in this particular year ...
- 16 MS. HENLEY ANDREWS, Q.C.: And you ...
- MR. BUDGELL: ... but that's not to say it could have
- occurred if the forced outage rates and if conditions that
- 19 you model and do the calculations had occurred. It's just
- the situation hasn't occurred this year.
- 21 MS. HENLEY ANDREWS, Q.C.: Now if you look at ... so
- 22 whether you look at Schedule 10 or whether you look at
- 23 Schedule 12, and my understanding is that the only
- 24 difference between them is that Schedule 10 shows the
- existing generating capability whereas Schedule 12 also
- incorporates the committed projects.
- 27 MR. BUDGELL: Yes.
- 28 MS. HENLEY ANDREWS, Q.C.: And the committed
- projects are the ones that are outlined on Schedule 11,
- which is Granite Canal, Beaton and Corner Brook Pulp and
- 31 Paper.
- 32 MR. BUDGELL: That's correct.
- 33 MS. HENLEY ANDREWS, Q.C.: And, but whether you
- look at Schedule 10 or whether you look at Schedule 12,
- whether there is in fact a capacity deficit or a peak deficit
- depends on whether the forecast is correct, whether the
- 37 conditions in any one of those years is sufficient to
- 38 generate either the peak or the energy requirements that are
- 39 forecast
- 40 MR. BUDGELL: On a projection basis, yes, of course.
- 41 (10:15 a.m.)
- 42 MS. HENLEY ANDREWS, Q.C.: Now, I'm going to move
- on to the short-term forecast. I'd like you to go to your
- supplementary evidence, your second supplementary
- evidence at page two. Now, in ... you indicate that you
- revised Schedules 5 and 6 with respect to operating load
- forecasts. Is that right?

- 48 MR. BUDGELL: That's correct.
- 49 MS. HENLEY ANDREWS, Q.C.: And that's based on
- 50 customer forecasts available as of the end of the second
- 51 quarter of 2001?
- 52 MR. BUDGELL: That's correct.
- 53 MS. HENLEY ANDREWS, Q.C.: And that indicates that on
- 54 the island interconnected system, the net impact of those
- 55 revised forecasts from your customers is an increase, is a
- decrease in demand of 24 megawatts and a decrease in
- 57 energy requirements of 60 gigawatt hours.
- 58 MR. BUDGELL: That's correct. I should add as well, the
- 59 2001 also reflect the actuals to the month of August.
- 60 MS. HENLEY ANDREWS, Q.C.: And the comment that's
- 61 made is that the higher energy requirements for
- 62 Newfoundland Power are more than offset by market-
- related downtime forecast by Abitibi Consolidated.
- 64 MR. BUDGELL: Yes.
- 65 MS. HENLEY ANDREWS, Q.C.: And that the reduction in
- 66 demand in 2001 is largely attributed to Newfoundland
- 67 Power's revised demand forecast.
- 68 MR. BUDGELL: That's correct.
- 69 MS. HENLEY ANDREWS, Q.C.: So Newfoundland Power
- 70 is now projecting a drop in its demand and an increase in
- 71 its energy?
- 72 MR. BUDGELL: According to its latest forecast, yes.
- 73 MS. HENLEY ANDREWS, Q.C.: And if you look ...
- 74 MR. BUDGELL: I should ... this is a drop relative to what
- 75 was previously filed.
- 76 MS. HENLEY ANDREWS, Q.C.: Exactly.
- 77 MR. BUDGELL: Okay.
- 78 MS. HENLEY ANDREWS, Q.C.: Now, if you look at the ...
- 79 and that change is incorporated in both your
- 80 supplementary testimony and the supplementary
- testimony, for example, of Mr. Brickhill and Mr. Henderson.
- 82 MR. BUDGELL: Hamilton.
- 83 MS. HENLEY ANDREWS, Q.C.: Hamilton. Is that right?
- 84 MR. BUDGELL: Yes.
- 85 MS. HENLEY ANDREWS, Q.C.: Okay. But at lines 16 to 19
- 86 of your testimony you indicate that subsequent to the
- 87 preparation of the forecast, Corner Brook Pulp and Paper
- has revised its firm requirements to 56 megawatts versus 66
- 89 megawatts.
- 90 MR. BUDGELL: That's correct.

- MS. HENLEY ANDREWS, Q.C.: And have they also 1
- forecast any changes with respect to their energy 2
- requirements? 3
- MR. BUDGELL: Yes, they did. Well, through 4
- conversations with their people, we estimate that the 5
- impact is in the range, somewhere between 80 and 90 6
- gigawatt hours less for 2002. 7
- MS. HENLEY ANDREWS, Q.C.: And these changes, these 8
- changes in the Corner Brook Pulp and Paper forecast, have 9
- not been incorporated into the current forecasts ... 10
- MR. BUDGELL: No, they have not. The information was 11
- not obtained till very recently. 12
- MS. HENLEY ANDREWS, Q.C.: Okay. And so they are 13
- also not incorporated into the revised cost of service study 14
- filed by Mr. Brickhill? 15
- MR. BUDGELL: No, they are not. 16
- MS. HENLEY ANDREWS, Q.C.: When you look at what 17
- Hydro has added in terms of capacity to its system as 18
- reflected on page seven, which we talked about, which is 19
- basically an addition of 77 megawatts of demand capacity, 20
- and then you look at Schedule 11, which is what is fore, 21
- what is already committed to be done over the next couple 22 of years, which, as I calculate it at, an additional 87.3
- 23
- megawatts of peak capacity to the system, that's in total 24
- adding somewhat in excess of 160 megawatts of peaking 25
- capacity. Is that right? 26
- MR. BUDGELL: I don't know what sources you're referring 27
- to there. 28
- MS. HENLEY ANDREWS, Q.C.: Okay. Let me take you 29
- through it. If you look at Schedule 10, Schedule 11 to your 30
- evidence, the committed projects, the Granite Canal, the 31
- Beaton Project and the Corner Brook Pulp and Paper Cojan 32
- (phonetic), that will add 87.3 megawatts of capacity. 33
- MR. BUDGELL: That's correct. 34
- MS. HENLEY ANDREWS, Q.C.: And firm energy 35
- 36 capability of 426 gigawatt hours.
- MR. BUDGELL: That's correct. 37
- MS. HENLEY ANDREWS, Q.C.: And when you look at 38
- page seven of your evidence, the three initiatives that have 39
- been taken since 1992 have added 76 megawatts of peaking 40
- capacity? 41
- MR. BUDGELL: Yes. 42
- MS. HENLEY ANDREWS, Q.C.: And obviously if you add 43
- the 76 to the 87.3, then you've got roughly 163 megawatts 44
- of peaking capacity that either has been added or will be 45
- added to this system over the next couple of years, since 46
- 1991. 47

- MR. BUDGELL: That's correct, but the ... on a go-forward
- basis that could be less 46 megawatts effective after 2003.
- MS. HENLEY ANDREWS, Q.C.: Now that depends on two
- things, isn't that right?
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: Because the Interruptible
- B Contract with Abitibi expires in 2003.
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: So whether that 46
- megawatts of interruptible demand is available will depend
- on two things. One is whether Newfoundland Hydro wants
- it to be available, isn't that right?
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And the ...
- MR. BUDGELL: Or requires it to be available.
- MS. HENLEY ANDREWS, Q.C.: Or requires it to be
- And the second is whether Abitibi in
- Stephenville is prepared to make it available.
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And whether they can
- come to terms over what the value of it ought to be.
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: But in theory it has been
- available now since 1993, correct?
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And unless ... you have
- no reason to believe that it wouldn't be made available at
- this point in time, do you?
- MR. BUDGELL: I haven't had any discussions with Abitibi
- in that regard as yet.
- MS. HENLEY ANDREWS, Q.C.: But you don't have any
- reason to believe that it wouldn't be available.
- MR. BUDGELL: No. 80
- MS. HENLEY ANDREWS, Q.C.: When you look at
- Schedules 10 and 12 to your evidence, and this is just more
- of a technical question as to how it was put together than
- anything else, there's a footnote that says that the 46
- megawatts of interruptible load is included in the peak load 85
- forecast and included in the determination of LOLH. 86
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: Our question is whether,
- when you use the word "included," is whether the 46
- megawatts of interruptible load is netted off or not netted

- 1 off.
- 2 MR. BUDGELL: It's netted off. It's just that it's not netted
- 3 off this table because we're reflecting Abitibi Stephenville's
- 4 demand as being the total demand, 72 or whatever
- 5 megawatts, as being firm demand on the system. The 46
- 6 megawatts we reflect in our modelling as a DSM initiative
- 7 and we modelled it as a resource that we can call upon to
- 8 reduce the generation within the generation model that's
- 9 producing the LOLH. We could have done it either way
- and got the, a similar result, but this just happened to be
- the way that we did the calculation.
- MS. HENLEY ANDREWS, Q.C.: Okay. So when ... but let's
- just ... I just need to be sure that I understand so that when
- you look at peak, or rather when you look at firm energy,
- you are not including the 46 megawatts?
- MR. BUDGELL: You mentioned energy. I'm confused.
- 17 This is ...
- MS. HENLEY ANDREWS, Q.C.: I'm sorry. Demand.
- MR. BUDGELL: It's the peak ... on the demand side, the 46
- 20 megawatts is included in the numbers that you see here,
- 21 the 1,576.
- 22 MS. HENLEY ANDREWS, Q.C.: Okay.
- 23 MR. BUDGELL: Okay.
- 24 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: Number. It's included in that particular
- number but we have to remove it or we include a resource
- in our portfolio of generation and supply side sources, a 46
- 28 megawatt block with an energy capability roughly
- equivalent to 25 times 10 hours a day for a winter period of
- whatever gigawatt hours ...
- 31 MS. HENLEY ANDREWS, Q.C.: Yeah.
- 32 MR. BUDGELL: ... that entails in our modelling, and
- 33 essentially that's one of the resources the program nets off
- 34 the load shape to arrive at the LOLH hours.
- 35 MS. HENLEY ANDREWS, Q.C.: But in terms of my
- question on the interpretation of both Schedule 10 and
- 37 Schedule 12, which have the same footnote at the bottom,
- 38 if I'm looking at the existing system with the 1,831 net
- 39 capacity ...
- 40 MR. BUDGELL: Yes. That's just generation. That doesn't
- include the 46.
- 42 MS. HENLEY ANDREWS, Q.C.: Okay.
- 43 MR. BUDGELL: That's why the note is added, because it's
- not, it wasn't taken off the peak and it's not in the 1,831.
- 45 MS. HENLEY ANDREWS, Q.C.: Okay. So if you wanted
- 46 to ... if you were looking at the capacity and the

- 47 interruptible availability you would add the 46 megawatts
- 48 to the 1,831?
- 49 MR. BUDGELL: Yes. It could either be taken off the 1,576
- or added to the 1,831, but you couldn't add it to the 1,831
- because the 1,831 is the capacity of system that's available
- 52 for the full year.
- 53 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BUDGELL: It's just ... it's a modelling issue.
- 55 MS. HENLEY ANDREWS, Q.C.: Okay. So, and I'm just
- trying to be sure that I understand where it is, that's all, and
- 57 SO ...
- MR. BUDGELL: It's in ... what the note is indicating, that it
- 59 was in the determination of the LOLH.
- 60 MS. HENLEY ANDREWS, Q.C.: Okay.
- 61 MR. BUDGELL: It was included.
- 62 MS. HENLEY ANDREWS, Q.C.: Alright. And it's included
- 63 because of the modelling option.
- 64 MR. BUDGELL: Yes.
- 65 MS. HENLEY ANDREWS, Q.C.: But it's not ... so it's in
- addition to some of these factors that are set out on the
- 67 schedules.
- 68 MR. BUDGELL: Yes.
- 69 MS. HENLEY ANDREWS, Q.C.: That helps me. Can you
- 70 confirm that the Interruptible B availability is a factor when
- 71 considering operating, the operating load forecast in much
- 72 the same way that the NP generation availability is?
- 73 MR. BUDGELL: I don't do that analysis. That would be
- 74 Mr. Henderson.
- 75 MS. HENLEY ANDREWS, Q.C.: Okay.
- 76 MR. BUDGELL: I'm sure he includes the cost in the
- 77 revenue.
- 78 (10:30 a.m.)
- 79 MS. HENLEY ANDREWS, Q.C.: We already asked him that
- 80 question, so we'll go with his answer. Now, I'm going to
- 81 change to a discussion of LOLE and LOLH. My
- 82 understanding of LOLE is that it's the average number of
- 83 hours or days each year when peak load is expected to
- exceed available generating capacity. Is that right?
- 85 MR. BUDGELL: Yes, more or less. That's a good summary.
- 86 MS. HENLEY ANDREWS, Q.C.: Alright. And LOLH is an
- 87 average measure based on accumulated annual or monthly
- 88 duration of probable interruptions.
- 9 MR. BUDGELL: Yes, or expected insufficiencies.

- MS. HENLEY ANDREWS, Q.C.: Okay. Ms. Butler asked 1
- you some questions yesterday about the LOLH target of 2
- 2.8 hours per year versus the LOLE target of .2 days per 3
- 4 year.
- 5 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, O.C.: Which is the more 6
- stringent requirement? 7
- MR. BUDGELL: I look at them both as being equivalent. 8
- We actually went to the trouble of, when we moved to 9
- LOLH, the one factor we kept consistent between the two 10
- was the reserve capability on the system. The LOP at the 11
- time, or the LOLH, expressed .2 days, we have .2 days per 12
- 13 year, ended up with a reserve, let's say, of 18 percent. Then
- we do an analysis based on a system that exactly provided 14
- that level and then we measure the reserve, and then we 15
- change the model to the new model, which included all the 16
- hours. I indicated to Ms. Butler the fact that the LOLE in 17
- 18 days per year only reflected load shapes (unintelligible)
- peak days 28 values or whatever there was in a particular 19
- month, whereas a new one has all the hours. We changed 20
- the load shape so we ensured that we picked the value that 21
- provided exactly the same system reserve as was previous. 22
- So that's the commonality between the two, so they're 23
- equivalent. 24
- MS. HENLEY ANDREWS, Q.C.: But you would agree with 25
- me that .2 days is actually 4.8 hours? 26
- MR. BUDGELL: Not the way this works. 27
- MS. HENLEY ANDREWS, Q.C.: Okay. 28
- MR. BUDGELL: That would be the information ... 29
- MS. HENLEY ANDREWS, Q.C.: No ... 30
- MR. BUDGELL: That would certainly be the information 31
- one would have, .2 times 24 hours, yes. As a matter of fact, 32
- I think that was my first impression, but it doesn't work that 33
- 34
- MS. HENLEY ANDREWS, Q.C.: When did Hydro change 35
- 36 the units of measure from LOLH to LO, from LOLE to
- LOLH? 37
- MR. BUDGELL: It was in the, around the, I think it was 38
- around the mid 1990s. It's when we acquired new software 39
- that permitted that capability. I should mention also as an 40
- aside, if you went to any utility and you modelled a 41
- different mix of generation, it wouldn't, the LOLH wouldn't 42
- necessarily give you the same value. In other words, if I 43
- say use .2 but change the mix, it's not Bay d'Espoir, so 44
- much generation and thermal, you'll end up with another 45
- number on reserve. 46
- MS. HENLEY ANDREWS, Q.C.: Okay. 47

- MR. BUDGELL: So these ... what I'm saying is that the .2,
- if you look at other utilities, they don't mean the same thing
- across utilities, they're not equivalent.
- MS. HENLEY ANDREWS, Q.C.: Uh hum.
- MR. BUDGELL: Okay. So it's a very important concept, 52
- and that's why when I said that we could have had a
- different mix and it mightn't have been 2.8 hours. It could
- have ended up to be three hours, four hours, five hours. It
- would have been higher if we had more thermal than hydro.
- It would have been higher if we were, our forced outage
- rates were higher on our plants than they otherwise would
- have been.
- 60 MS. HENLEY ANDREWS, Q.C.: Why did you make the
- change? 61
- MR. BUDGELL: The program requires ... we wanted to
- match ... one of the issues that we had in doing our
- modelling is that we were using a separate model for
- production costing and for reliability. Production costing
- was based on an hourly model. All hours of the month
- were reflected in the model, so we had load shapes that 67
- were consistent with what one might expect to occur in the
- month. When you did your old, when we did the old LOLE
- calculation, we used a separate load shape that was then 70 calculated on the peak day. You'd only use the, a very 71
- discreet set of data points, the peak days from each month.
- MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: And that meant we were carrying forward
- two data sets in the program and it was a lot easier to
- maintain one and go forth with what one that reflected the 76
- actual shape. 77
- MS. HENLEY ANDREWS, Q.C.: So are there benefits of 78
 - using LOLH versus LOLE?
- MR. BUDGELL: Not per se. It's just purely an academic,
- more pure calculation. All hours, obviously having more
- data points, represents the shape and load of the system
- more accurately than less data points. It's purely that 83
- effect. What I'm going to say is that the answers that we
- would have achieved in either case would have been
- identical because we've matched the reserve, but allows us 86
- to do better calculations and gives us more flexibility.
- MS. HENLEY ANDREWS, Q.C.: How did you come up 88
- with your 2.8 hours per year for LOLE?
- MR. BUDGELL: I just explained. It was the equivalent, it 90
- was the ... we did system simulations ... what we did was we
- modelled the current system at the time with an average 92
- load shape and we found the megawatt level at which we
- just hit .2. That was the old value.
- MS. HENLEY ANDREWS, Q.C.: Where did the .2 come

- from? 1
- MR. BUDGELL: The .2 is the value that Hydro has used, 2
- well, so long as I've been with Hydro, and before then. 3
- MS. HENLEY ANDREWS, Q.C.: Yeah, but my, I guess my 4
- question is ... 5
- MR. BUDGELL: It was a number that Hydro, well, my 6
- predecessors through judgement, through conversations 7
- and analysis in the past, have come up with as being a 8
- suitable number for our utility given our circumstances. 9
- MS. HENLEY ANDREWS, Q.C.: How do you know that it's 10
- suitable today? 11
- 12 MR. BUDGELL: Well, most of the utilities would have had
- a lower number, which would have meant that we would be 13
- carrying higher reserves and we would have a more 14
- expensive system. We didn't want to go there. You'd see 15
- some of that discussion on this mentioned in the reviews 16
- 17 of the Board's technical consultant, George Baker, when he
- did the review back in 1991. There's some interesting 18
- discussion on that fact there. 19
- MS. HENLEY ANDREWS, Q.C.: But you yourself have, 20
- you don't know what, whether the .2 reflects or reflected a 21
- reasonable reliability. It's just it's a judgement number? 22
- MR. BUDGELL: It's a judgement number, yes. It ends up 23
- with a percent reserve that's not out of line with what other 24
- 25 utilities carry.
- MS. HENLEY ANDREWS, Q.C.: Did Hydro conduct any 26
- studies or do any research on the value of LOLH versus 27
- LOLE? 28
- 29 MR. BUDGELL: No, not on the ...
- MS. HENLEY ANDREWS, Q.C.: So it was largely the fact 30
- that the new computer program in the mid '90s, it was 31
- available? 32
- MR. BUDGELL: This is only units of measure. I don't 33
- know what the value would be, to determine the value of 34
- one unit of measure versus another. It's the same analysis. 35
- All we've done is do the same analysis with another unit of 36
- measure. All I'm trying to say is that, it's like if I go out and 37
- buy meat, I buy pounds, and tomorrow the government 38 says you do it in kilograms, I buy it in kilograms. You don't 39
- have to do a study on whether pounds or kilograms are 40
- better. You're still buying, I'm assuming, the same meat,
- 41
- and you're paying the same value. All we've done is 42
- change, we're trying to buy the same item. 43
- MS. HENLEY ANDREWS, Q.C.: From a practical customer 44
- point of view as opposed to, we already discussed the 45
- actual definition of LOLE versus LOLH, but from a practical 46 customer point of view, what can a customer expect from a 47
- reliability point of view from an LOLH of 2.8 hours per 48

