(9:30 a.m.)

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- 3 MR. NOSEWORTHY, CHAIRMAN: Thank you, and a 4 good Friday morning everybody. Is there anything before 5 we get started, Counsel, any preliminary matters this 6 morning?
- MR. KENNEDY: Just one, Chair, I just wanted to bring to the attention of the parties that Hydro's second quarterly report has been filed with the Board September the 10th, 2001. It doesn't constitute the body of the evidence in the hearing, but since it is part of the Board's record, I felt it was appropriate to bring it to the attention of the parties.
- MR. NOSEWORTHY, CHAIRMAN: Thank you. If there's nothing further, we'll proceed with the ...
- MR. BROWNE, Q.C.: Mr. Chairman, I was going to say something about the people who are participating. I was going to give you a further update on that?
- MR. NOSEWORTHY, CHAIRMAN: Sure, thank you, Mr. Browne, I appreciate that.

MR. BROWNE, Q.C.: In reference to St. Anthony thusfar, we only have the Town Council making a presentation. It's ongoing, it could change, that's all I can tell you there. In reference to the coastal communities in Labrador, we will have a fair representation from there. We have no names to give to the Board as of yet. Assistants to Members at the Confederation Building are working on that and they should have names for us shortly. I suspect though we mightn't have the names until the plane lands, but anyway, that's ... they are working on it. The Town Council of Nain issued a circular in reference to the hearing, and I'll just have that distributed for the record. They're trying to advise all their members or all their citizens of the hearing. The only thing that they don't have in there is the amount of the rate increase proposed, because they don't know. They weren't informed officially, and I think Hydro could put a quick end to that by having someone, the facts to these coastal communities in this afternoon or later this morning, what exactly it is, the rate increase as proposed for the coastal communities in Labrador. I think it's incumbent upon Hydro to present that. When the Town Clerk can issue a notice such as this but can't put the exact rate that is being sought, or what the rate is for their schools and homes, there is something lacking here. I know Newfoundland Power, to their credit, always put an insert when they were seeking an increase stating what the increase is, and I don't see why Hydro didn't do something similar instead of depending upon the media and some public relations announcements, so it could be done simply by a fax to these communities. The communities have a network in place, so at least they will know and the

- Councils will know. That's not too much to ask. I was wondering if Hydro would speak to that or undertake to do
- MR. NOSEWORTHY, CHAIRMAN: Mr. Browne, before I ask Ms. Greene if there is any comment, are there ... do you have any expectations that there will be others, other than the Town Council of St. Anthony, who would be appearing before the Board on Monday at this point?
- 9 MR. BROWNE, Q.C.: You're asking me?
- 60 MR. NOSEWORTHY, CHAIRMAN: Yes, yeah.
- 61 MR. BROWNE, Q.C.: The Town Clerk up there tells me that
  62 there may be someone from the fish plant, he's discussing
  63 the issue with them, and we are still working on
  64 Roddickton. I might be able to tell you more after the break
  65 in reference to whether someone will appear from
  66 Roddickton.
- MR. NOSEWORTHY, CHAIRMAN: Thank you. Any further comment, Ms. Greene, before we proceed?
- MS. GREENE, Q.C.: I wonder if the Consumer Advocate could indicate the communities, if not the names of the people, the communities from which there will be representatives first?
- 73 MR. BROWNE, Q.C.: We have ... the Members are working
  74 on this. I understand there will be people from Mary's
  75 Harbour, Nain, Rigolet, Makkovik, and points in between.
  76 I have not been given a specific number by the people who
  77 are working at it in the members office up there at the
  78 Confederation Building, so this is what I've been told to
  79 date. But surely Newfoundland Hydro would know who
  80 their customers are in southern and northern Labrador and
  81 be able to inform the people there.
- MS. GREENE, Q.C.: Yes, we know who our customers are.
  The question is do you fax each one of our 35,000
  customers this afternoon, or do you fax representatives of
  town councils, and that's why I would have ... I was trying
  to determine the communities that have expressed an
  interest and we would have made an effort, but in terms of
  ... yes, we can undertake to send something today. I guess
  the question I'm thinking about in my mind is who we send
  it to at this point, and if it's the town councils, we will try to
  find the name of a mayor and a fax number. It's ...
- MR. BROWNE, Q.C.: Yeah, I'm just suggesting to councils at this point. Obviously, it's impossible for you to notify your 35,000 customers at this stage. That's something that may have been considered previously, but I think at this stage, since the councils do have a network in place as is evident from this circular they sent to residents, that might be best way to do it in the circumstances.
- MR. NOSEWORTHY, CHAIRMAN: The MHA's as well,