- year? Like what is that scenario?
- MR. BUDGELL: That ensures that we will expand the
- system and have no less than approximately 18 percent
- reserve on the system. The customer can ensure that if 52
- Hydro has loss of generation no worse than our forced
- outage rate practices and our load shape stays consistent
- and our forecasts of course occur as we project, the 55
- customer can ensure that we have reserve capacity on the 56
- 57 system to meet its requirements, that that's a level of firm
- that he can be comfortable about.
- MS. HENLEY ANDREWS, Q.C.: When ... how much ...
- based upon that criteria of LOLH of 2.8 hours per year,
- what amount of outage would that customer expect to
- experience?
- MR. BUDGELL: This is only a hypothetical.
- MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: I couldn't say that. There may not be any
- outage occur. These are ...
- MS. HENLEY ANDREWS, Q.C.: In a worst-case scenario.
- MR. BUDGELL: Well, again it doesn't depend on an 68
- individual customer. Any particular customer can have
- outages for a lot of reasons. This is only an outage 70
- because, that may occur because of generation, if there's
- insufficient generation on the system. The outage can
- 73 occur to ... this is not saying ... it's a calculation done
- assuming all the generation is available to be run to meet 74
- load. A customer in the real world can expect an outage 75
- because generation is not on the system at the time that an 76 event happens. What I'm saying here is that if we're in a 77
- period of time of year where we have one unit at Holyrood
- running, two units are shut down, and that unit trips off, an
- outage is going to occur, this indices is not reflecting that
- event. This is just a hypothetical planning exercise. It has 81
- little meaning in the operational sense, if that's where you're 82
- coming from.
- MS. HENLEY ANDREWS, Q.C.: And ...
- MR. BUDGELL: And it's a standard analysis that utilities
 - do from that perspective in doing their long-term planning.
- MS. HENLEY ANDREWS, Q.C.: And is it then correct to
- say that, if we look at Schedule 10 or Schedule 12 of your
- evidence, that what is reflected then in firm capability, or
- net capacity rather and firm capability, is 18 percent 90
- additional capacity above and beyond the projected need 91
- in order to accommodate all those other factors?
- MR. BUDGELL: Is 18 percent above a particular value? 93
- The 1,831 may not be 18 percent ... well, it'd be pretty close
- to the 1,576 because the LOLH is pretty close to 2.8, but ...
- MS. HENLEY ANDREWS, Q.C.: Yeah.

- MR. BUDGELL: ... it's roughly in that line. It's 18 percent
- 2 reserve carried on the system.
- 3 MS. HENLEY ANDREWS, Q.C.: Okay. And there's a net
- 4 capacity.
- 5 MR. BUDGELL: There's a net capacity. There's an excess
- 6 net capacity on the system, a reserve, to meet additional
- 7 load growth and unforeseen events such as forced outage
- 8 rates of units, forced outages of units. I believe as well
- 9 there's a question in an RFI where we show a survey or
- other utilities, if one needed to get a perspective on where
- our criteria for a reserve sat relative to other utilities.
- MS. HENLEY ANDREWS, Q.C.: I've looked at that and
- actually I will have a question for you on that shortly. To
- your knowledge has the Public Utilities Board ever been
- asked to approve this target, this reserve target?
- MR. BUDGELL: It's presented to the public this table and
- this discussion, both the criteria and these tables have
- been presented to the Public Utilities Board every year that
- 19 I have been associated either in the background or the
- witness at a hearing, so I think it's been all through the '80s.
- MS. HENLEY ANDREWS, Q.C.: There's ...
- 22 MR. BUDGELL: I don't know whether that infers that the
- 23 Public Utilities Board has ...
- MS. HENLEY ANDREWS, Q.C.: Addressed its mind to it.
- MR. BUDGELL: ... addressed it and said it approved it, but
- we've brought this evidence forward to the Board at every
- 27 hearing we appear at, and to justify plants, so I assume if
- one assumes, let's say with Cat Arm or with Hines Lake or
- 29 with the Holyrood units, the units in the past, if the Board
- had approved those plant to go in the rates, that that would be some sort of approval, but whether they said that this is
- the proper number to use, I can't say that.
- 33 MS. HENLEY ANDREWS, Q.C.: And when you change
- 34 from LOLE to LOLH, does your ... I understand that, from
- what you've described, that you have effectively chosen
- your LOLH so that it is supposed to be a reasonable match
- with a .2 LOLE, but does adopting an LOLH methodology
- have any impact on system planning?
- 39 MR. BUDGELL: No. It's exactly the same as before. It was
- just a different model, different computer program.
- 41 MS. HENLEY ANDREWS, Q.C.: So it shouldn't have any
- impact on the need for additional capacity.
- 43 MR. BUDGELL: It shouldn't.
- 44 MS. HENLEY ANDREWS, Q.C.: What is the effect of the
- load growth on LOLH?
- 46 MR. BUDGELL: Well, if you have load growth in the
- absence of any change in your system capability, then

- 48 your LOLH would increase, and it normally does so on an
- 49 exponential basis.
- 50 MS. HENLEY ANDREWS, Q.C.: So if your number of
- 51 gigawatt hours of usage increases, your LOLH will
- 52 increase.
- 53 MR. BUDGELL: Correct.
- 54 (10:45 a.m.)
- 55 MS. HENLEY ANDREWS, Q.C.: I'd like you to take a look
- at **PUB-55**, which I think is the document that you referred
- to a few moments ago in terms of a ...
- 58 MR. BUDGELL: A questionnaire?
- MS. HENLEY ANDREWS, Q.C.: Yeah, the answers from
- other utilities, and ...
- 61 MR. BUDGELL: What did you say, 55?
- 62 MS. HENLEY ANDREWS, Q.C.: 55.
- 63 MR. BUDGELL: I have it.
- 64 MS. HENLEY ANDREWS, Q.C.: And, Mr. O'Rielly, if you
- 65 would scroll down to the reference to Hydro-Quebec. You
- 66 need to keep going. Okay, there we are. Page three of
- 67 three. Hydro-Quebec has a reliability target, that is LOLE,
- 68 .1 days per year, and LOLH, 2.4 hours per year.
- 69 MR. BUDGELL: That's correct.
- 70 MS. HENLEY ANDREWS, Q.C.: And you would agree
- vith me that the 2.4 hours per year is in fact from a time
- 72 perspective a direct match to the .1 days per year?
- 73 MR. BUDGELL: I would agree.
- 74 MS. HENLEY ANDREWS, Q.C.: And your explanation for
- 75 that would be that the matching is not a one-to-one
- 76 relationship but it depends on the type of generation you
- 77 have on your system?
- 78 MR. BUDGELL: I would agree. Actually, I know it's the
- 79 same effect and it is very much a coincidence that that
- 80 occurred.
- 81 MS. HENLEY ANDREWS, Q.C.: Okay. And if you look at
- 82 this schedule on PUB-55, Newfoundland and Labrador
- 83 Hydro has a capacity reserve of 18.5 percent, Nova Scotia
- 84 and New Brunswick have 20 percent, but Hydro-Quebec
- 85 has only 12 percent.
- 86 MR. BUDGELL: Yes.
- 87 MS. HENLEY ANDREWS, Q.C.: And Manitoba Hydro has
- only 12 percent.
- 89 MR. BUDGELL: Yes, and these are two large hydroelectric-
- 90 base utilities and typically hydroelectric plants are more
- 91 reliable than thermal plants and that's why they can live

- 1 with lower reserve.
- 2 MS. HENLEY ANDREWS, Q.C.: Have you looked ... when
- doing your survey did you look at either the Northwest
- 4 Territories or the Yukon?
- 5 MR. BUDGELL: No.
- 6 MS. HENLEY ANDREWS, Q.C.: Those two systems,
- 7 however, are independent systems, not connected to the
- 8 grid, would you agree?
- 9 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: And that they would have
- some of the same issues in terms of capacity reserve that
- Newfoundland Hydro has?
- 13 MR. BUDGELL: Yeah. I don't know whether they follow a
- reliability calculation similar to what we do on the isolated
- systems or they do it this way. I'm not aware.
- MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, I could ...
- it's probably just as well to break here.
- MR. NOSEWORTHY, CHAIRMAN: Sure, that's fine. We'll
- reconvene at five after eleven. Thank you.
- 20 (break)
- 21 (11:13)
- 22 MR. NOSEWORTHY, CHAIRMAN: Thank you. May I ask
- Ms. Henley Andrews if you can continue, please?
- 24 MS. HENLEY ANDREWS, Q.C.: Yes, Mr. Chairman. Mr.
- Budgell, just so that I'm sure I have a handle on this liability
- 26 issue and this LOLE versus LOLH, you had agreed at the
- beginning of our discussion on this that LOLE is the
- average number of hours or days each year when peak load
- 29 is expected to exceed available generating capacity,
- 30 roughly?
- 31 MR. BUDGELL: It's the number of hours in a particular
- 32 year that was measured that the peak load exceeds the
- capacity system, yes.
- 34 MS. HENLEY ANDREWS, Q.C.: Okay. So, from a
- customer's perspective, it's the number of hours per year
- that you could possibly find that you couldn't get all the
- energy that you, all of the load that you wanted?
- 38 MR. BUDGELL: That probability exists. But again, as I
- 39 clarified, from an operational perspective this is just a
- planning perspective, it's not an operational perceptive.
- MS. HENLEY ANDREWS, Q.C.: No. And I realize that.
- But I'm translating your planning into the expectation of the
- 43 average customer.
- 44 MR. BUDGELL: That's right.
- MS. HENLEY ANDREWS, Q.C.: Is that there might be a

- 46 time where, and that time would be expected, anticipated to
- be .2 days per year when the peak load exceeds the actual
- 48 generating capacity?
- 49 MR. BUDGELL: Yes.
- 50 MS. HENLEY ANDREWS, Q.C.: And in moving from LOLE
- to LOLH Hydro has effectively accepted its original LOLE
- criteria that they would be aiming for .2 days per year?
- 53 MR. BUDGELL: Yes.
- 54 MS. HENLEY ANDREWS, Q.C.: And so, in using the
- 55 LOLH model it has basically been used to achieve exactly
- 56 the same result?
- 57 MR. BUDGELL: Yes. And I think that's indicated on the
- 58 footnote to the table we just referred to, which was PUB-
- 59 **55**.
- 60 MS. HENLEY ANDREWS, Q.C.: Okay. Now, on the island
- interconnected system what's the size of the largest unit?
 - MR. BUDGELL: 175 megawatts.
- 63 MS. HENLEY ANDREWS, Q.C.: Okay. And that's at
- 64 Holyrood?
- 65 MR. BUDGELL: Actually, yes, it is. There's two units at
- 66 Holyrood. I'm sorry, that's not net, that's the gross
- capacity. There would be about 166 megawatts.
- 68 MS. HENLEY ANDREWS, Q.C.: 166 megawatts?
- 69 MR. BUDGELL: Yes.
- 70 MS. HENLEY ANDREWS, Q.C.: And if you look at
- 71 Schedule 10 to your evidence, the first line will do. The net
- 72 capacity ... and I'm using the first line because the LOLH is
- 73 pretty close to the target of your 2.8.
- 74 MR. BUDGELL: Yes.
- 75 MS. HENLEY ANDREWS, Q.C.: Your net capacity in
- megawatts is 1,831 and your forecast peak is 1576?
- 77 MR. BUDGELL: That's correct.
- 78 MS. HENLEY ANDREWS, Q.C.: Which is a difference of
- 79 255 megawatts?
- 80 MR. BUDGELL: Yes.
- 81 MS. HENLEY ANDREWS, Q.C.: Which is a fair amount
- 82 larger than your largest unit?
- 83 MR. BUDGELL: That's correct.
- 84 MS. HENLEY ANDREWS, Q.C.: Whereas on your diesel
- 85 system, your isolated system, the reliability criteria that
- 86 Hydro uses is whether or not, is making sure that there's
- 87 enough capacity available if the single largest unit is out?
- 88 MR. BUDGELL: That's correct.

- 1 MS. HENLEY ANDREWS, Q.C.: Okay. So it's a higher
- 2 reliability factor for the island?
- 3 MR. BUDGELL: Yes. One is a deterministic value, the
- 4 isolated system, whereas this one is based on a
- 5 probabilistic approach.
- 6 MS. HENLEY ANDREWS, Q.C.: But the result is an
- 7 improvement in the reliability?
- 8 MR. BUDGELL: It's not necessarily the case that there's
- 9 necessarily improvement in the reliability, because the
- consideration ... in the isolated system you have, at most,
- 11 three units.
- 12 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: Meaning load. And the loss of the largest
- unit as opposed to the three units gives a level of
- reliability. You're working two versus three. In the case of
- the island interconnected system ... it's just not capacity,
- that's what I'm trying to come around to. For instance,
- Newfoundland Power has about 30 generating units and we
- might have about 20 and the Industrial Customers have
- 20 maybe 10 or more. So there may be 50 units on the system.
- So different units can be lost or off for different values of
- 22 time. In the isolated system there's no credence, it's just
- 23 deterministic, it's just a value. It's the simplest approach.
- As a matter of fact, before a probabilistic criteria was
- chosen by Hydro, the .2 back in the 1980s, the criteria
- before that was 15 percent reserve or the last of the largest
- unit, it was exactly that. And that's the way most utilities
- used to do their business back 20 years ago. But we've all
- 29 moved, most of the large utilities have moved to a
- probabilistic approach using programs of the sort we have, using criteria as you see outlined in the response to **PUB-**
- using criteria as you see outlined in the response to **PUB**-55 to do these type of calculations on the larger systems.
- But in the isolated systems, and again, there's another
- question here that we prepared, indicates that the approach
- is still on a deterministic basis in those systems.
- 36 MS. HENLEY ANDREWS, Q.C.: Now, when you look at
- 37 Schedule 10 in addition to that, if your forecast is on the
- 38 high side, if your forecast is cautious, then you will have
- 39 additional reserve also built in, won't you?
- MR. BUDGELL: There would be additional reserve, yes.
- MS. HENLEY ANDREWS, Q.C.: Okay. So, in effect, what
- 42 you have built into your system is the 18.5 percent reserve
- capacity that we've talked about and any additional reserve
- that's based upon a bias, if there is any, in the forecasting?
- MR. BUDGELL: We base the capacity on the expected
- peak. Yes, the reserve is based on our expected peak.
- 47 MS. HENLEY ANDREWS, Q.C.: And if the expected peak,
- 48 if the forecasting for the expected peak leads to a forecast
- that's high, then there's additional reserve built in?

- 50 MR. BUDGELL: There would if you come to a timeframe
- 51 when reserve is added, there would be additions.
- 52 MS. HENLEY ANDREWS, Q.C.: Yeah.
- 53 MR. BUDGELL: But there would be additional reserve
- 54 every time you add because you always ... remember the
- step function I indicated?
- MS. HENLEY ANDREWS, Q.C.: Uh hum.
- MR. BUDGELL: We can't meet it exactly. You can't build
- parts of plants.
- 59 MS. HENLEY ANDREWS, Q.C.: No. But you would agree
- 60 with me that if you look at the forecast for 2001, and if
- instead of having a forecast of 1500 megawatts you had a
- 62 forecast ... 1576, you had a forecast of 1500 that would have
- an impact on the LOLH?
- 64 MR. BUDGELL: Yes, the LOLH would drop.
- 65 MS. HENLEY ANDREWS, Q.C.: Okay. Thank you. I'd like
- you to take a look at CA-19. I took it out and then couldn't
- 67 find it. That contains the month-by-month contribution to
- 68 LOLH, is that right, that page 2 of 3?
- 69 MR. BUDGELL: Yes.
- 70 MS. HENLEY ANDREWS, Q.C.: And when you look at the
- 71 breakdown in terms of the forecasts for the period 2001
- 72 through 2006, is it fair to say that the system only faces
- 73 reliability problems requiring extra generation in a couple of
- vinter months?
- 75 MR. BUDGELL: That's likely when the event would
- 76 happen, yes.
- 77 MS. HENLEY ANDREWS, Q.C.: And that ...
- 78 MR. BUDGELL: Actually, all those years, I think those are
- on an actual basis and they're all over 2.84, so there is a
- 80 probability of each one of those years that we exceed the
- 81 criteria.
- 82 MS. HENLEY ANDREWS, Q.C.: That's correct, but if you
- 83 look at the month where that is most likely to happen would
- 84 you agree that that, based upon what you have here, would
- appear to be February?
- 86 MR. BUDGELL: That's correct.
- 87 MS. HENLEY ANDREWS, Q.C.: And that, in fact, when
- you look at 2001 as an example your February contribution
- 89 to LOLA, which is 1.75, which is roughly 60 percent of the
- 90 total LOLH?
- 91 MR. BUDGELL: I haven't done that calculation for this
- 92 year, but if that's your calculation of it I'd have to accept
- 93 that that's right. It's a major part of the contribution.
- 94 MS. HENLEY ANDREWS, Q.C.: Okay. Would you agree

- that an extra unit of load, whether it's a kilowatt or
- 2 megawatt, in February increases the calculated annual
- 3 LOLH more than an extra unit in March?
- 4 MR. BUDGELL: Both would increase, whether ... I would
- 5 expect that the increase in February, because it looks like
- 6 we're more constrained in that particular month, that the
- 7 increase would be higher in February to the LOLH, the
- 8 contribution would be higher, yes.
- 9 MS. HENLEY ANDREWS, Q.C.: And similarly, an increase
- in February in the demand would have a bigger impact
- upon the annual LOLH than a unit in July?
- 12 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: So would you agree that
- an increased load in the third or fourth highest month isn't
- nearly as big a problem for LOLH as in the peak month or
- the second highest peak?
- MR. BUDGELL: Well, they all contributed because the
- 18 LOLH criteria is based, not necessarily on a month, it's
- based on the total for the year. 2.84 doesn't give any
- credence to an actual month of when it occurs, it's just the
- 21 total for the year.
- 22 MS. HENLEY ANDREWS, Q.C.: But when you look at the
- 23 figures ...
- 24 MR. BUDGELL: The contributions are different in different
- 25 months and the majority of them, based on these average
- load shapes, do occur in February being the highest.
- 27 MS. HENLEY ANDREWS, Q.C.: Yes. And ...
- MR. BUDGELL: Followed by January.
- 29 MS. HENLEY ANDREWS, Q.C.: Followed by January. Can
- you tell in advance or forecast accurately the month when
- 31 forecast peak will occur in any year?
- MR. BUDGELL: No, of course not.
- 33 MS. HENLEY ANDREWS, Q.C.: That doesn't really matter,
- 34 does it?
- MR. BUDGELL: Not really, no. I think it'll occur sometime,
- I'm pretty sure, between December and March.
- 37 MS. HENLEY ANDREWS, Q.C.: Okay. But when it occurs
- really doesn't matter because with your system planning,
- 39 you're planning for the peak no matter when it occurs, is
- 40 that right?
- 41 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And so you don't need to
- choose the month that you're planning for?
- 44 MR. BUDGELL: I don't give any particular significance to
- it. This is just that it's an average shape. Another year,

- 46 which is one of the years we indicated earlier in our
- 47 discussions, the peak occurred in December. It can occur
- in any of those particular months.
- 49 MS. HENLEY ANDREWS, Q.C.: And with your system
- 50 planning it doesn't matter which one?
- 51 MR. BUDGELL: It doesn't, no.
- MS. HENLEY ANDREWS, Q.C.: Because you've planned
- for it whenever it occurs?
- 54 MR. BUDGELL: That's correct.
- 55 MS. HENLEY ANDREWS, Q.C.: Now, I'd like to go to IC-
- 56 217. Would you agree with me that if you look at IC-217
- 57 for 2002 and compare it to CA-19, which we were just
- 58 looking at, that IC-217 indicates that on the surface,
- without the GNP generation, the system LOLH is higher?
- 60 MR. BUDGELL: That's correct.
- 61 MS. HENLEY ANDREWS, Q.C.: But if you look at the GNP
- 62 generation and the GNP load which is higher, as I
- 63 understand it, generally speaking, than the generation, the
- 64 LOLH is worse off, isn't it?
- 65 MR. BUDGELL: I don't understand that last statement.
- 66 You're losing me.
- 67 MS. HENLEY ANDREWS, Q.C.: Okay. LOLH is affected
- 68 by two factors, isn't that right? One is the amount of
- 69 generation that's available, correct?
- 70 MR. BUDGELL: I can think of more than two.
- 71 MS. HENLEY ANDREWS, Q.C.: Alright. Well, let's ... it's
- 72 affected by at least two factors, one of them is the amount
- of generation that's available from generating ...
- 74 MR. BUDGELL: The amount, the type and the capacity
- 75 and the number.
- 76 MS. HENLEY ANDREWS, Q.C.: Okay. And the other ...
- 77 MR. BUDGELL: Of generators.
- 78 MS. HENLEY ANDREWS, Q.C.: And the other is the
- 79 actual peak?
- 80 MR. BUDGELL: The actual peak in each individual month
- and the energy in each of those months.
- 82 MS. HENLEY ANDREWS, Q.C.: Okay. Go to IC-270, and
- 83 in particular, the question first, which is C sub 3. So it says,
- 84 "Please list all the communities and provide the loads by
- 85 month for each community and the peak loads by month
- 86 since 1992 and forecasts for 2001 and 2002." And
- subsection 3 reflects the areas which were part of the St.
- 88 Anthony/Roddickton system prior to the GNP
- 89 interconnection, correct?
- 90 MR. BUDGELL: Yes.

- MS. HENLEY ANDREWS, Q.C.: Now, could we go to the 1
- answer, Mr. O'Rielly? So it's the answer to C sub 3, and it 2
- refers us to a table, and it says that the forecasts for the 3
- 4 GNP meter delivery points for 2001 and 2002 are available
- for winter peak demand only. Could we go to that table? 5
- That's ... keep going. There it is. And this table, would you 6
- agree, Mr. Budgell, shows the peak demand in the GNP area 7
- by month? 8
- MR. BUDGELL: The St. Anthony/Roddickton section of 9
- the GNP, yes. 10
- MS. HENLEY ANDREWS, Q.C.: Okay. And while it 11
- doesn't show the system total, it's clear when you look at 12
- this that there are very few months where the 9.7 megawatts 13
- of generation that's available is adequate for Main Brook, 14
- Roddickton and St. Anthony? 15
- MR. BUDGELL: To meet that load by itself, yes, I agree 16
- with you, it can for a number of those months meet the 17
- 18 peak demand.
- (11:30)19
- MS. HENLEY ANDREWS, Q.C.: Okay, and so we know 20
- that there are, or have been, any number of months where 21
- the load from that part of the Great Northern Peninsula was 22
- in excess of the 9.7 megawatt generation capacity? 23
- MR. BUDGELL: Yes. 24
- MS. HENLEY ANDREWS, Q.C.: Okay. And, in fact, that 25
- is similar to what's forecast for the test year? 26
- MR. BUDGELL: Yes, for St. Anthony/Roddickton. 27
- MS. HENLEY ANDREWS, Q.C.: St. For 28
- Anthony/Roddickton? 29
- MR. BUDGELL: Yes. 30
- MS. HENLEY ANDREWS, Q.C.: So, when you're looking 31
- at LOLH, and in particular going back to IC-217, when 32
- you're looking at the calculation of LOLH for the island 33
- interconnected system on the one hand, the St. 34
- Anthony/Roddickton area contributes generation, correct? 35
- MR. BUDGELL: Yes, it does. 36
- MS. HENLEY ANDREWS, Q.C.: But on the other hand, it 37
- contributes load to the peak demand? 38
- MR. BUDGELL: Yes, it does. 39
- MS. HENLEY ANDREWS, Q.C.: And there are any number 40
- of months, particularly winter months, in the St. 41
- Anthony/Roddickton area where their peak exceeds their 42
- generating capability? 43
- MR. BUDGELL: Yes. 44
- MS. HENLEY ANDREWS, Q.C.: So that you would expect 45

- that the St. Anthony/Roddickton area would have a
- negative impact on LOLH for the system during those time
- periods?
- MR. BUDGELL: No, I wouldn't accept that.
- MS. HENLEY ANDREWS, Q.C.: Why not?
- MR. BUDGELL: Because that's no different ... what you're
- doing, you're tying together a generation in an area to load 52 53
- in a particular area. We don't dedicate generation to a
- particular load. The same thing could be said if I took one
- of your customers, for instance, Corner Brook Pulp and
- Paper, the load in Corner Brook at the mill is in excess of
- your generation.
- MS. HENLEY ANDREWS, Q.C.: Okay. Well, would you 58
- then agree with me that ...
- MR. BUDGELL: But, I mean, this calculation does not ...
- the load is modelled in the calculation as the total load of
- the system and the generation is modelled as a total
- generation. I don't look at the incremental load in a
- particular area versus the generation in that particular area
- and look for a mismatch and see if they're in a deficit or in
- an excess position in that location.
- MS. HENLEY ANDREWS, Q.C.: And I realize you don't.
- MR. BUDGELL: Right. I mean, I can look at the ... take
- your argument on the opposite side. I can look at Bay
- d'Espoir and I have a 500 megawatt plant and I got 20
- megawatts of load. It doesn't mean much to me, right, 71
- comparing Bay d'Espoir to St. Alban's load to the Bay 72
- d'Espoir plant. But the same thing, it doesn't mean much to 73
- me when you take the St. Anthony generation and you're 74
- comparing it just to the St. Anthony load. It means 75
- something to me if you have an outage, obviously, if that's
- your point, whether we can meet the requirements of that
- system under an outage. But in a normal event and talking 78
- about LOLH, the load in individual parts of the system is 79
- not modelled, nor is it an issue in that calculation.
- MS. HENLEY ANDREWS, Q.C.: Well, I'm not asking you 81
- 82 whether it means anything to you. I'm asking you whether
- I'm correct, which is that if the load on the St.
- Anthony/Roddickton system exceeds the generation that's 84
- available, then that would tend to increase LOLH?
- MR. BUDGELL: If the load on the St. John's system is 86
- greater than the generation in the Roddickton area it tends
- to increase the LOLH. If the load in any part of the system
- is greater than generation in another part of the system it
- will increase LOLH.
- MS. HENLEY ANDREWS, Q.C.: So the answer is yes?
- MR. BUDGELL: The answer is yes for wherever you want
- to pick.

- 1 MS. HENLEY ANDREWS, Q.C.: Okay. How would you
- 2 define load factor?
- 3 MR. BUDGELL: It's the ratio of average megawatts to
- 4 people.
- 5 MS. HENLEY ANDREWS, Q.C.: And how do you calculate
- 6 a...
- 7 MR. BUDGELL: Oh, I'm sorry, I gave you capacity factor.
- 8 MS. HENLEY ANDREWS, Q.C.: Pardon me?
- 9 MR. BUDGELL: I was ... no. What I had is all right. It's the
- ratio of the average load of a customer to the peak of that
- 11 customer's load factor.
- MS. HENLEY ANDREWS, Q.C.: So it's the ratio of the
- average load to the peak?
- 14 MR. BUDGELL: Yes.
- 15 MS. HENLEY ANDREWS, Q.C.: And the average load
- being ...
- MR. BUDGELL: The energy in the year divided by 8760, if
- that's the number of hours in a year.
- 19 MS. HENLEY ANDREWS, Q.C.: Okay. So you take the
- 20 energy component, you divide it over the number of
- 21 gigawatt hours, you divide it by the number of hours in a
- year, and you multiply it by the peak?
- 23 MR. BUDGELL: No. You divide, that gives you the
- 24 average megawatts.
- MS. HENLEY ANDREWS, Q.C.: Yeah.
- MR. BUDGELL: And then you take that average and
- 27 divide it by the peak.
- MS. HENLEY ANDREWS, Q.C.: And divide it by the peak,
- 29 okay
- 30 MR. BUDGELL: That occurred during that same year.
- MS. HENLEY ANDREWS, Q.C.: Is there a relationship ...
- or I think there's obviously then a relationship between
- 33 average load and peak for the purpose of calculating load
- 34 factor?
- MR. BUDGELL: For the purpose of calculating load factor,
- 36 yes, agreed.
- 37 MS. HENLEY ANDREWS, Q.C.: Is there a relationship
- 38 between load factor and efficient use of the system by
- 39 customers?
- 40 MR. BUDGELL: Depending on the type of system, yes.
- 41 MS. HENLEY ANDREWS, Q.C.: Okay. And what is that?
- 42 MR. BUDGELL: Well, if the system was hydraulic, for
- instance, and had a capacity factor, I'll take it from the

- 44 generation that was close to the customer load factor, then
- 45 that would be ideal. If you have thermal generation on
- 46 your system and you're utilizing it only in the wintertime
- and not in the summertime, then obviously, then it's good
- 48 to have a higher load factor. Higher load factor dictates
- 49 less capacity, I guess, to meet the total load.
- 50 MS. HENLEY ANDREWS, Q.C.: Okay. It means that
- 51 there's a better match between the peak requirements and
 - the energy requirements, right?
 - 53 MR. BUDGELL: That's right.
 - 54 MS. HENLEY ANDREWS, Q.C.: Am I correct that the
 - 55 island system coincident peak reflects the combined
 - 56 demand of all of Hydro's customers at a given point in time
 - in the year?
- 58 MR. BUDGELL: Yes.
- 59 MS. HENLEY ANDREWS, Q.C.: And that system peak is
- 60 used in the planning process in a number of different
- 61 ways?
- 62 MR. BUDGELL: If it's the total island system peak we're
- referring to here?
- 64 MS. HENLEY ANDREWS, Q.C.: Yes.
- 65 MR. BUDGELL: Yes, for expansion planning.
- 66 MS. HENLEY ANDREWS, Q.C.: Okay. And system peak
- is also used in the short-term forecasts, isn't that right?
- 68 MR. BUDGELL: That then is only the peak that Hydro is
- 69 called upon by its customers to meet. It's a different peak.
- 70 MS. HENLEY ANDREWS, Q.C.: Yes.
- 71 MR. BUDGELL: But that, again, is used in this rate setting
- 72 environment.
- 73 MS. HENLEY ANDREWS, Q.C.: And would you agree that
- 74 the energy requirement for the island interconnected
- 75 system, as in the number of gigawatt hours to be consumed
- in the course of the year, varies from season to season, day
- 77 to day and hour to hour?
- 78 MR. BUDGELL: I agree.
- 79 MS. HENLEY ANDREWS, Q.C.: And I think you've
- 80 indicated already that there is not a lot of variation in that
- 81 for industrial customers but there is a significant variation
- 82 for utility customers?
- 83 MR. BUDGELL: That's correct.
- 84 MS. HENLEY ANDREWS, Q.C.: And that's because
- 85 industrial customers are regarded as high load factor
- 86 customers?
- 87 MR. BUDGELL: That's correct.

- 1 MS. HENLEY ANDREWS, Q.C.: Which means they have
- a fairly constant demand over the course of the year when
- 3 they're in normal operations?
- 4 MR. BUDGELL: That's correct.
- 5 MS. HENLEY ANDREWS, Q.C.: And they consume
- 6 energy fairly evenly when they're in normal operation?
- 7 MR. BUDGELL: Yes.
- 8 MS. HENLEY ANDREWS, Q.C.: Utility customers, Hydro's
- 9 utility customers, whether it's the interconnected rural or
- Newfoundland Power, are not high load factor customers?
- 11 MR. BUDGELL: Some of them may be in the general
- service area, but if you're talking about residential and
- normal, that's true, they're not.
- MS. HENLEY ANDREWS, Q.C.: Would you agree that
- Newfoundland Power's demand is much higher in the
- winter months?
- MR. BUDGELL: Than their demand in other times?
- 18 MS. HENLEY ANDREWS, Q.C.: Yes.
- 19 MR. BUDGELL: Yes, of course.
- 20 MS. HENLEY ANDREWS, Q.C.: And that Newfoundland
- 21 Power's demand, even in the winter, varies with the time of
- 22 day?
- 23 MR. BUDGELL: Yes.
- 24 MS. HENLEY ANDREWS, Q.C.: Okay. As a customer of
- 25 Hydro's how can you change your peak demand?
- MR. BUDGELL: Which customer are we talking about?
- 27 MS. HENLEY ANDREWS, Q.C.: Well, let's take the
- industrial customers as an example.
- 29 MR. BUDGELL: By, I would assume ... one with or without
- 30 generations?
- 31 MS. HENLEY ANDREWS, Q.C.: Without generations.
- MR. BUDGELL: It would have to remove or change one of
- 33 his processes to take it off line.
- 34 MS. HENLEY ANDREWS, Q.C.: And if you had generation
- 35 how would you change your peak demand?
- 36 MR. BUDGELL: You can increase your generation, your
- self generation level, and you could do the same as the
- 38 customer that didn't have generation, as well, take
- production processes off line.
- 40 MS. HENLEY ANDREWS, Q.C.: Now, in the case of
- Newfoundland Power, Newfoundland Power has
- generation capacity, isn't that right?
- 43 MR. BUDGELL: Yes, they do.

- 44 MS. HENLEY ANDREWS, Q.C.: How can Newfoundland
- 45 Power change its peak demand?
- 46 MR. BUDGELL: A number of ways. They can do it exactly
- 47 the same as the industrial, with their generation, and as well
- 48 Newfoundland Power can if it desires, to use their
- curtailable loads, as well, which is a modest amount.
- 50 MS. HENLEY ANDREWS, Q.C.: Okay. Curtailable loads
- being their ability to have customers take less?
- MR. BUDGELL: I understand they have some customers ...
- 53 MS. HENLEY ANDREWS, Q.C.: Similar to ...
- 54 MR. BUDGELL: ... similar to Interruptible B.
- 55 MS. HENLEY ANDREWS, Q.C.: Exactly, similar to ...
- 56 MR. BUDGELL: Not to the same extent, but there is some
- 57 value, there was.
- 58 MS. HENLEY ANDREWS, Q.C.: Can you control your
- 59 demand?
- 60 MR. BUDGELL: Can Hydro control the demand?
- 61 MS. HENLEY ANDREWS, Q.C.: No. Can ... I'm sorry. Can
- an industrial customer actually control its peak?
- 63 MR. BUDGELL: Of course, yes, and some of them do that
- 64 right now.
- 65 (11:45)
- 66 MS. HENLEY ANDREWS, Q.C.: Is it as easy for a utility
- customer to control its peak?
- 68 MR. BUDGELL: I would think the industrial customer
- 69 would have, because it has a control if its processes, would
- 70 have an easier time to control its peak.
- 71 MS. HENLEY ANDREWS, Q.C.: And that's because the
- viility customer, on the whole, can't control the temperature
- 73 at which I set my electric heat or the time of day when I use
- 74 my electrical equipment, isn't that right?
- 75 MR. BUDGELL: Well, you can control it if you wish. I'm
- 76 not sure what your comfort level will be if you wish to
- 77 change it around.
- 78 MS. HENLEY ANDREWS, Q.C.: Yeah. But I'm just saying
- 79 Newfoundland Power can't control its customers?
- 80 MR. BUDGELL: It can if it desired to do that, but the extent
- at which it can do it for those electric heat type customers
- would be very difficult.
- 83 MS. HENLEY ANDREWS, Q.C.: Okay. Can Newfoundland
- 84 Power control the energy use and the time of use of
- 85 energy?
- 86 MR. BUDGELL: It would be difficult.

- MS. HENLEY ANDREWS, Q.C.: Okay. Are you aware of 1
- any measures that have been taken by Newfoundland 2
- Power to control its peak demand in 2001 or 2002? 3
- MR. BUDGELL: None come to mind right now. 4
- MS. HENLEY ANDREWS, Q.C.: Now, I'd like to move to 5
- Newfoundland Power's revised forecast, and in particular 6
- we'll go back to page 2 of your second supplementary 7
- evidence. Would you agree that the revised 8
- Newfoundland Power forecast for 2001 and 2002 that's 9
- reflected in your second supplementary evidence ... I'm 10
- sorry. Do you have it there yet? 11
- MR. BUDGELL: Yes. Is there a particular page I should be 12
- 13 referring to?
- MS. HENLEY ANDREWS, Q.C.: Page 2. It's on the screen, 14
- actually. 15
- MR. BUDGELL: Okay. 16
- MS. HENLEY ANDREWS, Q.C.: Would you agree that that 17
- revised forecast significantly reduces Newfoundland 18
- Power's demand forecast? 19
- MR. BUDGELL: Yes, there is reduction. 20
- MS. HENLEY ANDREWS, Q.C.: And it increases their 21
- energy forecast? 22
- MR. BUDGELL: Yes. 23
- MS. HENLEY ANDREWS, Q.C.: For an increase in their 24
- forecast load factor? 25
- MR. BUDGELL: That's correct. 26
- MS. HENLEY ANDREWS, Q.C.: And their forecast load 27
- factor, in fact, moves from 49.5 percent to 51.1 percent? 28
- MR. BUDGELL: In that area. 29
- MS. HENLEY ANDREWS, Q.C.: Okay. Would you agree 30
- with me that this is material to revenue requirement 31
- allocation? 32
- 33 MR. BUDGELL: Yes, very much so.
- MS. HENLEY ANDREWS, Q.C.: Particularly to the revenue 34
- allocation to the industrial customers? 35
- MR. BUDGELL: Yes. And to Newfoundland Power, 36
- obviously. 37
- MS. HENLEY ANDREWS, Q.C.: So it reduces 38
- Newfoundland Power's revenue requirement allocation and 39
- increases the industrial customers'? 40
- MR. BUDGELL: Yes, over and above what was as filed. 41
- MS. HENLEY ANDREWS, Q.C.: That's right. Where did 42
- you get Newfoundland Power's revised forecast? 43

- MR. BUDGELL: From Newfoundland Power.
- MS. HENLEY ANDREWS, Q.C.: Has Hydro reviewed this
- revised forecast for its reasonableness?
- MR. BUDGELL: We normally, for the purposes of rate
- hearings, accept Newfoundland Power's forecast.
- MS. HENLEY ANDREWS, Q.C.: Okay. So the answer is
- no, you haven't reviewed it for its reasonableness?
- MR. BUDGELL: Well, we made the similar observation that
- you just made in regards that the load factor had been
- reduced, and the information that we have was because
- that was a review that they had performed of their load 54
- factor in their historical sample that they use.
- MS. HENLEY ANDREWS, Q.C.: Okay. If there's no
- witness from Newfoundland Power to deal with its forecast
- how can we here judge its reasonableness?
- MR. BUDGELL: I certainly can't answer that.
- What's your MS. HENLEY ANDREWS, Q.C.:
- understanding of Newfoundland Power's rationale for the
- change? 62
- MR. BUDGELL: I haven't got any explanation, other than 63
- the fact that the new forecast reflects an update to the load
- ... Newfoundland Power normally reflects their energy
- usage and then applies a load factor on their, I guess on 66
- the individual energy demands on the system, and they do
- every time, I believe, they do a forecast, they do an update
- to that. I'm assuming that the sample that they're using
- reflected this change.
- MS. HENLEY ANDREWS, Q.C.: But you don't know that?
- MR. BUDGELL: That's the indication that I know that it
- does, that's what's occurred. That change is, from our
- perspective, is not evidenced in long-term samples.
- MS. HENLEY ANDREWS, Q.C.: Now, when I go through 75
- the next number of questions I want you to keep in your
- mind that Newfoundland Power's projected load factor, 77
- based upon its new forecast, will go to 51.1 percent. So I
- just wanted you to keep that in your mind. I'd like you to take a look at NP-121, and in particular page 3 of the
- answer to that. Now, Mr. O'Rielly, I think what I'm going to 81
- have to do, unfortunately, is go back to the question so
- that we can be sure. And you can see that the question 83
- asks to complete a table for each of the following 84
- customers. And (a) is Newfoundland Power, correct?
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: Okay. And one of the
- things that it asks for is energy sales in megawatt hours?
 - MR. BUDGELL: That's correct.