- Mr. Anderson, I would think, and Ms. Jones, I think they 1
- have been involved, and Mr. MacLean, as well. 2
- MS. GREENE, Q.C.: And with respect to the MHA's, they 3
- have been briefed by Hydro. 4
- MR. NOSEWORTHY, CHAIRMAN: They have been, 5
- 6
- MS. GREENE, Q.C.: There have been discussions with the 7
- MHA's. 8
- MR. NOSEWORTHY, CHAIRMAN: Okay, thank you. So 9
- is it my understanding that you will be ... 10
- MS. GREENE, Q.C.: I will undertake to ... 11
- MR. NOSEWORTHY, CHAIRMAN: Undertake to try to 12
- communicate with the ... 13
- MS. GREENE, Q.C.: ... try to get something out between 14
- now and Wednesday. I can't promise it will be this 15
- 16 afternoon, until I talk to the staff.
- MR. NOSEWORTHY, CHAIRMAN: Thank you. If there's 17
- nothing else, we'll proceed with the Board questioning, and 18
- I'll ask Commissioner Powell to begin. Good morning, Mr. 19
- Henderson. 20
- MR. HENDERSON: Good morning. 21
- COMMISSIONER POWELL: Good morning, Mr. 22
- Henderson. 23
- MR. HENDERSON: Good morning. 24
- COMMISSIONER POWELL: Thank you, Chair. I only 25
- have a couple of items I want to touch on, and I don't think 26
- there's anything that we've gone over before, and I don't 27
- think anybody is going there. One of the ... when I first 28
- started to read your evidence, I looked down at the pre-29 filed evidence, and you said your position was Manager of 30
- Systems Operation, so then I went to NP-5. It gives the 31
- chart of accounts ... or not chart of accounts, the analysis 32
- of all the various departments and various positions and 33 we started off with Mr. Wells, and then we continued on 34
- 35 with the Vice-President of Transmission and Rural
- Operations, Mr. Reeves, so I went across to the right to 36
- pick up Mr. Henderson, and then I couldn't find you. So
- 37 that didn't really depress me too much, because my wife
- 38 always said that the inability to read road maps and take 39
- directions is a male thing, so I went looking and I started 40
- going through the documents and I found at NP-5 and D-1, 41
- under production, and down about three levels there is a 42
- little block called Manager of Systems Operation, R.J. 43
- Henderson, so I presume that's you. 44
- MR. HENDERSON: That's correct. 45
- COMMISSIONER POWELL: So then I continued on to 46
- find out, because it refers you to the chart **D-6**, and over in 47

- **D-6**, we've got Manager of Systems Operations, R.J.
- Henderson, and there's a bunch of blocks down below you,
- so that's you and that's your department.
- MR. HENDERSON: That's right.
- COMMISSIONER POWELL: Sort of down in the middle of
- the organizational chart.
- MR. HENDERSON: Yes.
- COMMISSIONER POWELL: So then I went over to NP-6,
- where they list all the staff and various divisions, and in 56
- May of 2001 it shows under production, 313 full-time 57
- 58 employees, and 63 part-time, for approximately 376 staff at
- the end of May 2001. So is that where you fit in?
- MR. HENDERSON: I'm in that number.
- (9:45 a.m.)
- COMMISSIONER POWELL: In that number, okay, so we
- go back to **D-6**, so I started doing some calculations, so
- your little department represents about four percent of the
- production staff, and about one and a half percent of the
- total staff of the Hydro organization.
- MR. HENDERSON: Right.
- COMMISSIONER POWELL: Okay, I tried to get ... I do that 68
- just to try to visualize what you're doing and where you fit
- in, because I was sort of intrigued when I started crunching
- some numbers, listening to the testimony, and even though
- you're very small in terms of the size of the organization, 72
- between 30 and 35 percent of the total budget of the 73
- organization goes through your department in terms of
- your cost and controls and various things you impact on,
- and probably even greater. So you can almost ...
- MR. HENDERSON: It's in that vicinity. 77
- COMMISSIONER POWELL: Yeah, so I get the feeling that 78
- systems operation is almost the heart of the organization in 79
- the sense that as you beat, the organization beats, and they
- better all be going at the same beat with you. So I had a 81
- chance last year, last winter or last spring, I'm not sure, and
- not being from St. John's, it's sometimes very difficult to
- figure out when it's winter and when it's spring, but to go
- to your Control Centre over there at your headquarters at
- Columbus Drive, so just looking at that chart in D-6,
- yourself, and it comes down to the Superintendent-Energy
- Control Centre, is that the ... the Energy Control Centre, is 88
- that the ... when you're standing above looking down in
- sort of a big cage with all the dials on the wall and chaps
- down there on computers, that is the Energy Control
- 92 Centre?
- MR. HENDERSON: That is, yes.
- COMMISSIONER POWELL: So those people under the