- 1 MS. HENLEY ANDREWS, Q.C.: And the other thing that
- 2 it asks for is the coincident peak?
- 3 MR. BUDGELL: That's right.
- 4 MS. HENLEY ANDREWS, Q.C.: Which is the maximum
- 5 demand?
- 6 MR. BUDGELL: That's the maximum demand on our
- 7 system.
- 8 MS. HENLEY ANDREWS, Q.C.: Okay. Now, can we go
- 9 back to page 3? It's my understanding that this is the table
- of information provided by Hydro with respect to that
- request for information and with respect to Newfoundland
- Power. Is that right?
- 13 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: Okay. Now, we've already
- discussed, a few minutes ago, how you calculate load
- 16 factor?
- 17 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: By our calculation this
- exhibit shows that Newfoundland Power's load factor over
- the period from 1996 had varied from 46.2 percent to 50.8
- 21 percent?
- MR. BUDGELL: I haven't got the calculation on the table.
- 23 I'll have to accept your numbers.
- 24 MS. HENLEY ANDREWS, Q.C.: I'd also like you to
- undertake to verify that?
- MR. BUDGELL: This is for the period?
- MS. HENLEY ANDREWS, Q.C.: From 1996 to 2000.
- MR. BUDGELL: I already ... I have numbers for ... this is a
- 29 peak on our system. I have ... you'll have to appreciate that
- 30 we track information from Newfoundland Power on the total
- load, not the load on ... this is the generation that we meet,
- 32 this number is affected by their generation.
- 33 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: So it's the capacity that our system sees.
- Newfoundland Power, in doing their forecast, the first
- 36 forecasts are total requirements and then nets off the
- 37 generation. So the history that I have under those
- 38 forecasts would be reflecting the total load of
- 39 Newfoundland Power, which would include what their
- 40 generation would meet. Because it's going to be difficult to
- 41 track the actual load factor on the basis of the net of their
- 42 generation.
- 43 MS. HENLEY ANDREWS, Q.C.: Well, for the purpose of
- allocating costs on Hydro's system, Newfoundland Power's
- total load factor is irrelevant, isn't it?

- 46 MR. BUDGELL: No. You have to remember that's one of
- 47 the factors that's built into the capacity credits.
- 48 MS. HENLEY ANDREWS, Q.C.: Yes.
- 49 MR. BUDGELL: In the rate calculations.
- 50 MS. HENLEY ANDREWS, O.C.: Okay.
- 51 MR. BUDGELL: And Hydro, when it has the forecast
- 52 provided by Newfoundland Power, which is the net to us,
- we make assumptions on what their generation is, bring it,
- $\,$ we then bring it back, put a credit back to bring it to the
- total load and then apply the credits. So actually, what actually happens in rates is that the load factor then is a
- 57 different number. It's based on the net ... the generation
- of different number. It's based on the net ... the generation
- 58 credits for rate setting purposes. But maybe that's not
- $\,$ where you're coming from, from this perspective. I don't
- 60 know.
- 61 MS. HENLEY ANDREWS, Q.C.: Well, I'll actually
- eventually get to that part, as well. But, in fact, what you're
- 63 saying is that apart from the generation credit that
- Newfoundland Power gets their load factor, for the purpose
- of rate setting, is set on the basis of their net generation, of
- 66 the net after you take off the generation credit?
- 67 MR. BUDGELL: That's correct.
- 68 MS. HENLEY ANDREWS, Q.C.: And as a result, they're
- also getting a benefit on the calculation of their portion of
- 70 the revenue requirement?
- 71 MR. BUDGELL: That's correct.
- 72 MS. HENLEY ANDREWS, Q.C.: So they're getting
- 73 compensation in two different ways?
- 74 MR. BUDGELL: I don't know if it's in two different ways.
- 75 Its compensation is in view of the fact that the generation
- is available to the system, the overall system.
- 77 MS. HENLEY ANDREWS, Q.C.: Yeah. But the fact that it's
- 78 ... that the generation available is netted off against their
- 79 demand for the purpose of calculating their load factor
- 80 affects their load factor?
- 81 MR. BUDGELL: Yeah. Yes, in as far as the calculations in
- 82 the rates.
- 83 (12:00)
- 84 MS. HENLEY ANDREWS, Q.C.: Okay. So do you have
- 85 load factor figures for Newfoundland Power?
- 86 MR. BUDGELL: I only have load factor figures for the total
- 87 produced and purchased.
- 88 MS. HENLEY ANDREWS, Q.C.: Okay. For what years?
- 89 MR. BUDGELL: For `86 to 2000.
- 90 MS. HENLEY ANDREWS, Q.C.: Okay. And do you have

- a figure as to what Newfoundland Power's projected load
- factor is now for ... or load factor would be now based upon
- 3 its new forecast for 2001 and 2002?
- 4 MR. BUDGELL: Based on the forecast as filed, it was .5.
- 5 MS. HENLEY ANDREWS, Q.C.: Yes.
- 6 MR. BUDGELL: Based on the load factor that was in the
- 7 supplemental evidence, my second supplemental it was
- 8 .513.
- 9 MS. HENLEY ANDREWS, Q.C.: And looking at the
- information that you have with respect to the period from
- 11 1996 to 2000 has Newfoundland Power's load factor ever
- been .513 or greater?
- MR. BUDGELL: Yes, it has for several years.
- MS. HENLEY ANDREWS, Q.C.: And what years where
- they?
- MR. BUDGELL: The year 2000 it was .513, in the year ... I
- said `86, by the way, I have dated back to `86, not `96. Are
- you just interested in `96?
- MS. HENLEY ANDREWS, Q.C.: I'm just interested in 1996
- 20 onward
- MR. BUDGELL: In `96 the only instance is 2000.
- 22 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BUDGELL: For `96 on.
- 24 MS. HENLEY ANDREWS, Q.C.: And 2000 was a
- particularly warm year, wasn't it?
- MR. BUDGELL: I believe so.
- 27 MS. HENLEY ANDREWS, Q.C.: And, in fact, when we had
- been discussing both the forecasts and the actuals for 2000
- 29 you've pointed out to me on a number of times that ... a
- number of occasions that the peak in 2000 would have been
- lower because of such a warm winter?
- MR. BUDGELL: Yes. The late 1990s were warmer than
- 33 normal.
- 34 MS. HENLEY ANDREWS, Q.C.: Okay. And that would
- normally affect ... that might also have served to increase
- 36 Newfoundland Power's load factor in 2000 above and
- beyond what the average?
- MR. BUDGELL: No. You'd have to look at the peak day.
- 39 MS. HENLEY ANDREWS, Q.C.: Yes.
- 40 MR. BUDGELL: The year being warmer than normal would
- affect the energy take.
- MS. HENLEY ANDREWS, Q.C.: Yeah.
- 43 MR. BUDGELL: That can affect the low factor, as well, but

- 44 I think Newfoundland Power normalized for that, but you'd
- 45 have to look at the peak. But the peak, the peak was not
- there, the peak conditions that would have drove ... a high
- peak had not occurred.
- 48 MS. HENLEY ANDREWS, Q.C.: No. And we know that,
- because when we look at 2000 we have the actual date on
- 50 that?
- 51 MR. BUDGELL: That's right.
- 52 MS. HENLEY ANDREWS, Q.C.: And we also know that
- 53 the energy requirements were reduced to some extent in
- 54 2000?
- 55 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: So it would be reasonable
- to expect that 2000, that load factor would improve in 2000
- for utility customers, given what actually occurred?
- 59 MR. BUDGELL: Yes.
- 60 MS. HENLEY ANDREWS, Q.C.: So in 2000 you would
- 61 expect both a lower peak and a higher load factor for
- 62 Newfoundland Power, based upon the weather that
- 63 occurred?
- 64 MR. BUDGELL: Yes. Well, that's the evidence.
- 65 MS. HENLEY ANDREWS, Q.C.: Okay. But now when we
- talk about 2001, and in particular when we talk about 2002
- we're forecasting, right?
- 68 MR. BUDGELL: That's correct.
- 69 MS. HENLEY ANDREWS, Q.C.: And we normally don't
- 70 forecast based upon the warmest year, do we?
- 71 MR. BUDGELL: No. we don't.
- 72 MS. HENLEY ANDREWS, Q.C.: No. And that's because
- you have to look pretty much at the average if you're ... you
- 74 can either look at worst case, you can look at average, or
- you can look at best case, but if you want to get something
- 76 that's a reasonable forecast you wouldn't look at the
- varmest year, would you?
- 78 MR. BUDGELL: Not if your intentions are to ensure that
- 79 there is adequate capacity to meet peak.
- 80 MS. HENLEY ANDREWS, Q.C.: Okay. Can you tell me,
- 81 based upon the information that you have, what your
- 82 calculation of Newfoundland Power's load factor was for
- 83 1996?
- 84 MR. BUDGELL: .484.
- 85 MS. HENLEY ANDREWS, Q.C.: And for 1997?
- 86 MR. BUDGELL: .505.
- 87 MS. HENLEY ANDREWS, Q.C.: For 1998?

- 1 MR. BUDGELL: .502.
- 2 MS. HENLEY ANDREWS, Q.C.: For 1999?
- 3 MR. BUDGELL: .508.
- 4 MS. HENLEY ANDREWS, Q.C.: And for 2000 you've
- 5 already told us that it was .513?
- 6 MR. BUDGELL: That's correct.
- 7 MS. HENLEY ANDREWS, Q.C.: Now, as you pointed out
- 8 earlier today, at page 2 of your evidence, the second
- 9 supplemental evidence, you indicate that Newfoundland
- 10 Power's higher energy requirements are more than offset by
- market down time for Abitibi?
- MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: In what circumstances
- would you get higher energy requirements associated with
- 15 a lower peak?
- MR. BUDGELL: I'd have to know the ... are you referring
- the question in the context of a particular customer?
- MS. HENLEY ANDREWS, Q.C.: No, Newfoundland Power.
- MR. BUDGELL: Newfoundland Power. Only if there was
- something material that has happened in the system.
- 21 MS. HENLEY ANDREWS, Q.C.: Are you aware of
- 22 anything that's happened, material that's happened in the
- 23 system?
- MR. BUDGELL: I'm not aware of anything significant that's
- 25 happened between pre-filed and supplemental.
- MS. HENLEY ANDREWS, Q.C.: Would you agree that
- generally a decrease in demand is not accompanied by an
- increase in energy?
- 29 MR. BUDGELL: On a projected basis, no. Yeah, I would
- agree that that would not be expected.
- 31 MS. HENLEY ANDREWS, Q.C.: Okay. Under your
- 32 proposed industrial contracts which were pre-filed with the
- 33 Board, and you don't actually need to ... you're not going
- 34 to need to look at it for this question. The industrial
- customers have to declare their demand for the subsequent
- year by October 1st, isn't that right?
- 37 MR. BUDGELL: That's correct.
- 38 MS. HENLEY ANDREWS, Q.C.: And that demand is called
- 39 their amount of power on order?
- 40 MR. BUDGELL: That's correct.
- 41 MS. HENLEY ANDREWS, Q.C.: So, in the case of Corner
- Brook Pulp and Paper, as an example, because they have
- revised their forecast for 2002, correct?
- 44 MR. BUDGELL: Exactly was the exercise of making that

- determination or putting in their power in order that lead us
- to question the forecast that we were using up to that time
- period.
- 48 MS. HENLEY ANDREWS, Q.C.: Because their existing
- 49 contracts also require that the industrial customers notify
- 50 Hydro before October 1st of their amount of power on
- order for the following calendar year, isn't that right?
- 52 MR. BUDGELL: That's correct.
- 53 MS. HENLEY ANDREWS, Q.C.: Okay. So, the revision by
- 54 Corner Brook Pulp and Paper of its forecast from 67
- megawatts to 53 megawatts in 2002 now means that its
- demand for 2002 or firm demand for 2002 is 56 megawatts,
- 57 right?
- 58 MR. BUDGELL: That's what I understand, yes.
- 59 MS. HENLEY ANDREWS, Q.C.: And based upon your
- 60 current proposal Corner Brook Pulp and Paper will pay the
- firm rate for that 56 megawatts of demand?
- 62 MR. BUDGELL: Only if that's reflected in the forecast
- which Hydro determines its rates on.
- 64 MS. HENLEY ANDREWS, Q.C.: Yes.
- 65 MR. BUDGELL: The supplemental evidence right now is
- 66 based on 67.
- 67 MS. HENLEY ANDREWS, Q.C.: Yes. But, if you ... but the
- 68 question was, with respect to Corner Brook Pulp and Paper,
- is that right now they have locked in for 2002 to a demand
- of 56 megawatts, is that right?
- 71 MR. BUDGELL: That's correct.
- 72 MS. HENLEY ANDREWS, Q.C.: And that they will pay
- vhatever Hydro's firm rate turns out to be, demand rate, for
- 74 that 56 megawatts?
- 75 MR. BUDGELL: That's correct.
- 76 MS. HENLEY ANDREWS, Q.C.: If Corner Brook Pulp and
- 77 Paper exceeds that demand, if they have a need for
- 78 additional demand, pursuant to Hydro's proposed
- 79 contractual relationship they will have to pay ... first of all,
- the demand will have to be available, correct?
- 81 MR. BUDGELL: That's correct.
- 82 MS. HENLEY ANDREWS, Q.C.: And secondly, they
- 83 would have to pay whatever Hydro's non-firm rate would
- 84 be for that additional demand above and beyond the 56
- 85 megawatts?
- MR. BUDGELL: That's correct.
- 87 MS. HENLEY ANDREWS, Q.C.: Which on the whole is a
- 88 less attractive rate, the rate that you're proposing, than the
- 89 demand rate?

- 1 MR. BUDGELL: I'm ...
- 2 MS. HENLEY ANDREWS, Q.C.: Is it cheaper or ...
- 3 MR. BUDGELL: I don't ... my memory right now, I don't
- 4 recall the actual number.
- 5 MS. HENLEY ANDREWS, Q.C.: Okay.
- 6 MR. BUDGELL: But I remember earlier discussions about
- 7 it. If I can be reminded what the values are? I don't have
- 8 the numbers in front of me, I don't ...
- 9 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BUDGELL: ... know whether one was higher than the
- other, but I believe it was higher. I believe you're right.
- MS. HENLEY ANDREWS, Q.C.: Okay. Now, if Corner
- Brook Pulp and Paper has a lower demand in 2002 than 56
- 14 megawatts.
- 15 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: It will have to pay for the
- 56 megawatts that it's ordered anyway, right?
- 18 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And that's because Hydro
- 20 recovers the demand charge from the industrial customers
- 21 regardless of their actual demand? In other words, if
- 22 Corner Brook Pulp and Paper orders 56 megawatts for 2002
- 23 they pay for 56 megawatts except in exceptional
- circumstances even if they only use 50?
- MR. BUDGELL: That's right. That's the concept of the
- 26 power order.
- 27 MS. HENLEY ANDREWS, Q.C.: Newfoundland Power has
- a blended rate?
- 29 MR. BUDGELL: Yes.
- 30 MS. HENLEY ANDREWS, Q.C.: So it pays only for the
- energy that it consumes?
- 32 MR. BUDGELL: The rate is an energy charge.
- 33 MS. HENLEY ANDREWS, Q.C.: The rate is an energy
- charge. But the rate has built into it a demand cost and an
- 35 energy cost?
- 36 MR. BUDGELL: Yes. There was a demand and energy
- component that went into the rate, you're correct.
- 38 MS. HENLEY ANDREWS, Q.C.: That's based upon the
- 39 cost of service?
- 40 MR. BUDGELL: Yes, that's correct.
- 41 MS. HENLEY ANDREWS, Q.C.: And the cost of service
- assumes a certain load factor for Newfoundland Power?
- 43 MR. BUDGELL: That's correct.

- 44 MS. HENLEY ANDREWS, Q.C.: And if Newfoundland
- 45 Power's load factor for the purpose of the cost of service
- increases, then its rate will decrease? The amount of its
- share of the revenue requirement will decrease?
- 48 MR. BUDGELL: That's correct.
- 49 MS. HENLEY ANDREWS, O.C.: And if Newfoundland
- 50 Power's ... on the converse is that if Newfoundland Power's
- load factor decreases when the rates are being set it will
- pick up a larger share of the revenue requirement?
- 53 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: And that will be reflected
- 55 in its rate?
- 56 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS, Q.C.: So when we're looking at
- 58 this hearing and the setting of the rates for 2002, the
- 59 amount of the demand cost that's contained in
- 60 Newfoundland Power's rates depends on what its forecast
- demand and forecast load factor for 2002 are?
- 62 MR. BUDGELL: That's correct.
- 63 MS. HENLEY ANDREWS, Q.C.: And if Newfoundland
- Power overstates its energy requirement for 2002 and
- understates its demand for 2002 the industrial customers
- will pick up costs in their rates set for 2002 that are not
- 67 properly theirs?
- 68 MR. BUDGELL: I don't know about the energy component,
- 69 because the energy, whether it's increased or decreased,
- vould mean more or less Holyrood, so there would be a
- 71 commiserate decrease in costs.
- MS. HENLEY ANDREWS, Q.C.: Okay.
- 73 MR. BUDGELL: But what you're saying from a demand
- 74 component is correct.
- 75 MS. HENLEY ANDREWS, Q.C.: Okay. So if
- 76 Newfoundland Power overstates its ... understates its
- 77 demand for 2002 the industrial customers will pick up the
- 78 costs in their rates for 2002 that are not properly theirs?
- 79 MR. BUDGELL: Yes, the portion of fixed costs that go into
- 80 those rates.
- 81 MS. HENLEY ANDREWS, Q.C.: Okay. But, unlike the
- 82 industrial customers, Corner Brook Pulp and Paper, for
- example, that we just discussed, Newfoundland Power has
- 84 no penalty if its demand is greater than its forecast, correct?
- 85 MR. BUDGELL: No. That's correct.
- 86 MS. HENLEY ANDREWS, Q.C.: That's correct. And ...
- 87 MR. BUDGELL: Not that I'm aware of, I'm saying.
- 88 MS. HENLEY ANDREWS, Q.C.: Okay.

- 1 MR. BUDGELL: I'm not aware that there is any penalty.
- MS. HENLEY ANDREWS, Q.C.: Because they don't have
- 3 to pay a premium if their demand is above their forecast?
- 4 MR. BUDGELL: No, not in the same way that industrial
- 5 have, that is correct.
- 6 MS. HENLEY ANDREWS, Q.C.: And they only pay for
- 7 their energy?
- 8 MR. BUDGELL: That's right.
- 9 (12:15)
- MS. HENLEY ANDREWS, Q.C.: So would you agree with
- me that Newfoundland Power, in setting their rates for 2002,
- would benefit from an understatement of its demand for
- 13 2002?
- MR. BUDGELL: I don't want to go so far as to say that
- Newfoundland Power purposely understated or overstated
- 16 ..
- 17 MS. HENLEY ANDREWS, Q.C.: Oh, no, no.
- MR. BUDGELL: ... its demand to do anything under ...
- MS. HENLEY ANDREWS, Q.C.: But the practical effect ...
- 20 MR. BUDGELL: But the practical effect of what you're
- 21 proposing is true.
- 22 MS. HENLEY ANDREWS, Q.C.: I'd like to turn to IC-80.
- 23 And go to the ... and you can see the question was to
- 24 provide the short and long-term forecasts filed with the
- Board in each of the rate referrals made by Hydro since 1977, together with the actual loads experienced in each of
- 1977, together with the actual loads experienced in each of the years covered by the forecasts. So could you go to the
- table, please, Mr. O'Rielly? Alright. When you look at this
- table, Mr. Budgell, would you agree with me that the
- actuals are in all circumstances, lower than the forecasts?
- 31 MR. BUDGELL: That's correct.
- 32 MS. HENLEY ANDREWS, Q.C.: And who amongst the
- customers would contribute to that?
- 34 MR. BUDGELL: All customers contribute. This is an
- 35 energy number.
- 36 MS. HENLEY ANDREWS, Q.C.: Yes.
- 37 MR. BUDGELL: All customers contribute. If I was to, on
- a percentage basis, indicate which group of customers
- 39 contribute most, I would say industrial.
- MS. HENLEY ANDREWS, Q.C.: Okay. Industrial to the
- energy numbers or to the differences?
- 42 MR. BUDGELL: Industrial forecasts normally don't come
- up to what we project.
- 44 MS. HENLEY ANDREWS, Q.C.: Okay.

- 45 MR. BUDGELL: The biggest is usually with industrials on
- 46 a percentage basis.
- 47 MS. HENLEY ANDREWS, Q.C.: Okay. For your
- 48 projections in your second supplemental evidence you've
- 49 changed Schedule 5, correct?
- 50 MR. BUDGELL: That's correct.
- 51 MS. HENLEY ANDREWS, Q.C.: But you haven't change
- 52 Schedule 8, correct?
- 53 MR. BUDGELL: Schedule 8 was?
- 54 MS. HENLEY ANDREWS, Q.C.: The long-term forecast?
- MR. BUDGELL: No, there's no change in that schedule.
- 56 MS. HENLEY ANDREWS, Q.C.: Okay. And that's because
- 57 the forecasting that's used with respect to Schedule 5 is
- short-term versus long-term?
- 59 MR. BUDGELL: That's correct. We haven't completed the
- 60 exercise of revising the long-term.
- 61 MS. HENLEY ANDREWS, Q.C.: Would you agree that for
- the test year 2002, every increase in Newfoundland Power's
- 63 load factor impacts the industrial customers?
- 64 MR. BUDGELL: Are you speaking from a perspective of ...
- 65 MS. HENLEY ANDREWS, Q.C.: From a portion of cost
- 66 point of view.
- 67 MR. BUDGELL: From a prior cost allocation setting the
- sa rates?
- 69 MS. HENLEY ANDREWS, Q.C.: Yes.
- 70 MR. BUDGELL: Yes.
- 71 MS. HENLEY ANDREWS, Q.C.: Would you agree that one
- of those ways is that increases in system load ...
- 73 MR. BUDGELL: I should go back, though. That's
- 74 assuming the industrials stay static.
- 75 MS. HENLEY ANDREWS, Q.C.: That's correct.
- 76 MR. BUDGELL: While this is happening. I mean, both of
- them could be (inaudible) and the impact could be moot.
- 78 MS. HENLEY ANDREWS, Q.C.: But I agree.
- 79 MR. BUDGELL: Yeah, okay. I just wanted to clarify that.
- 80 MS. HENLEY ANDREWS, Q.C.: And similarly, a decrease
- 81 in the industrial customers' load factor would increase
- 82 Newfoundland Power's costs?
- 83 MR. BUDGELL: Yes. The same effect happens to either
- party if one is static and the other changes.
- 85 MS. HENLEY ANDREWS, Q.C.: Okay. But we know now
- 86 what the industrial customers demand is going to be for

- 1 2002, don't we?
- 2 MR. BUDGELL: For the megawatt demand, yes.
- 3 MS. HENLEY ANDREWS, Q.C.: Because it's fixed by
- 4 contract?
- 5 MR. BUDGELL: Yes.
- 6 MS. HENLEY ANDREWS, Q.C.: Now, in terms of the ways
- 7 in which an increase in Newfoundland Power's load factor
- 8 increases the industrial customers' costs, would you agree
- 9 that one of the ways is that increases in system load factor
- shift more hydraulic generation costs to energy rather than
- 11 demand?
- MR. BUDGELL: I'm not as familiar with the cost of service
- 13 ...
- MS. HENLEY ANDREWS, Q.C.: That would be Mr.
- 15 Brickhill?
- MR. BUDGELL: ... methodology. That would be Mr.
- 17 Brickhill would be the best to answer that question.
- 18 MS. HENLEY ANDREWS, Q.C.: Would you agree that
- increases in the Holyrood forecast generating capacity
- 20 factor shifts more of the Holyrood generation costs to
- 21 energy from demand, or would that also be better put to
- 22 Mr. Brickhill?
- MR. BUDGELL: I'd have to defer that to Mr. Brickhill.
- MS. HENLEY ANDREWS, Q.C.: Would you agree that an
- 25 increase in Newfoundland Power's load factor reduces
- 26 Newfoundland Power's relative allocation of demand
- related costs based on coincident peak?
- MR. BUDGELL: Can you repeat that again, please?
- 29 MS. HENLEY ANDREWS, Q.C.: Would you agree that an
- 30 increase in Newfoundland Power's load factor reduces
- 31 Newfoundland Power's allocation of demand related costs
- based on coincident peak?
- 33 MR. BUDGELL: Yes.
- 34 MS. HENLEY ANDREWS, Q.C.: Would you also agree
- 35 that once the rate is set Newfoundland Power is indifferent
- to the relationship between its forecast demand and its
- actual because of its rate being an energy only rate?
- 38 MR. BUDGELL: I don't know. Can you just repeat that
- question again? Are you just talking from the concept of
- demand or are you just talking about from an energy?
- 41 MS. HENLEY ANDREWS, Q.C.: I'm actually just talking
- about demand which is that once ...
- 43 MR. BUDGELL: I don't know whether they'd be indifferent.
- I mean, I'm sure they'd be pleased with load growth as
- opposed to decreases in load.

- 46 MS. HENLEY ANDREWS, Q.C.: From a cost ...
- 47 MR. BUDGELL: But the concept ...
- 48 MS. HENLEY ANDREWS, Q.C.: They don't pay you more?
- 49 MR. BUDGELL: They pay us more money if their energy is
- 50 more, right.
- MS. HENLEY ANDREWS, Q.C.: Yeah. But they don't pay
- 52 for the increased demand that they might use?
- MR. BUDGELL: No.
- 54 MS. HENLEY ANDREWS, Q.C.: Except through their
- 55 energy rate?
- 56 MR. BUDGELL: That's right.
- 57 MS. HENLEY ANDREWS, Q.C.: And for Corner Brook
- Pulp and Paper, which is also referred to on page 2 of your
- supplemental evidence, the revision to 56 megawatts from
- 60 67 megawatts will also affect the cost allocation?
- 61 MR. BUDGELL: Yes, I understand it will.
- 62 MS. HENLEY ANDREWS, Q.C.: But, Corner Brook Pulp
- and Paper will have to pay the non-firm rate if it actually
- needs more demand than what it's ordered?
- 65 MR. BUDGELL: That's correct.
- 66 MS. HENLEY ANDREWS, Q.C.: And it will have to pay for
- 56 megawatts of demand regardless of whether it uses it?
- 68 MR. BUDGELL: Yes.
- 69 MS. HENLEY ANDREWS, Q.C.: When you say in your
- 70 evidence on page 2, again we're at the supplementary
- 71 evidence, or the second supplementary evidence that, or
- 72 somewhere, that there'll be a final cost of service filed by
- 73 Hydro before the end of the hearing?
- 74 MR. BUDGELL: Yes, I understand that would be the case,
- 75 that would reflect any changes or mistakes or errors that
- 76 have been noted, and I assume any direction that we
- receive from the Board in that regard ...
- 78 MS. HENLEY ANDREWS, Q.C.: And that's expected to be
- 79 filed before the hearing actually concludes?
- 80 MR. BUDGELL: I don't know whether it would be before.
- 81 I suspect it will be after the hearing concludes.
- 82 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BUDGELL: But I don't think we'll have a Board order
- before the hearing concludes, that's my problem.
- 85 MS. HENLEY ANDREWS, Q.C.: Okay. This is a very good
- place to break, Mr. Chairman.
- 87 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
- 88 Henley Andrews. Thank you, Mr. Budgell. We'll

reconvene at 2:00.

2 (break)

(2:00 p.m.)

- 4 MR. NOSEWORTHY, CHAIRMAN: Thank you and good
- 5 afternoon. Any preliminary matters please, Counsel, before
- 6 we begin?
- MR. KENNEDY: Yes, Chair. I believe Hydro will be reporting on the undertakings and I just add as well that for the advisement of the panel that it's the intention of the counsels to have a meeting after we're finished tomorrow for the purposes of discussing some scheduling issues and as well to solicit the views of counsel concerning final
- submissions in the hopes that we will get there one day, so
 ... and then I would be reporting to the panel subsequent to
- that meeting about its outcome.
- MR. NOSEWORTHY, CHAIRMAN: Our very best wishes to you. Ms. Greene?
 - MS. GREENE, Q.C.: Thank you, Mr. Chair. I have a copy of the list of undertakings that were provided yesterday that I would like to distribute at this time. As in the past, the reference to the transcript is given as well as a general description of the subject matter, and I would like to review each one now because with the exception of two, I believe we are in a position to respond to all of them. The first undertaking was given to counsel for Newfoundland Power, and it was agreed that we would confirm whether abandonment charges had been recovered with respect to Hope Brook Gold Mine and the answer is no, which was the indication yesterday by Mr. Budgell.

The second undertaking was again given to counsel for Newfoundland Power and it's found on page 13, lines 30 to 44 of the transcript, and we were asked to check to see if there were any undepreciated costs remaining for transmission line 255 after the shut down of the Hope Brook mine. We have again checked this and as indicated by Mr. Budgell yesterday, there are no, or there were no undepreciated costs at that time with respect to TL-255 and the terminal station associated with it.

The next two undertakings relate to VHF mobile radio system, and I have a document to distribute at this time which will address both of those undertakings.

MR. KENNEDY: Chair, I believe that's U-Hydro No. 14.

U-HYDRO NO. 14 ENTERED

MS. GREENE, Q.C.: Thank you. The first undertaking listed with respect to the VHF mobile radio system relates to the increase in cost associated with the revised update that was filed on October 31st. Counsel for Newfoundland Power asked that we provide explanation of the increase in

cost for this project, the increase being from what was filed on May 31st, 2001, and what was contained in the October 31 update, and the first half of U-Hydro No. 14 is the answer to that question where you will see in the table, the first column with numbers is for the original, and that would be as filed on May 31st. The second column entitled "revised" would be the current estimate for that component for that project. The difference is noted in the last column, and then there are notes to explain the variance from the original as filed, and the revised as of October 31, and as Mr. Budgell indicated yesterday, the increase in cost is primarily as a result of the project becoming a two year project.

The second undertaking with respect to the VHF mobile radio system was to provide a breakdown of the component costs of the equipment, and that is contained in the second part of U-Hydro No. 14 where there is a breakdown of the revised estimate of the equipment contract which is shown in the first table of \$5.8 million.

The next undertaking was to provide a copy of the architectural portion of the technology strategic plan, and Mr. Budgell indicated yesterday that report is not completed and when it is completed it will be filed.

The next undertaking related to providing information on the cost of the emissions monitoring at the stacks at Holyrood. That is the one that I don't have ready for today. The last undertaking was an undertaking given to counsel for Industrial Customers, and it related to the determination of the forecast winter peak, and Mr. Budgell answered that question this morning.

So from the list of undertakings provided yesterday, there are two outstanding. One being the architectural portion of the technology strategic plan, and the other relating to the costs of the emission monitoring at Holyrood. Thank you, that completes ...

MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. Greene.

MS. BUTLER, Q.C.: Excuse me, Mr. Chairman, if I might. In relation to one of the undertakings, I had reviewed with Ms. Greene earlier this morning, and again, just before we started, and my error, I assume, because of the way the question was specifically put, but unfortunately the undertaking that I thought I was getting was for undepreciated ... this is in relation to the second undertaking, page 13 ... undepreciated plant costs remaining for TL-250 and 255, that's the lines and the terminal stations after the shutdown of the Hope Brook Gold Mine. I accept that by the time the question got put to Mr. Budgell, it appears that I was asking only about the 255, but if Hydro doesn't mind, the undertaking I was looking for was a little different than what ultimately got

- recorded. 1
- MS. GREENE, Q.C.: And that's not a problem, it's just that 2
- I knew from the conversation that there must have been a 3
- misunderstanding, so I asked Ms. Butler, so if it is with 4
- respect to TL-250 and the terminal station, yes, we will 5
- provide that as well. 6
- 7 MS. BUTLER, Q.C.: Thank you very much.
- MR. NOSEWORTHY, CHAIRMAN: Thank you. Ms. 8
- Henley Andrews, I'd ask you to continue please? 9
- MS. HENLEY ANDREWS, Q.C.: Thank you. Mr. Budgell, 10
- one of the things that you mentioned this morning in 11
- answer to one of the questions that I posed about 12
- Newfoundland Power's forecast for 2001 and 2002, that is 13
- the revised forecast, and I guess probably for their, all their 14
- forecasts, you mentioned something about normalizing 15
- factors. Do you recall that? 16
- 17 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: Okay, what were you 18
- talking about? 19
- MR. BUDGELL: I understand from the forecast basis, 20
- Newfoundland Power normalizes their energy forecast for 21
- weather. 22
- MS. HENLEY ANDREWS, Q.C.: And what do you mean 23
- by that? 24
- MR. BUDGELL: Well, they reflect in their projections 25
- average weather conditions. 26
- MS. HENLEY ANDREWS, Q.C.: That's your 27
- understanding? 28
- MR. BUDGELL: That's my understanding, yes. 29
- MS. HENLEY ANDREWS, Q.C.: But you have no way of 30
- knowing whether they've actually done that with respect to 31
- this forecast? 32
- MR. BUDGELL: No, I wouldn't. 33
- 34 MS. HENLEY ANDREWS, Q.C.: There's one really minor
- thing that we think must be a typographical error actually 35
- in one of the answers to information requests, and I just 36
- thought that I'd run it by you to see whether we're right or 37
- not, and that is with respect to CA-48, page 4, and in 38
- particular, lines 2 and 3. It says the island interconnected 39
- system should have sufficient generating capacity to 40
- satisfy a lost load expectation, which is LOLE target of not 41
- more than 2.8 hours per year. 42
- MR. BUDGELL: Yes, the ... 43
- MS. HENLEY ANDREWS, Q.C.: Should that be ... 44
- MR. BUDGELL: I say it could be, remember I was talking 45

- this morning ... I referred to loss of load, expectation of loss
- load hours as being, to me it means the same thing.
- MS. HENLEY ANDREWS, Q.C.: So should that actually be
- LOLH or ...
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: Okay, so that should be
- LOLH?
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: Thank you. Now I want
- to move on to a discussion of your capital budget. Do you,
- yourself, ever conduct cost benefit analysis?
- MR. BUDGELL: I have in the past.
- MS. HENLEY ANDREWS, Q.C.: As part of your current
- position do you do that?
- MR. BUDGELL: No, not in my current position.
- MS. HENLEY ANDREWS, Q.C.: What, when you talk
- about having conducted a cost benefit analysis, what do
- you mean?
- MR. BUDGELL: I'm sorry, you did ask cost benefit. I
- normally refer to it as cost effectiveness, the type of
- analysis typically in planning, system planning does, is 66
- what's called cost effectiveness.

of analysis that I'd be ...