- 1 (inaudible) supervisory, Energy Control Centre, these are
- 2 people actually working in that centre?
- 3 MR. HENDERSON: That's right.
- 4 COMMISSIONER POWELL: The power system operators,
- 5 are they working in that centre?
- 6 MR. HENDERSON: Yes.
- 7 COMMISSIONER POWELL: Okay, you're a professional
- 8 engineer, electrical. Are any of these people in those three
- 9 departments down from you, are they professional in terms
- of educational wise? I'm sure they're all professional in
- 11 how they do their job but ...
- MR. HENDERSON: There are two professional engineers
- besides myself.
- 14 COMMISSIONER POWELL: Okay, so ...
- MR. HENDERSON: And the rest would be technicians.
- There is an accountant and the rest are ...
- 17 COMMISSIONER POWELL: No, there's an accountant on
- the block left.
- 19 MR. HENDERSON: Yes.
- 20 COMMISSIONER POWELL: And there's a ...
- 21 MR. HENDERSON: The remainder would be considered
- 22 technicians.
- 23 COMMISSIONER POWELL: Okay, so all these people in
- this chart here, I would see them in that ...
- MR. HENDERSON: They're in that office area.
- 26 COMMISSIONER POWELL: Yeah, in that bubble type
- 27 concept there, looking down.
- MR. HENDERSON: Yes.
- 29 COMMISSIONER POWELL: Okay, so none of these are
- out in the field, they're all right there in the ...
- 31 MR. HENDERSON: Exactly.
- 32 COMMISSIONER POWELL: Okay, reading through your
- 33 pre-filed evidence and listening to your discussion, you
- 34 talked about having computer programs and computer
- models, and things to ... as to data going to the centre, you
- would be collecting.
- 37 MR. HENDERSON: Yes.
- 38 COMMISSIONER POWELL: And that would be done
- automatically, it's all tied in ... and it gives you a model.
- Now these programs you have, are they independent of the
- JD Edwards system that you've got?
- 42 MR. HENDERSON: Yes.
- 43 COMMISSIONER POWELL: Okay, so you use these

- 44 models to do your various calculations that you arrive at
- 45 these conversion factors we talked about.
- 46 MR. HENDERSON: Yes, the conversion factors would be
- 47 coming from data that we have collected over the years.
- They're not part of the JD Edwards system. Some of the
- information comes from our energy management system.
- 50 Others is just information that we tabulate in spreadsheets
- and databases and that sort of thing.
- 52 COMMISSIONER POWELL: Well, except for ... not
- 53 wanting to go back into the hydraulic data which you got
- from a different source, but all this other data that you use
- 55 in these spreadsheets would have been things that you,
- 56 these computer models would have gotten from the
- 57 operation ...
- 58 MR. HENDERSON: Some of it, that's where it came ... some
- 59 of it is, for instance, the energy produced by a generator
- $\,$  comes from a manual meter reading taken on the generating
- 61 unit that would, we would be recording and maintaining in
- 62 a database.
- 63 COMMISSIONER POWELL: So that's somebody outside
- of your department would send you that information?
- 65 MR. HENDERSON: Yes, yeah.
- 66 COMMISSIONER POWELL: Okay, and that's a routine
- 67 coming in on a regular basis.
- 68 MR. HENDERSON: On a regular basis.
- 69 COMMISSIONER POWELL: And it's one of your, in your
- 70 department, your ...
- 71 MR. HENDERSON: Correct, and reports, puts it into
- 72 reports and so on.
- 73 COMMISSIONER POWELL: Is that why you need an
- 74 accountant in your little operation there?
- 75 MR. HENDERSON: The accountant does the power bills
- 76 for all our large customers as well, so the billings for
- 77 Newfoundland Power and bills for the industrial customers
- are done by him as well.
- 79 COMMISSIONER POWELL: Okay, so it's actually done
- 80 right in your department, it doesn't go up through the
- system to Mr. Roberts?
- 82 MR. HENDERSON: No, there is involvement with the
- 83 controller's department and the rates department in that
- 84 process. Everybody has a role, but we actually take the
- 85 energy readings and put them on the bills. They give us
- 86 rates to apply to the kilowatt hours if you like, and they
- also do all the ... I'll say more detailed accounting activities
- 88 related to recording it into our ... into the JD Edwards
- 89 system and that sort of thing.
- OCOMMISSIONER POWELL: Okay, so you just actually