- MS. HENLEY ANDREWS, O.C.: Yes.
- MR. BUDGELL: And the difference in cost effectiveness is
- usually these are analyses done when one recognizes that 70
- 71 there is no alternative than to proceed with some measure
- to address a requirement or need. Then the decision rests 72
- on which of a group of alternatives is least cost, so you're 73
- looking at the cost and effect of different alternatives, and 74
- the fact that it says cost effectiveness means that you've
- got to recognize that you're not comparing a mouse and an
- elephant. I mean they have to have some relatively in the
- effect that it has on the overall system. So that's the type
- MS. HENLEY ANDREWS, Q.C.: Familiar with doing.
- MR. BUDGELL: More familiar with. Cost benefit analysis 81 sometimes is synonymous for me. It's referred to as the
- same type of analysis, but there is times it has different
- benefits because one can ... it has a different meaning. One
- can infer from cost benefit, you're doing an analysis of 85
- whether it's beneficial to do a project or not do a project.
- MS. HENLEY ANDREWS, Q.C.: Given the cost.
- MR. BUDGELL: Yes, given the cost, and those are, to me,
- two distinct analyses.
- MS. HENLEY ANDREWS, Q.C.: Yes, okay. In terms of

79

- Hydro's capital policy, capital budgeting policy, in terms of 1
- when a cost benefit analysis is done versus when it's not 2
- done, which type of cost benefit analysis does that refer 3
- 4
- MR. BUDGELL: I'd have to go to the section that's written 5
- up in the budget. 6
- MS. HENLEY ANDREWS, Q.C.: Okay. 7
- MR. BUDGELL: Now this is page **B-6**. 8
- MS. HENLEY ANDREWS, Q.C.: Yes. 9
- MR. BUDGELL: And I'm starting with the paragraph, I 10
- guess, "Many", the word starting "many". 11
- MS. HENLEY ANDREWS, Q.C.: Yes. 12
- MR. BUDGELL: Many of the explanations refer to cost 13
- benefit studies, and it should be recognized that because 14
- of the nature of the individual project, not all decisions to 15
- proceed are supported by formal cost benefit studies. For 16
- example, when the level of safety or reliability of service to 17
- customers would be clearly jeopardized if a project did not 18
- proceed, a formal cost benefit study would not be required 19
- to support the decision to proceed. There is really no 20
- 21 alternative but to proceed. The majority of projects
- included in Hydro's 2002 capital budget have no formal 22
- cost benefit study supporting the decision to proceed. 23
- These projects are required for one or more of the following 24
- 25 reasons. And I won't go through the reasons, just jump
- down below. Notwithstanding this, however, before actual 26
- construction or implementation of a project is started, 27
- engineering analysis is undertaken to ensure that the most 28
- appropriate technical and cost effective solution has been 29
- identified. Further, where there are a number of technically 30
- acceptable alternatives to address a particular problem, or 31
- when implementation of a new alternative may offer cost 32
- advantages over an existing condition, cost effectiveness 33
- analyses are performed. That's our policy. 34
- MS. HENLEY ANDREWS, Q.C.: No, I understand what 35
- your policy is, but what I was trying to get at is you've 36
- 37 identified for me what, and you did that yesterday as well,
- I think for Ms. Butler, that from your perspective there are 38
- two different types of cost benefit analysis. There is the 39
- cost effectiveness, which is what you've described as 40 being more familiar with yourself, which is when there's no 41
- alternative and you're just looking at which of the bids, or 42
- whatever, is least cost. 43
- MR. BUDGELL: Yes. 44
- MS. HENLEY ANDREWS, Q.C.: And then there is the type 45
- of cost benefit analysis that looks at whether the benefit of 46
- the proposal is worth the cost. 47
- MR. BUDGELL: Yes. 48

- MS. HENLEY ANDREWS, Q.C.: So when the policy, from
- your perspective, when the policy shown on **B-6** refers to
- cost benefit studies, what type of cost ... which of those
- two types of cost benefits studies would be done if a cost
- benefit study was required for a project?
- MR. BUDGELL: It could be either. I'm normally familiar
- with cost effectiveness, that type of study. That's the 55
- normal, the norm within system planning, the ones that I am 56
- the most familiar with, that I am directly responsible for. 57
- These are ones, the projects that have been identified as
- being situations that don't meet our criteria for planning of
- the system, so we're looking at alternatives, so normally
- cost effectiveness type of analysis.
- (2:15 p.m.)
- MS. HENLEY ANDREWS, Q.C.: Now, do you have any
- particular training in evaluating benefit versus cost?
- MR. BUDGELL: I have been, my ... when I did engineering
- in university, I did engineering economic analysis courses.
- I have also done courses since then subsequent.
- MS. HENLEY ANDREWS, Q.C.: Okay, when was the last
- planning study that you did?
- MR. BUDGELL: In which regard?
- MS. HENLEY ANDREWS, Q.C.: Well the last, I mean one
- of the things that your evidence, we went through this
- yesterday, indicates that you're responsible for the
- completion of planning studies which result in the
- recommendation of new generation, transmission and
- distribution facilities.
- MR. BUDGELL: Yeah, and I'm ... is it in distribution,
- generation, or transmission?
- MS. HENLEY ANDREWS, Q.C.: It doesn't matter to me.
- I'm asking which was the last one that you did?
- MR. BUDGELL: From a generation perspective, the last
- one we did was in relation to the Corner Brook Pulp and
- Paper and ACI.
- MS. HENLEY ANDREWS, Q.C.: You mean the Beaton
- 85 project?
- MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS, Q.C.: Now that project is
- actually a Fortis and Abitibi Consolidated project, isn't that 88
- right? 89
- MR. BUDGELL: I understand that's the arrangement.
- MS. HENLEY ANDREWS, Q.C.: Okay, and the other one
- is Corner Brook Pulp and Paper?
- MR. BUDGELL: Yes.

- 1 MS. HENLEY ANDREWS, Q.C.: What was your role in
- those planning studies, or that planning study?
- 3 MR. BUDGELL: I'm the director of the department. I
- 4 oversaw the analysis. I also participated in the discussions
- 5 with the companies.
- 6 MS. HENLEY ANDREWS, Q.C.: And what was the
- 7 purpose of that planning study?
- 8 MR. BUDGELL: The purpose of that planning study was
- 9 to follow the direction that the government had provided
- for us to speak to those customers and report back to
- 11 government on our findings.
- MS. HENLEY ANDREWS, Q.C.: So what exactly were you
- doing, and what was in the planning study? What were
- 14 you looking at?
- MR. BUDGELL: I was looking at the costs of proceeding
- with these alternatives.
- 17 MS. HENLEY ANDREWS, Q.C.: And in the process of
- doing that, was a cost benefit analysis done?
- MR. BUDGELL: There was an analysis done, yes.
- 20 MS. HENLEY ANDREWS, Q.C.: Okay, as ...
- 21 MR. BUDGELL: Cost effectiveness analysis.
- 22 MS. HENLEY ANDREWS, Q.C.: Okay, now cost
- effectiveness, you've told me, was when there's no
- alternative, and you look at which is the least cost?
- MR. BUDGELL: I look at cost effectiveness in terms of I
- looked at the cost effectiveness amongst a bunch of
- 27 alternatives. I indicated that I can use the analysis for
- both.
- 29 MS. HENLEY ANDREWS, Q.C.: Okay, alright, now in
- 30 terms of the portion of the capital budget that you're
- 31 testifying on, is perhaps the best way to deal with it, what
- 32 has your role been in the preparation of that part of the
- capital budget?
- 34 MR. BUDGELL: The system planning department would
- 35 have done the analysis associated with a couple of the
- 36 projects that were in this, in the budget, both in the
- generation area and in the transmission area.
- 38 MS. HENLEY ANDREWS, Q.C.: Okay.
- 39 MR. BUDGELL: TRO.
- 40 MS. HENLEY ANDREWS, Q.C.: When the process started
- in system planning, in your department, how many projects
- were originally put forward for 2002 as potential projects
- that you were looking at?
- 44 MR. BUDGELL: I don't recall.
- 45 MS. HENLEY ANDREWS, Q.C.: Do you have a rough

- 46 number?
- 47 MR. BUDGELL: I actually don't recall. I know that it
- wasn't, there wasn't a lot of projects for 2002. If you, and
- 49 the reason I'm saying that is that normally we do, we put
- forth a five year capital program, and I don't remember the
- split between 2002, 3, 4, and 5.
- 52 MS. HENLEY ANDREWS, Q.C.: When was your last five
- year capital program completed?
- 54 MR. BUDGELL: In advance of this application.
- 55 MS. HENLEY ANDREWS, Q.C.: And when was the last
- one done before that?
- 57 MR. BUDGELL: It would have been in, it would have
- ended approximately just before that.
- 59 MS. HENLEY ANDREWS, Q.C.: So when you say that
- 60 there was one done in advance of this application, that's a
- 61 five year capital planning?
- MR. BUDGELL: We would have reviewed, our normal
- process, and let me go back, maybe I'm confusing you.
- 64 MS. HENLEY ANDREWS, Q.C.: Yeah.
- MR. BUDGELL: Our normal process, which I indicated on
- 66 the capital, was we'd start in December of a year, and it
- ends in coming forward to the Board in November of the
- 68 next year.
- 69 MS. HENLEY ANDREWS, Q.C.: Uh hum.
- 70 MR. BUDGELL: So last year in 2000 we would have done
- our 2001 budget, completed it, and went to the Board for
- 72 submission. At the same time as this was going on, we
- 73 obviously had prepared the application for this particular
- 74 hearing, so both, we had, we actually had to have the
- 75 people within the organization move ahead with two years
- 76 at the same time.
- 77 MS. HENLEY ANDREWS, Q.C.: Okay, so they were doing
- 78 the planning for the 2001 capital budget, and the planning
- 79 for the 2002 capital budget at the same time?
- 80 MR. BUDGELL: Yes, in the fall.
- 81 MS. HENLEY ANDREWS, Q.C.: Yes, in the fall.
- MR. BUDGELL: There was a shorter period of time allotted
- for the 2002, that's the point I'm trying to make.
- 84 MS. HENLEY ANDREWS, Q.C.: Yes, and that was in the
- 85 fall of 2000.
- 86 MR. BUDGELL: That was in the fall of 2000.
- 87 MS. HENLEY ANDREWS, Q.C.: Okay, the ... am I correct
- 88 that as part of ... but you say you have a five year plan?
- MR. BUDGELL: There is a five year budget, yes, a five

- 1 year capital budget.
- 2 MS. HENLEY ANDREWS, Q.C.: Okay, and was that also
- prepared in the fall of 2000, or was that started ...
- 4 MR. BUDGELL: I think the 2002, the emphasis, obviously
- from the perspective of the rate hearing, the emphasis for
- 6 the 2002 year was on the 2000 budget, not on the
- 7 subsequent years, so I don't think there was materially too
- 8 much examination given to future years above what was
- given back in the year, the 2000 to 2001 exercise for the 2001
- 10 budget.
- 11 MS. HENLEY ANDREWS, Q.C.: Okay.
- MR. BUDGELL: Okay, the time didn't permit for people to
- recast and look totally at the five year plan again. We
- would be essentially just completing that process now if we
- were in a normal year.
- 16 MS. HENLEY ANDREWS, Q.C.: So right at the moment
- there is no five year capital plan for system planning?
- 18 MR. BUDGELL: For system planning, no, system
- 19 planning's proposals, or any proposals would be in the
- 200 2001 that were prepared back in 2001, and we haven't
- 21 changed anything.
- 22 MS. HENLEY ANDREWS, Q.C.: Okay, I'm still confused.
- 23 MR. BUDGELL: System planning did a five year, or had a
- 24 five year budget done in 2000 ...
- MS. HENLEY ANDREWS, Q.C.: For it's 2001 capital
- budget application.
- 27 MR. BUDGELL: Yes, but the application is only for one
- 28 year.
- 29 MS. HENLEY ANDREWS, Q.C.: Yes.
- 30 MR. BUDGELL: But in the process of doing that we did
- 31 five years.
- 32 MS. HENLEY ANDREWS, Q.C.: Okay.
- 33 MR. BUDGELL: And everybody in the organization who
- 34 would have budgeting responsibilities or submit projects
- 35 to budgets would have done that.
- 36 MS. HENLEY ANDREWS, Q.C.: Uh hum.
- 37 MR. BUDGELL: But that's static. That's where things sit
- today. The only things that changed for the hearing is that
- individuals that had items in the 2002 budget year, had to
- 40 look very closely at those items because those were being
- brought forward into the rate referral, and there wasn't time
- permitted to initiate a full review of the five year plan, and
- in the short window before the hearing started.
- 44 MS. HENLEY ANDREWS, Q.C.: Alright, now I understand
- now, so let's go back to the fall of 2000 for a moment. In

- coming up with your budget for 2001 and 2002, but also in
- coming up with your five year plan, somebody or some
- people must have developed information on what capital
- 49 projects they would like to see carried out in that period, is
- 50 that right?
- 51 MR. BUDGELL: Oh yes, yes, people in the organization, in
- 52 the organization that do prepare budgets within their area,
- 53 do prepare budgets, and I think Mr. Reeves went through
- 54 some description of that process when he was on the
- 55 stand.
- 56 MS. HENLEY ANDREWS, Q.C.: Okay, and for the portion
- of the budget, the roughly \$13 million that you're
- responsible for, that would also be true?
- 59 MR. BUDGELL: Yes. I have to characterize ... I am
- 60 reporting, I am ... for the purposes of this hearing, I am
- appearing on behalf of the budget for the generation area.
- This generation area, the responsibility of the budget items
- 63 go outside of my responsibility.
- 64 MS. HENLEY ANDREWS, Q.C.: Okay.
- 65 MR. BUDGELL: But ... okay?
- 66 MS. HENLEY ANDREWS, Q.C.: Yeah.
- MR. BUDGELL: As long as you understand that.
- 68 MS. HENLEY ANDREWS, Q.C.: I do now, and I thought
- 69 that that was the case. Now with respect to the, so with
- 70 respect to the generation budget, the portion of the budget
- 71 that relates to generation, were you involved at all in
- 72 developing that?
- 73 MR. BUDGELL: I was involved in the discussions
- associated with this year's budget, yes, as part of the rates
- 75 team that reviewed the budgets going forward, and
- 76 reviewed the justifications, and assisted with the
- 77 preparation of RFI's associated with the hearing on these
- 78 items.
- 79 MS. HENLEY ANDREWS, O.C.: So do you have any
- 80 knowledge of exactly where the process started? I mean do
- 81 you have any knowledge of how many projects for
- 82 generation were originally proposed?
- 83 MR. BUDGELL: No, I wouldn't have that knowledge.
- 84 MS. HENLEY ANDREWS, Q.C.: Now with respect to the,
- 85 what I'll ... with respect to the technology part of the
- 86 budget, who would have been responsible for that?
- 87 MR. BUDGELL: That would have started within the
- 88 information systems and technology group.
- 89 MS. HENLEY ANDREWS, Q.C.: And are they under your
- 90 direction?
- 91 MR. BUDGELL: No.

- 1 MS. HENLEY ANDREWS, Q.C.: Okay, so you don't have
- any knowledge either as to how that budgeting process
- 3 would have started?
- 4 MR. BUDGELL: Well, I know generally how the budgeting
- 5 process ... within the individual departments, whether it's in
- 6 TRO or IS & T, budget proposals are brought forward to
- 7 supervisory ... like normally prepared by supervisors, asset
- 8 managers.
- 9 MS. HENLEY ANDREWS, Q.C.: Uh hum.
- MR. BUDGELL: I guess that's the term we use within the
- 11 corporation, and these asset managers bring budgets
- forward to their respective superiors, their supervisors, and
- it eventually ends up to the director level, which I am at,
- but in my section ... there's 12 of us so I can just look
- outside the door and I see everybody. Mr. Reeves has to
- deal with several hundred people, so his process is a lot
- more complicated than mine. He has budget proposals
- coming from Bishop Falls, coming from Goose Bay, and
- Port Saunders and St. Anthony, and all of these things are
- coming in. They are reviewed at the divisional level down
- in the areas, and then the areas sort through these projects
- 22 and decide what their priorities are to bring forward to the
- 23 appropriate director of that particular portion of the
- appropriate director of that particular portion of the
- company, the department, and then once the directors have gone through it, and they have combed out projects that
- gone through it, and they have combed out projects that they think don't meet their asset test, then these projects go
- they think don't meet their asset test, then these projects go to the vice-president level, and then there's another review
- at that level, and then only after that level do projects then
- at that level, and then only after that level do projects then
- come forward and go to management committee for a final
- look, and then from the management committee, sometimes projects are sent back, they're changed, they're modified,
- moved to different years because of discussions, and then
- they go to Hydro's board of directors, and then they go to
- this Board for approval. That's the process, but I'm ...
- MS. HENLEY ANDREWS, Q.C.: Okay, let me try and ...
- MR. BUDGELL: So it's kind of difficult to go right down to
- 37 the level in the bowels of the company where budgets
- 38 originate.
- 39 MS. HENLEY ANDREWS, Q.C.: Okay.
- 40 MR. BUDGELL: It could be far removed from me in some of
- 41 the divisions.
- 42 (2:30 p.m.)
- 43 MS. HENLEY ANDREWS, Q.C.: In terms of the capital
- budget, when you were doing, when Hydro was in the
- 45 process of preparing its capital budget in the fall of 2000 for
- 46 2001 and 2002 as you've just discussed, did any proposals
- 47 come forward to you in your position as director from your
- group of 12 for capital projects?
- 49 MR. BUDGELL: Yes.

- 50 MS. HENLEY ANDREWS, Q.C.: Okay, are any of those in
- the capital budget for 2002?
- 52 MR. BUDGELL: Yes, we participated, we did the ... I'm
- saying as far as proposals now ... in some extent, assisted
- with proposals. The Ebbe (phonetic) line.
- 55 MS. HENLEY ANDREWS, Q.C.: Yes.
- MR. BUDGELL: The justification for that would have been
- 57 done by system planning.
- 58 MS. HENLEY ANDREWS, Q.C.: Which one is that?
- 59 MR. BUDGELL: Ebbegumbaeg, the line.
- MS. HENLEY ANDREWS, Q.C.: Yes, that's what I thought
- on you were talking about.
- MR. BUDGELL: E-b-b-e-g-u-m-b-a-e-g, for the benefit of
- 63 those ...
- 64 MS. HENLEY ANDREWS, Q.C.: Believe it or not, I
- actually, having thought it was "gum bag" for a long time,
- 66 I now know how to spell it. Okay, so that came through
- your department?
- 68 MR. BUDGELL: Yes, the justification did. We were
- 69 requested to prepare the justification by the generation
- 70 section.
- 71 MS. HENLEY ANDREWS, Q.C.: Okay.
- 72 MR. BUDGELL: Or the systems operations generation
- 73 section.
- 74 MS. HENLEY ANDREWS, Q.C.: But that was, so that
- 75 wouldn't have been ...
- 76 MR. BUDGELL: It was their budget.
- 77 MS. HENLEY ANDREWS, Q.C.: It was their budget.
- 78 MR. BUDGELL: But we did the justification for it.
- 79 MS. HENLEY ANDREWS, Q.C.: Okay.
- 80 MR. BUDGELL: I indicated as well there is a couple of,
- 81 there is a transformer changeout in one location on the Baie
- 82 Verte Peninsula.
- 83 MS. HENLEY ANDREWS, Q.C.: Yeah.
- 84 MR. BUDGELL: And I believe there is one other in that
- 85 area.
- 86 MS. HENLEY ANDREWS, Q.C.: Now the transformer ...
- 87 MR. BUDGELL: Burlington substation, I believe one was.
- 88 MS. HENLEY ANDREWS, Q.C.: Uh hum.
- 89 MR. BUDGELL: And there was one other budget, and I
- 90 don't recall what was in the rural area, but it wouldn't have
- 91 been in the generation area.