- work out the amount in terms of the kilowatts and 1
- gigawatts or whatever, and the other department puts the 2
- actual dollar value on it. 3
- MR. HENDERSON: Well, we do it but they ... I mean that's 4
- a pretty simple mathematical calculation. 5
- COMMISSIONER POWELL: Yes, okay, no problem there. 6
- These conversion factors that you use, is that done right 7
- 8 here in this department?
- MR. HENDERSON: Yes. 9
- COMMISSIONER POWELL: You do it. So when you 10
- arrive at these conversion factors, how do they get to Mr. 11
- Osmond's department, the Rate Stabilization, which has an 12
- impact on it? I mean are they downloaded ... 13
- MR. HENDERSON: We do the budgeting, so they are part 14
- of the information in our budget information that we 15
- provide to Mr. Osmond's department, and then they would 16
- take that and apply it to the Rate Stabilization Plan, and 17
- wherever else they may use it. 18
- COMMISSIONER POWELL: Now, one of the problems I 19
- have, and it's not fair to say I have a problem, but I'm just 20
- trying to follow the flow because I found you down here in 21
- the middle somewhere, and when I look at this situation 22
- here, going back to NP-5, D-1, you're down here to the 23
- 24 extreme right ... that's not a political philosophy, that's just
- where you happen to be, and you're grouped there with, I 25
- guess, assuming this is equal weighting, with the Manager 26 of Hydro Generation, Thermal Generation, and then your 27
- System Operations, and you report to a Director-General of 28
- Operations, which appears to be vacant. Normally there's 29
- somebody occupying that position, and then you go up 30
- and you report to the Vice-President of Production, Mr. 31
- Haines, who seems to have equal weight with Mr. Reeves, 32
- Mr. Osmond, and reports back up to Mr. Wells. My, 33
- certainly, understanding ... you sort of skip that and you go 34
- right over here to Mr. Osmond, Vice-President of Finance, 35
- (inaudible), or is this flow ... 36
- MR. HENDERSON: I guess when it comes to these 37
- conversion factors, they are discussed with my boss. 38
- Right now the organization, there has been a 39
- reorganization, and the vacant position has been 40
- eliminated, so I now report directly to Mr. Haines. 41
- COMMISSIONER POWELL: So Mister ... 42
- MR. HENDERSON: And so on a go-forward basis now, I 43
- will be, any changes to conversion factors will be reviewed 44
- with Mr. Haines before they become utilized, if you like, 45
- within all the departments. That's not a decision I make on 46
- my own. It's a recommendation I would make to Mr. 47
- Haines, and he would either agree or we'd come to an 48
- agreement as to what it should be, and then it would be 49

- passed on to the other departments for use.
- COMMISSIONER POWELL: Okay, so you have to sit
- down and justify these things to Mr. Haines before they
- would ... when you first do up the conversion factor, you
- would flow up through the data, would Mr. Haines then
- take that over to Mr. Osmond, they work out the numbers
- and say, well this is not the right one, work it back down to 56
- you and say can we have another go at this?
- MR. HENDERSON: We're not, I guess, that structured. I
- mean I can call people in Mr. Osmond's department ...
- COMMISSIONER POWELL: So you send it over, try this
- on, because I got to talk to the boss first?
- MR. HENDERSON: They're ... excuse me, we would all
- have a discussion, I guess, on the impact of it. In
- particular, the Holyrood conversion factor, the hydro
- conversation factor doesn't really, it would be more with
- Mr. Haines than myself, but the Holyrood conversion
- factor would probably involve more discussion because
- the, it involves the Rate Stabilization Plan.
- COMMISSIONER POWELL: How man conversion factors
- did you send over to Mr. Osmond related to the thermal 70
- before you arrived at the one you used?
- MR. HENDERSON: The only one that went is the one that 72
- 73 we arrived at because we used the ... we took the most
- recent years' average and that sort of reflected the way that
- the Board had looked at it the last time it got reviewed so
- we went with that approach, so we agreed with that
- approach, and then we did the calculations and came up
- with the number, and everybody agreed that that was the
- appropriate number because that was a similar approach 79
- that had been taken in the past, which was looking at the
- most recent conversion factor experience, and applying it,
- so that was the only one that we ...
- COMMISSIONER POWELL: Were you asked for a what-if 83
- scenario, do you ever do any of that?
- MR. HENDERSON: We did a little analysis to see whether
- 86 there was, you know, like we have actual experience, so
- you could say well let's ... you know, what if we had the
- experience of 1997 versus what if we had the experience of 88
- 1999. I would have just done that on a very rough basis
- because you're using different amounts of oil in those
- different years and this sort of thing, and it has different
- financial impacts, right, but the number we settled on was
- just based, as I said, with past experience type thing, past
- practice.
- COMMISSIONER POWELL: So Mr. Haines had to
  - basically okay that, and then the official ... is there any
- procedure in, like ...
- MR. HENDERSON: At the time it wasn't Mr. Haines, it was

- his predecessor, Mr. Collett, who looked at the numbers 1
- and said this is a reasonable way to go. He agreed with it 2
- and we went ahead, moved forward with using that one. 3
- COMMISSIONER POWELL: So he puts his official stamp 4
- of approval on it? I mean is there any ... if I went in, if I was 5
- going in to do an audit of the process, would I find a 6
- document saying he signed off on it, or ... 7
- MR. HENDERSON: There should be something there. 8
- COMMISSIONER POWELL: When you're ... you're down 9
- there, I don't want to question your ability or anything, I 10
- wouldn't do that. I'm sure, you know, you've forgotten 11
- more about the system than a lot of people will know, but 12
- 13 you're working on these numbers, you're working on your
- practices in the past, but there must be some days that you 14
- wake up and you wonder, gosh, you know, have I got the 15
- right mouse trap, or is there something we're doing wrong. 16
- Do you have any authority to go out and say we'd like to 17
- 18 get somebody to come in and, you know, check this for me,
- you know, to stand on their head and look at it in a 19
- different way, so to speak? Or do you just keep doing what 20
- you've been doing because you're so confident in what 21
- you're doing? 22
- MR. HENDERSON: When it comes ... well, I guess, it 23
- depends on the area. In some areas we would go out for a 24
- consultant, if you like, to look at an area where we may not 25
- have much experience in that area, and we would like to 26
- have that other opinion. With respect to the conversion 27
- factor, it's a fairly straightforward calculation, so we've 28
- never considered going out asking a consultant to do that 29
- kind of a calculation. 30
- COMMISSIONER POWELL: Do you ... your department, 31
- you're working ... you report to, as you say, you used to 32
- report to a director of generation operations, and then to a 33
- vice-president, is there any process within Hydro that, 34 excuse me, somebody would come in as a matter of routine
- 35 and look over what you're doing and sort of, what I would 36
- call an internal audit of what you're doing ... your process, 37
- see that you're complying with all the procedures. You 38
- must have a manual, basically, where you have to 39
- document various things that you're doing. 40
- MR. HENDERSON: There is some documentation, 41
- depending on the complexity and, I guess, criticalness of 42
- things, there is some documentation. We do have an 43
- internal audit department that does check certain things 44
- with, you know, as far as process, and make sure that 45
- people are following procedures that are documented and 46
- so on, so that is done and they do come to my department. 47
- There is also, I have had people from the Board's auditors, 48
- if you like, Grant Thornton have come in and spoken to me 49
- about how we do things to get an understanding. 50