- 1 MS. HENLEY ANDREWS, Q.C.: Okay, now ...
- 2 MR. BUDGELL: Which I'm reporting on today.
- 3 MS. HENLEY ANDREWS, Q.C.: Now the generation, the
- 4 Ebbegumbaeg, I still want you to call it that ... line,
- although you prepared the justification, that is not part of
- 6 your system planning budget, correct?
- 7 MR. BUDGELL: No, you see what happens is that system
- 8 planning never has a budget at the end of the day. I'll try
- and explain it. We, we, the budget proposals coming to the
- division are normally poked into these particular categories,
- so there's no system planning section, so our budgets
- would be put under either, if our responsibilities are
- 13 generation planning, and of course our generation
- responsibilities would have been associated with Granite
- 15 Canal, and this one is not being reviewed by this Board,
- and the other projects would have been the transmission or
- distribution projects. Now we don't have any transmission
- projects in the 2001 or 2002 time period. The 2001 projects
- on the go right now are reliability improvements because of
- 20 the transmission, although there is an aspect of one of the
- 21 projects which we were involved in changing the ampacity
- at one of the lines, it's into that project, and the other
- projects are in the distribution area, but we have no
- 24 additional generation, which I have indicated in my
- evidence, in the rural areas for this budget.
- MS. HENLEY ANDREWS, Q.C.: Okay, so what you're, I
- think what you've told me is that system planning does not
- have a capital budget of its own.
- 29 MR. BUDGELL: We prepare budget proposals but they
- end up in the budget process in divisional budgets under
- 31 different headings.
- 32 MS. HENLEY ANDREWS, Q.C.: Now in terms of the
- 33 preparation of those budget proposals, do the proposal
- 34 ideas originate with system planning, or do you simply
- assist other departments with preparation of budget
- proposals for things that they have already identified?
- 37 MR. BUDGELL: Both.
- 38 MS. HENLEY ANDREWS, Q.C.: Okay, in terms of the
- capital budget for 2002 that we are now looking at, what
- budget items, in terms of the idea for the budget items,
- would have originated with system planning?
- 42 MR. BUDGELL: Only the ones that are in the TRO section,
- the two that I mentioned.
- 44 MS. HENLEY ANDREWS, Q.C.: Okay, which is the
- transformer changeouts.
- MR. BUDGELL: One is the transformer and I did mention
- 47 the other, but I'll have a look and get it for you. The
- transformers was the Burlington substation.

- 49 MS. HENLEY ANDREWS, Q.C.: Yeah.
- 50 MR. BUDGELL: The Ebbegumbaeg, I mentioned. I'm sorry,
- 51 there's three. Ebbegumbaeg, which we ... well it wasn't
- 52 always, but we did support for it, and the voltage
- regulators for Barachois.
- 54 MS. HENLEY ANDREWS, Q.C.: Okay.
- 55 MR. BUDGELL: So that's **B-41 and B-42**.
- 56 MS. HENLEY ANDREWS, Q.C.: B-41 and B-42?
- 57 MR. BUDGELL: Yes.
- 58 MS. HENLEY ANDREWS, Q.C.: Did system planning,
- 59 when the process started, want to have more than those
- particular capital projects in B-41 and B-42, done in 2002?
- 61 MR. BUDGELL: I don't, I won't go as far as to say we had
- 62 proposals prepared, but we were aware in the rural areas,
- 63 for instance, that there was potential for other projects that
- 64 could be done which we did not proceed with in preparing
 - the budget. We consciously discussed it and didn't.
- 66 MS. HENLEY ANDREWS, Q.C.: Okay, but in terms of
- 67 preparing a budget for submission for consideration, the
- two items that you submitted were just the B-41 and the B-
- 69 42, both ...
- 70 MR. BUDGELL: There might have been some others
- submitted and might have been moved off. I don't recall ...
- 72 again ...
- 73 MS. HENLEY ANDREWS, Q.C.: Because that's my
- 74 question, were there others that were submitted?
- 75 MR. BUDGELL: I don't remember whether it was in 2001 or
- 76 2002, I remember alternatives associated with the
- transformer in the Goose Bay area popping in and out of
- 78 the budget, depending on which forecast we were dealing
- 79 with ... there was an issue ... I remember there was
- 80 discussion and information coming forth from customer
- 81 services in regards to possible fish plant activity on the
- 82 Labrador coast which is an item which is always difficult for
- 83 us because we don't try to move with a budget until we
- really know definitely what is definitely going to occur, and
- 85 there was those type of things going on.
- 86 MS. HENLEY ANDREWS, Q.C.: Your budget proposals, I
- 87 presume, the ones that would go forward would be written
- 88 ones?
- 89 MR. BUDGELL: Yes.
- 90 MS. HENLEY ANDREWS, Q.C.: And if we take a look at **B-**
- 91 41 as an example, would that be the entire budget proposal
- 92 that would go forward from system planning?
- 93 MR. BUDGELL: No.
- 94 MS. HENLEY ANDREWS, Q.C.: And what else would

- 1 have gone forward with that?
- 2 MR. BUDGELL: There would have been a detailed estimate
- 3 and a justification.
- 4 MS. HENLEY ANDREWS, Q.C.: A detailed estimate?
- 5 MR. BUDGELL: Well there's ... budgets are normally
- 6 prepared with estimates of costs broken down into
- 7 construction materials, internal/external forces, labour,
- 8 contracts, IEC escalation, the estimates.
- 9 MS. HENLEY ANDREWS, Q.C.: And the justification?
- MR. BUDGELL: The justification would have been detailed
- in regards to any analysis in support of this budget. Like
- this one would have been a voltage regulator, so very likely
- there was a load and voltage study done in support of this.
- MS. HENLEY ANDREWS, Q.C.: Why would that have not
- been filed with the Board as part of the approval process?
- MR. BUDGELL: The Board set the process here and we're
- following the Board's direction in regards to what items and
- information level is supplied to the Board. If the Board or
- the intervening parties require additional information, it's
- only a matter to ask. This is the standard that we have
- followed and Newfoundland Power have followed.
- 22 MS. HENLEY ANDREWS, Q.C.: But you would agree,
- 23 apart from whether the standard that has been followed,
- which frankly what that is doesn't bother me one way or the
- other ..
- MR. BUDGELL: It is a big concern, you know, because like
- 27 if details on capital budgets, and Ms. Greene didn't refer to
- it today, but I will, maybe at her exception, but we provided estimates, detailed estimates to Newfoundland Power at
- 30 their request. We had some reservations in supplying that.
- When we give ... this is public documentation, and we just
- $\,$ give detailed estimates that if it's approved well then go out
- 33 to tender. If tenderers have that information in their hands,
- we're not going to get very good bids. I can tell you what
- 35 they're going to bid if I ... right, and if that detailed
- 36 information went to the Board, or was available, widely
- known to everybody in regards to estimates, or you needed that amount of detail on the estimates to make a
- decision on whether a project would go ahead, I mean it's
- decision on whether a project would go allead, I mean it
- 40 going to be a very difficult situation to manage a utility,
- and to go out and do tenders and build projects. That's only one issue. I'm just talking about costs, but as you're
- talking about justification, if there are justifications in the
- budgets where there are questions arising and we go to the
- Board each year, or we have since 1996, and the Board or
- the Board's consultants have questions and asked
- 47 questions, which they do of us, and they do of
- Newfoundland Power, then additional information will be
- 49 supplied.

- MS. HENLEY ANDREWS, Q.C.: Well, I guess where I'm
- coming from frankly is that if what is being submitted here
- reflects the process then from my perspective, I think it's
- totally inadequate. Now that's not your fault, or that's ... I'm
- not throwing that at your feet, but what I'm saying to you
- is that let's take a look at **B-41** as an example. This project
- 56 involves purchase and installation of voltage regulators on
- 57 the Barachois system. All it tells me is the nature of the
- 58 project, correct?
- 59 MR. BUDGELL: That's right.
- 60 MS. HENLEY ANDREWS, Q.C.: Now you've got ... and it's
- \$112,000, so it's above the \$50,000 small project amount,
- 62 correct?
- 63 MR. BUDGELL: Yes.
- 64 (2:45 p.m.)
- 65 MS. HENLEY ANDREWS, Q.C.: Now if I go to **B-6**, page
- 66 B-6 of the capital budget, B-6 tells me in theory when cost
- benefit studies need to be done, isn't that right?
- 68 MR. BUDGELL: That's correct.
- 69 MS. HENLEY ANDREWS, Q.C.: And it says if the project
- 70 is required to protect human life, to meet projected
- customer load demand, etcetera, etcetera ...
- 72 MR. BUDGELL: Which this one does.
- 73 MS. HENLEY ANDREWS, Q.C.: Okay, but let's go back to
- 74 **B-41**.
- 75 MR. BUDGELL: Which the second sentence refers to, the
- one you didn't read.
- 77 MS. HENLEY ANDREWS, Q.C.: Peak load level on the
- 78 feeder has resulted in low voltage levels, right?
- 79 MR. BUDGELL: Yes.
- 80 MS. HENLEY ANDREWS, Q.C.: But that doesn't tell me,
- 81 you're right, it tells me that the peak load has resulted in
- 82 low voltage levels, but it doesn't tell me that it's urgent,
- 83 does it?
- 84 MR. BUDGELL: No.
- 85 MS. HENLEY ANDREWS, Q.C.: And it doesn't tell me that
- 86 there's going to be a problem meeting customer load
- 87 demand?
- 88 MR. BUDGELL: But if I told you it was urgent, and it was
- 89 part of the process, and we don't get approval until ...
- 90 what's the point? If it was urgent we would have come to
- 91 the Board as a non-budgeted proposal, so it's not urgent.
- 92 It's required in the year 2002, because that's when we put it
- 93 in the budget.
- 94 MS. HENLEY ANDREWS, Q.C.: Okay, well let's ...

- MR. BUDGELL: So it's obviously not urgent. 1
- MS. HENLEY ANDREWS, Q.C.: Now when you look at 2
- that, when you look at that simple sentence that says peak 3
- load level on the feeder has resulted in low voltage levels, 4
- and you look at the criteria that are on page 6 of your 5
- capital budget, which of those do you consider that it 6
- comes within? 7
- MR. BUDGELL: To meet projected load demand. 8
- MS. HENLEY ANDREWS, Q.C.: Okay, now when ... 9
- MR. BUDGELL: And it could be three, the imminent
- interruption of customer services because if the voltage 11
- erodes to an extent in this particular case, we had low 12
- voltage at the end of the feeder, that this particular 13
- customer is subjecting his household equipment, or his 14
- household equipment can be subjected to low voltages, he 15
- can lose appliances and those type of things. 16
- MS. HENLEY ANDREWS, Q.C.: Let's go back to B-41 17
- again. 18

10

- MR. BUDGELL: That's where I'm at. 19
- MS. HENLEY ANDREWS, Q.C.: Yeah, well you said it 20
- would be number two, which is to meet projected customer 21
- load demand. 22
- 23 MR. BUDGELL: Load demand has grown on the feeder to
- the extent where voltages at the end of the feeder have 24
- decreased below accepted standards. 25
- MS. HENLEY ANDREWS, Q.C.: But your proposal doesn't 26
- say that, does it? 27
- MR. BUDGELL: It's low voltage level, we refer to low 28
- voltage levels, in the context that we refer to it, it's 29
- obviously below our criteria. 30
- MS. HENLEY ANDREWS, Q.C.: But ... 31
- MR. BUDGELL: I agree, you may not understand that from 32
- the ... 33
- MS. HENLEY ANDREWS, Q.C.: And the Board may not, 34
- members of the Board may not. 35
- MR. BUDGELL: And the Board may not, I agree. 36
- MS. HENLEY ANDREWS, Q.C.: And they're the ones who 37
- are reviewing the budget. 38
- MR. BUDGELL: That's right, and could ask the question 39
- about which standard that would be. 40
- MS. HENLEY ANDREWS, Q.C.: Okay, and there's certainly 41
- nothing in that that indicates that there is an imminent 42
- interruption of customer service, isn't that right? 43
- MR. BUDGELL: No, except that it could damage equipment 44
- if it is low voltage. 45

- MS. HENLEY ANDREWS, Q.C.: But again, there's nothing
- in the proposal as presented or submitted that says that.
- MR. BUDGELL: No.
- MS. HENLEY ANDREWS, Q.C.: So if I'm looking at this, if
- I'm looking at your criteria for doing a cost benefit study,
- and I'm looking at your capital project proposal, I have no
- information from that single page that indicates to me
- whether a cost benefit analysis is or is not required, isn't 53
- that right?
- MR. BUDGELL: I don't agree. The project will provide a
- more stable and regulated source of power to Hydro's
- customers, it's got low voltage level, there must be some
- indication that there's a problem.
- MS. HENLEY ANDREWS, Q.C.: But you can have ...
- MR. BUDGELL: And if you look at PUB-30 where the
- Board is asking for details on the budget, we provided the 61
- details. I accept your point. I mean it's just that somebody
- has to set down the level of information that's required to
- satisfy the budget. If we're supplying minimal information 64
- and if there's a requirement through due process that more 65
- information has to be provided, we have to be given 66
- direction on to what level that is.
- MS. HENLEY ANDREWS, Q.C.: Okay, let me, let me just
- ask you a different question, because I understand where
- you're coming from on that answer as well. Within Hydro,
- if you submitted to the Vice-President to whom you report,
- just this page without the detailed estimate and without the
- detailed justification, would it be approved?
- MR. BUDGELL: My Vice-President would ask for
- additional information, as the Board has.
- MS. HENLEY ANDREWS, Q.C.: Would you ever send to 76
- your Vice-President a capital project proposal that was the
- equivalent of just that one page?
- MR. BUDGELL: Our process does not submit this page to
- our Vice-President.
- MS. HENLEY ANDREWS, Q.C.: Okay, your process
- submits ...
- MR. BUDGELL: The cost estimate and the justification
- sheets.
- MS. HENLEY ANDREWS, Q.C.: Okay, so your Vice-
- President doesn't have to come back to you to look for the 86
- cost estimate and the detailed justification. Your Vice-
- President may very well have to come back to you with
- questions. 89
- MR. BUDGELL: He'll come back with questions, yes.
- MS. HENLEY ANDREWS, Q.C.: Okay, one of the
- questions that was deferred to you, I believe, by Mr.

- Reeves was with respect to diesel generating units and 1
- upgrades, or what are called overhauls? 2
- MR. BUDGELL: No, Mr. Reeves, I'm sure if you were 3
- talking of overhauls, he would deal with that. I don't have 4
- any involvement with diesel overhauls. 5
- MS. HENLEY ANDREWS, O.C.: Well ... 6
- 7 MR. BUDGELL: If he was talking about diesel generation
- additions associated with new load requirements he would 8
- defer to me. 9
- MS. HENLEY ANDREWS, Q.C.: 10 Well, it's my
- understanding from Mr. Reeves' testimony that Hydro has 11
- now adopted a policy for replacing diesel generating units 12
- in isolated communities after five overhauls? 13
- MR. BUDGELL: Yes, I have heard that testimony and I 14
- understand that that's the case, but that's a TRO initiative, 15
- it's within their division. They generate and they follow 16
- through on that. That's their standard. 17
- MS. HENLEY ANDREWS, Q.C.: So you had, but 18
- previously they did as many as six or seven overhauls, 19
- correct? 20
- MR. BUDGELL: Yes, yeah, in some cases, or maybe they 21
- overhauled until it fell to pieces, or a problem happened on 22
- 23
- MS. HENLEY ANDREWS, Q.C.: So you don't know where 24
- that change in policy originated, like from whom it 25
- originated? 26
- MR. BUDGELL: It was in their ... they researched and 27
- checked with other utilities in regards to that matter and 28
- devised their own policies. 29
- MS. HENLEY ANDREWS, Q.C.: Do you know, personally 30
- know? 31
- MR. BUDGELL: I didn't ... 32
- MS. HENLEY ANDREWS, Q.C.: You're assuming that they 33
- 34 researched, is that ...
- MR. BUDGELL: Well, I didn't ... let me say it another way. 35
- I sat in the back while Mr. Reeves was talking, but he was 36
- referring to what other utility practices were, so I only am 37
- assuming from that comment that he had been in, or his 38
- people were in contact with the practices of other utilities. 39
- Now our people in that area meet regularly, or at least every 40
- year, with most of the large isolated diesel system 41
- operators across Canada. I believe this year actually the 42
- meeting was here in St. John's, and we sponsored it, and 43
- they are aware of what these other companies do, and what 44
- their practices are from an operating perspective, but the 45
- replacement and the overhaul of diesels is a decision which 46
- the operations division make. System planning doesn't, I 47

- don't get involved unless requested into the day-to-day
- activities.
- MS. HENLEY ANDREWS, Q.C.: So you don't have any
- involvement in planning studies, for example, that would
- deal with the cost benefits of extra overhauls versus new
- generation and that type of thing.
- MR. BUDGELL: If I'm looking at new generation, and if
- there is an overhaul in the forecast, i.e., the budget, then I would take into effect that that cost is there in the budget,
- in the decision. What I'm saying is that if you have a 57
- situation where a large diesel unit is about to get its fifth or 58
- 59 sixth overhaul and it's the year before we're going to
 - replace a unit in a particular station, then I might make the
- suggestion that let's put the (inaudible) together and not 61 spend the money on the overhaul, which are major
- expenditures, and the next year replace a unit ... why not
- put the new unit in and replace that unit and then we'd save
- at least one of the capital expenditures. That would be my
- 66 involvement, and that would be through discussion when
- the budgets are compared. We ... when my group prepares
- our budgets, I sit with the other directors and let them
- 68 know what I'm doing or planning and conversely we sit and 69
 - get a view of what they're doing, so that the two dovetail
- together, so we're not going to management, let's say, with 71
- redundant budgets. If I'm doing something that will affect 72
- 73 somebody else, they'll pull theirs and we'll decide which one is the more appropriate to go forward with.
- MS. HENLEY ANDREWS, Q.C.: Okay, so let's, just before 75
- we break, can you give me an example of a situation on the 76
- isolated system where that's happened, where there's been 77
- a plan for an overhaul and you've been talking about new 78
- generation?
- MR. BUDGELL: Yeah, I think the Ramea system, we were
- looking at quite a high cost in overhaul of units, of existing
- units in the capital program, and there was an analysis and
- a study done in relation to that. There are other instances.
- MS. HENLEY ANDREWS, Q.C.: Well just, okay, well
- perhaps we should ...
- MR. BUDGELL: Ramea is one.
- MS. HENLEY ANDREWS, Q.C.: Perhaps we should break,
- Mr. Chairman. 88
- MR. NOSEWORTHY, CHAIRMAN: That's fine. I would
- ask for everybody's cooperation at keeping the breaks 90
- about 15 minutes. I notice that on occasion we've strayed, 91
- I think, well beyond that, and I try and like to maintain the
- 15 minutes or so for the break period. Thank you.
- (break) 94
- (3:15 p.m.)

- 1 MR. NOSEWORTHY, CHAIRMAN: Thank you. Counsel,
- 2 do you have a preliminary matter?
- 3 MR. KENNEDY: Chair, just one comment that counsel
- 4 needs to finish early today so with the panel's permission,
- 5 the intention is to break at quarter to four this afternoon.
- 6 MR. NOSEWORTHY, CHAIRMAN: Absolutely, that's
- 7 fine.
- 8 MR. KENNEDY: Seeing how we we're all back very early
- 9 from our break. (laughter)
- 10 MR. NOSEWORTHY, CHAIRMAN: I won't respond.
- 11 Could I ask you to continue, Ms. Henley Andrews, please.
- MS. HENLEY ANDREWS: Yes, so Mr. Budgell when we
- look at the role of system planning, I take it then that
- 14 system planning really deals with expansions to the
- existing generation, transmission and distribution, is that
- 16 correct?
- 17 MR. BUDGELL: That's the primary role, expansions or
- upgrades to the equipment, I'm not just talking like the
- replacement, it's because of load growth.
- 20 MS. HENLEY ANDREWS: Okay, so you don't, a system
- 21 planning, does system planning have any role at all in
- 22 establishing criteria for replacements or those types of
- 23 things?
- MR. BUDGELL: I did confer with Mr. Reeves during the
- 25 break in regards to what you may be misunderstanding
- 26 from the comments that might have been made, because I
- was trying, we were trying to find that reference that you
- 28 referred to and in regard to the upgrades, the one
- involvement that we did, we do do associated with that ... if they're going to change out a machine in one of the diesel
- systems, they'll come to us and confirm the proper size for
- the new machine that goes into the system, because it
- might be smaller, or it could be a little larger, if there's a load
- 34 requirement.
- 35 MS. HENLEY ANDREWS: Okay.
- MR. BUDGELL: Okay. I think that's the reference, as far as
- 37 I can ...
- 38 MS. HENLEY ANDREWS: So from a system planning
- 39 point of view, you're looking at upgrades and expansions
- 40 primarily, but if you take TRO as example, replacements to
- 41 existing facilities, like direct replacements, those types of
- 42 things, the criteria for that would be determined in their
- 43 department.
- 44 MR. BUDGELL: Yes.
- 45 MS. HENLEY ANDREWS: And those, if you take a criteria
- such as LOLH which we talked about this morning, which
- is ... system planning has in place for its reserve ...

- 48 MR. BUDGELL: Yes.
- 49 MS. HENLEY ANDREWS: ... capacity. Would that be, that
- 50 criteria be something that is adopted by system planning
- on its own or would that be a criteria or a policy that would,
- 52 as to what the amount ought to be, be something that
- would be approved higher up.
- MR. BUDGELL: Obviously it would have to be approved
- by management.
- 56 MS. HENLEY ANDREWS: And management being the
- 57 management committee?
- 58 MR. BUDGELL: Yes.
- 59 MS. HENLEY ANDREWS: Now the last question that I
- 60 have on page **B-6**, at least I hope it's the last question on
- page B-6, is can you think of any capital project that could
- 62 not be interpreted as falling within one or more of these
- з criteria?
- 64 MR. BUDGELL: I don't have one that comes to mind right
- ss now.
- 66 MS. HENLEY ANDREWS: Isn't it true that these criteria are
- sufficiently broad that ...
- 68 MR. BUDGELL: No, no, I'm sorry. If, I should say, we
- 69 would be doing cost, I'd indicated even though it indicates
- 70 to meet projected customer load demands and it says you
- 71 don't do cost effectiveness analysis, we would be doing it
- 72 anyway. From a system planning ... this is from a different
- 73 perspective is that if you lost a piece of equipment or it is
- imminent to meet customer load demand, if we were adding
- 75 generation we would be doing it. If we were adding new
- 76 transmission, we would be doing a cost effectiveness
- 77 analysis. If we were adding a new diesel unit to the diesel
- 78 system, we would be doing a cost effectiveness analysis,
- 79 or sorry ...
- 80 MS. HENLEY ANDREWS: Yeah, but now you're, okay
- you're, I understand what you're saying but first of all ...
- 82 MR. BUDGELL: This is just speaking from a generic sense,
- 83 it's not talking to system planning itself, from the
- 84 perspective of the budget and the budgets coming forth
- 85 from the others areas of the divisions.
- 86 MS. HENLEY ANDREWS: But we've already had evidence
- before the Board, and I think it you've been here for pretty
- well all of it, that only two of the capital projects that are
- 89 proposed for 2002 required cost benefit analysis, cost
- benefit studies. Do you remember that?
- 91 MR. BUDGELL: I remember the discussion to that extent
- 92 with Mr. Reeves, I believe.
- 93 MS. HENLEY ANDREWS: Okay, and I think what I'm
- 94 trying to get at is that when we look this policy on page **B**-

- 6, we have two problems, you and I, when we talk about it
- and probably others as well, and one is that there are
- different interpretations of what's meant by a cost benefit
- 4 study, wouldn't you agree?
- 5 MR. BUDGELL: There certainly is.
- 6 MS. HENLEY ANDREWS: And it is very difficult to
- 7 conceive of a capital project which would not fit one of the
- 8 criteria down below, if you gave them the broadest possible
- 9 interpretation, correct?
- MR. BUDGELL: I couldn't come up with one in that
- moment, but by the same token it would be difficult to do
- a cost benefit analysis on an item that protects human life.
- 13 It'd be difficult to do a cost benefit analysis on a project
- that presents (sic) or prevents imminent interruption to
- customer services. It would be difficult to do one that
- protects Hydro's assets against loss and damage, because
- all of that would cost, would mean you're bearing a risk.
- MS. HENLEY ANDREWS: Yeah, well let's take the human
- 19 life one now as an example, because that's a really good
- example. Wouldn't you agree that the issue of protection
- of, first of all, you can never protect human life completely
- in any work situation, wouldn't you agree?
- MR. BUDGELL: I would agree, you would never be able to,
- but you have to move on items that you recognize is, is a
- 25 risk to people.
- MS. HENLEY ANDREWS: And the question is not only
- whether it's a risk but to what extent it's a risk?
- MR. BUDGELL: Yes, of course.
- 29 MS. HENLEY ANDREWS: So you, you may very well be
- 30 able to design a workplace that absolutely minimizes the
- risk to human life but the cost of doing that may be out of
- proportion to the risk, wouldn't you agree?
- 33 MR. BUDGELL: That's a possibility, but most of the
- examples that I come across are not to that extent.
- 35 MS. HENLEY ANDREWS: Okay, but ...
- 36 MR. BUDGELL: It, it's possible.
- 37 MS. HENLEY ANDREWS: Now I want to take a look at the
- **B-19**, which is the continuous emission monitoring.
- 39 MR. BUDGELL: Yes.
- 40 MS. HENLEY ANDREWS: Now we had some discussion
- on that yesterday, isn't that right?
- 42 MR. BUDGELL: That's correct.
- 43 MS. HENLEY ANDREWS: Or you did with Ms. Butler?
- 44 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS: I take it that when you look at

- 46 this one which is \$801,000, again there's an indication that
- a formal cost benefit study was not required. Correct?
- 48 MR. BUDGELL: That's correct.
- 49 MS. HENLEY ANDREWS: And when you look at the
- 50 proposal, all it says is a recent health risk assessment
- 51 concluded that quantification of the emissions should be
- 52 undertaken, correct?
- 53 MR. BUDGELL: That's correct.
- 54 MS. HENLEY ANDREWS: However, as I understand it
- 55 from you, the emissions at the present time are within the
- 56 regulatory guidelines, correct?
- 57 MR. BUDGELL: That's correct.
- MS. HENLEY ANDREWS: And the purpose of this study
- is to identify whether there is a health risk, correct?
- 60 MR. BUDGELL: In a sense, yes.
- 61 MS. HENLEY ANDREWS: Because the section of the, on
- 62 the page that Ms. Butler referred you to yesterday from the
- report, my understanding was that they wanted to look at
- 64 the particulate (phonetic), the ambient air quality to
- 65 determine whether, for example, I think one example was the
- 66 degree of problem that could be encountered by children
- eating snow and animals and that type of thing.
- MR. BUDGELL: Yes.
- 69 MS. HENLEY ANDREWS, Q.C.: So there's, if you look at
- your **B-6**, it's not to protect human life, is it?
- MR. BUDGELL: It could be. It could be, if emissions, if it
- vas determined that the level of emissions emitted were
- 73 above the standards because right now we're assuming the,
- 74 the company doing this analysis was assuming a ratio, they
- don't know whether the ratio is correct or not.
- 76 MS. HENLEY ANDREWS: But based upon the study that
- 77 they've done they believe you're within the regulatory
- 78 requirements.
- 79 MR. BUDGELL: I agree. They do.
- 80 MS. HENLEY ANDREWS: And, in fact, there are no nox or
- 81 sox requirements.
- 82 MR. BUDGELL: That is currently, currently at this time, I
- 83 agree.
- 84 MS. HENLEY ANDREWS: And there is, in fact, no
- 85 evidence of a risk to human life.
- 86 MR. BUDGELL: Well, I don't know. I'm not an expert in
- 87 emissions and effect on human life.
- 88 MS. HENLEY ANDREWS: And it's not to meet projected
- customer load demand or to prevent imminent interruption
- of customer service, or to comply with the regulations and

- standards, because we've just dealt with that, or ...
- 2 MR. BUDGELL: Well not yet, but there are, there are
- 3 indications that standards may be applied.
- 4 MS. HENLEY ANDREWS: Okay, and that really
- 5 underscores my point a few moments ago, doesn't it, which
- 6 is that just about any capital project can be brought within
- 7 the criteria on page **B-6** in order to exempt it from a formal
- 8 cost benefit study. Would you agree?
- 9 MR. BUDGELL: Yes. Not, no, not any project, but I would
- agree that this particular project would. I'd have the same
- difficulty of coming up with a cost benefit study for this
- particular analysis, or this particular project. The cost, I
- know, but the benefits are pretty hard to quantify because
- they're based on the risk, an unquantified risk.
- MS. HENLEY ANDREWS: What ... changing the subject,
- what is the intent of a technology plan?
- 17 MR. BUDGELL: In which context?
- MS. HENLEY ANDREWS: In Hydro's context. What's the
- purpose of having, developing a technology plan?
- MR. BUDGELL: Are you talking from the IS, information
- 21 services perspective?
- MS. HENLEY ANDREWS: Yes.
- MR. BUDGELL: My interpretation of a technology plan is
- 24 to develop a plan of what software and hardware
- technology we're going to support within the organization,
- to do, to carry on our business.
- MS. HENLEY ANDREWS: And that's not complete yet,
- 28 correct?
- 29 MR. BUDGELL: That's my understanding.
- 30 MS. HENLEY ANDREWS: Now the part of, the part of the
- 31 budget which you're answering for, as I understand it, is
- the information systems.
- 33 MR. BUDGELL: Yes.
- MS. HENLEY ANDREWS: And there's a number of
- 35 components of that that are proposed in this budget,
- 36 agreed?
- 37 MR. BUDGELL: Yes.
- 38 MS. HENLEY ANDREWS: And one of those is the
- document management system.
- 40 MR. BUDGELL: That's correct.
- 41 MS. HENLEY ANDREWS: Which I had a second ago.
- 42 MR. BUDGELL: It's **B-60**.
- 43 MS. HENLEY ANDREWS: B-60, and that's a \$140,000?

- 44 MR. BUDGELL: \$104,000.
- 45 MS. HENLEY ANDREWS: \$104, I'm sorry, \$104,000?
- 46 MR. BUDGELL: That's correct.
- 47 MS. HENLEY ANDREWS: Which of the criteria on page
- **B-6** would this come within to exempt it from the need for
- a cost benefit study?
- 50 MR. BUDGELL: It doesn't, it doesn't meet any of the
- 51 criteria that is on that page.
- 52 MS. HENLEY ANDREWS: And yet, under cost benefit
- 53 study it says a formal cost benefit study was not required.
- 54 MR. BUDGELL: It says that, yes.
- 55 MS. HENLEY ANDREWS: Hydro manages its documents
- now, wouldn't you agree?
- MR. BUDGELL: As best it can in different ways within
- 58 different parts of the Company, yes.
- MS. HENLEY ANDREWS: And would you agree that a
- 60 document management and imaging system is simply a
- 61 different way of managing documents?
- 62 MR. BUDGELL: Yes. Hopefully, a more efficient way.
- 63 MS. HENLEY ANDREWS: And that in order to, would you
- 64 agree with me that in order to justify the cost of the
- 65 document management and imaging system, you would
- 66 want to be satisfied that you were actually going to get
- 67 efficiencies?
- 68 MR. BUDGELL: That's right and that's part of the \$104,000
- was to hire a consultant to give us a report. This is like a
- 70 feasibility study being done by a consultant, with a pilot,
- 71 to give us information that we can look at the benefits to
- 72 the organization of going this way.
- 73 MS. HENLEY ANDREWS: Why would a feasibility study,
- 74 now I understand from an accounting perspective why a
- 75 feasibility study would become part of your capital costs
- 76 after you decided to go ahead with something, but why
- 77 would a feasibility study ...
- 78 MR. BUDGELL: It costs over \$50,000 so it has got to go
- 79 into the budget as an item, that's again one of the...
- 80 MS. HENLEY ANDREWS: Is it a capital cost?
- 81 MR. BUDGELL: Yes, we capitalize these, these
- 82 expenditures.
- 83 MS. HENLEY ANDREWS: Now you, there was some
- 84 discussion yesterday with respect to **B-61**, which is the
- 85 additional corporate applications.
- 86 MR. BUDGELL: Yes.
- 87 MS. HENLEY ANDREWS: And I think I understood from

- you that part of the \$517,000 was intended to purchase 1
- some type of load forecasting, or some type of load 2
- software. 3
- MR. BUDGELL: Yes, it's, it's a short term load forecast for 4
- several days ahead, a system for Mr. Henderson's group 5
- actually, for doing their dispatch and their generation 6
- 7 plans.
- MS. HENLEY ANDREWS: And as I understand it, the 8
- remainder of the money is not yet allocated to any 9
- particular project? 10
- MR. BUDGELL: That's exactly right. It's general provision 11
- of monies for projects do arise from time to time during the 12
- 13 run of the year for support software.
- MS. HENLEY ANDREWS: The Board, under the 14
- legislation, has an obligation to approve each of Hydro's 15
- capital projects, would you agree? 16
- 17 MR. BUDGELL: Yes.es.
- MS. HENLEY ANDREWS: How can the Board approve an 18
- amount of money for unknown and unidentified software? 19
- MR. BUDGELL: It's, it's very, it's part of the business. It's 20
- 21 very similar to, in the distribution area there's allotment of
- funds for connection of customers, but we don't know, 22
- maybe, both us and Newfoundland Power put forth 23
- provisions in our budget for monies to connect customers 24
- up. We don't identify that there's definitely going to be 25
- customers there. 26
- MS. HENLEY ANDREWS: But you know, based upon 27
- previous years' experiences with expenses and hookups 28
- and you know ... 29
- MR. BUDGELL: Yeah, we, these, these type of monies get 30
- spent from each year to year. 31
- MS. HENLEY ANDREWS: But you're not, it's not being, 32
- this part isn't proposed as being part of your operating 33
- budget, this is proposed as being part of your capital 34
- budget, correct? 35
- MR. BUDGELL: Yes, I agree, because this part of our 36
- process, this part of our system is that these items have to 37
- be capitalized. We could put it in our operating budget, I'm 38
- assuming if a decision had been made that way, but I'm 39
- assuming it's coming forth as capital because that is 40
- deemed to be the proper place where it belongs. 41
- MS. HENLEY ANDREWS: When there's, the technology 42
- plan is still a work in progress, right? 43
- MR. BUDGELL: Yes, there were supposed to be, we talked 44
- about a part that was supposed to be completed this fall 45
- and the application by the end of this year, and very likely 46
- through those, through that process there would be 47

- identified specific software that the Corporation may have
- to avail of to proceed along the lines of the strategic plan
- lays out. These items haven't, where the studies haven't
- been completed yet.
- MS. HENLEY ANDREWS: Why couldn't the purchase of
- that software be delayed for the 2003 capital budget until
- it's known exactly what the Company wants or needs?
- MR. BUDGELL: Well you'd have the interim period of a
- year of not having any money to act upon the decision
- that's coming forth in December of this year. You'd have a
- year's delay.
- MS. HENLEY ANDREWS: But don't...
- MR. BUDGELL: Isn't it more prudent to move ahead,
- recognizing that there are expenditures of this sort made
- from year to year.
- MS. HENLEY ANDREWS: But you, you would agree that
- certain costs can be deferred and certain costs can't?
- MR. BUDGELL: Oh, I agree, yes.
- MS. HENLEY ANDREWS: And the technology plan which
- is still not even submitted to Hydro, it's still not even 67
- finalized, once it has been finalized or once it's been
- submitted and reviewed by the Company, the fallout from 69
- that plan, on a go forward basis, could mean that software
- purchased in February of 2002 would not be suitable for the
- implementation of the plan.
- MR. BUDGELL: I'm assuming here that the purchases
- would be made consistent with the recommendations of the
- plan. Then there may be other software that had to be
- purchased within the Company separate, like there's 76
- requests come into Hydro or into the IS department, 77
- looking for specific software to do a particular work and
- within the IS department those requests would go to a 79
- group within the Corporation which would review that
- request and make a recommendation whether that software
- should be purchased for that purpose, and I used the
- example with Ms. Butler, it might be tool management or 83
- 84 tracking at Holyrood. Those are the type of non-business
- or major business like JDE type applications that the
- Corporation needs or there might be a requirement to 86
- update, let's say Lotus Notes, to be consistent or
- compatible with something else, if ... as we move ahead in
- the Corporation so there are purchases of this type of
- software that is necessary to be made, but again I can't 90
- quantify or identify what the particular items are, in the 91
- absence of this plan.
- MS. HENLEY ANDREWS: And you can't identify whether
- it's going to be necessary to make that decisions or
- whether it's simply going to be a desire on the part of
- Hydro to make that decision?

- 1 MR. BUDGELL: I know it's an ongoing requirement of the
- 2 Corporation to expend these monies each and every year.
- 3 MS. HENLEY ANDREWS: Yet, well, you know that monies
- are spent in each and every year, but whether particular
- 5 money needs to be spent in one year versus another year
- is a question of judgement in some cases?
- 7 MR. BUDGELL: Preparation of budgets is a, is an exercise
- 8 in judgement. Agree.
- 9 MS. HENLEY ANDREWS: Well, let me just give you an
- example, perhaps is the best way to go about it, and that's
- to say let's take Microsoft Word, standard everyday word
- processing package. Upgrades come out for that type of
- thing on a regular basis, wouldn't you agree?
- 14 MR. BUDGELL: Yes.
- 15 MS. HENLEY ANDREWS: And you don't have to
- 16 upgrade.
- 17 MR. BUDGELL: No.
- MS. HENLEY ANDREWS: Your product can work quite
- nicely without the upgrade in many circumstances.
- MR. BUDGELL: It may or it may develop a problem. I don't
- 21 know.
- 22 MS. HENLEY ANDREWS: And you might want to
- 23 upgrade.
- MR. BUDGELL: In the case of Hydro, that would be a very
- large decision given the number of users, and the, even
- your example it's not, it's like moving to Microsoft 1999 to
- 27 Microsoft 2000, just because it came out. I don't think that
- type of exercise goes on.
- MS. HENLEY ANDREWS: Okay, but what I'm saying to
- you, no, I'm not, I'm not trying to suggest that, but what I'm
- saying to you is that even if it were identified that there
- were some aspects of the upgrade that could be useful, on
- 33 the whole upgrading to the latest version of something
- 33 the whole upgrading to the fatest version of someth
- would not be an urgent item.
- 35 MR. BUDGELL: No. Of course, not. If what you have is
- working perfectly well and serves the purpose, of course
- 37 not
- 38 MS. HENLEY ANDREWS: That's a good place to break.
- 39 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.
- 40 Henley Andrews. Would you have any notion of how long
- 41 you might be in this cross-examination of Mr. Budgell,
- 42 please.
- 43 MS. HENLEY ANDREWS: I have a much better notion of
- it than I did this morning. I think I'll take the better of the
- morning tomorrow, but should be finished by lunch.
- 46 MR. NOSEWORTHY, CHAIRMAN: Thank you very much.

- 47 Thank you, Mr. Budgell. We'll reconvene at 9:30 tomorrow
- 48 morning.
- 49 (hearing adjourned to November 7, 2001)