- COMMISSIONER POWELL: So these various factors that
- you use, you mentioned that, I think in your pre-filed
- evidence, the timeframe. If the panel said to you, what
- would be the conversion factors you would use today, how
- long would it take for you to get those for both the ... how
- about for today's date?
- $(10:00 \ a.m.)$
- MR. HENDERSON: As of today's date, you want the
- conversion factor for ...
- COMMISSIONER POWELL: I'm not going to ask you for
- it, but just ...
- MR. HENDERSON: No, but I'm just trying to understand,
- are you looking for ... at the end of any month you could do
- a conversion factor calculation and we do it for every
- 65 month.
- COMMISSIONER POWELL: Yes.
- MR. HENDERSON: And I think it's in there as far as year
- to date. I think we provided that up to the end of August
- 69 or July.
- 70 COMMISSIONER POWELL: So you're talking about, if it
- takes you about a month after ... with all the data?
- MR. HENDERSON: No, well the data, you wait until you 72
- 73 have a full month's production. At the end of each month
- we do a dipping, I'll call it, or a measurement of the fuel in
- the tanks at Holyrood. That tells us how much fuel we
- consumed during the month. At the end of the month we
- do meter readings on the generators that tells us how much
- energy we've produced, so you need those two numbers to
- do the conversion factor calculation, so that, they're 79
- monthly processes, so you'd have to wait until the end of 80
- a month to get a number.
- COMMISSIONER POWELL: So in other words, for you to
- give me the conversion factor for today, you'd have to
- phone up Holyrood and tell somebody to dip the tanks to
- find out how much is there.
- 86 MR. HENDERSON: How much have we used since the last
- measurement of the tanks and what are, how much energy
- have we produced, and then you would do your ratios.
- COMMISSIONER POWELL: So basically these are 24 hour 89
- ... if somebody said to you we need it today instead of the
- end of the month, these are procedures that would have to
- be done and they're sort of 24 hour type ...
- MR. HENDERSON: Yes.
- COMMISSIONER POWELL: So therefore, 24 hours after
- that you can come up with a new conversion factor?
- MR. HENDERSON: Yes.

- COMMISSIONER POWELL: Okay, I just wanted to get 1
- some feel for the flow of this ... why you do it monthly, I 2
- appreciate why you do it, but it doesn't take you a month 3
- 4 after the end of the month to come up with a figure?
- 5 MR. HENDERSON: No.
- COMMISSIONER POWELL: No, okay. What is ... the 6
- operations planning engineer, what does he or she do? 7
- MR. HENDERSON: He does the, a whole variety of things, 8
- but one of the things would be our water management 9
- activities. He runs our model that we use for developing 10
- those minimum levels that we talked about yesterday, and 11
- for writing the model to help us determine what production 12
- 13 levels we require from our generation each week. He runs
- the model. He also gathers a lot of information with respect 14
- to the reliability of our system. He reviews all of our 15 outages that are going on in the system to ensure that
- 16 there are no technical problems related to taking certain
- 17 pieces of equipment out, or how they might affect the
- 18
- customers. He'll do what we call load flow analysis of 19
- those outages to make sure that we know how we should 20 approach the outage as far as giving directions to the
- 21 operators to maybe put on extra load at Holyrood, or just 22
- 23 Holyrood, or however, whatever things we have at our
- avail to control the system. He will provide guidelines to 24
- the operators. Those are sort of an overview of the, I 25
- suppose, more time consuming elements of his job, but 26
- there are a lot of other things that he does. 27
- COMMISSIONER POWELL: You have a relatively small 28
- staff there, and this is 24 hours a day, seven days a week, 29
- 365 days a year. I mean this never stops. People get sick, 30 people take holidays, I haven't done any flow charting in
- 31 terms of work, but is there much movement? It's not ... I 32
- wouldn't, but the nature wouldn't lend itself to getting 33
- somebody off the street to come in and fill in. 34
- MR. HENDERSON: No. 35
- COMMISSIONER POWELL: So what happens when 36
- you're gone? I mean you do have ... 37
- MR. HENDERSON: Well I've been here for three weeks. 38
- COMMISSIONER POWELL: How are the lights staying 39
- on, yeah, yeah. 40
- MR. HENDERSON: And Mr. Butler, who is the 41
- superintendent of the Control Centre is taking care of 42
- things, and he's very much looking forward to me coming 43
- back because he's run ragged right now. 44
- COMMISSIONER POWELL: Yes, okay, so ... but this 15 45
- people, including yourself who is here, working, and the 46
- sick, the holidays, I mean that can run. There's no ... I mean 47
- you have your annual holidays ... 48

- MR. HENDERSON: It all presents its challenges to
- scheduling and so on, particularly the people, the 11 people
- that work on shift. You know, there are certainly 51
- 52 challenges when you have sick people there.
- presents a lot of challenges as to how you reschedule and 53
- deal with that. You know, you end up incurring overtime, 54
- having people at work extra hours in order to take care of
- these things and so on.
- 57 COMMISSIONER POWELL: But none of these other
- departments sort of blend in with yours, do you move
  - people back and forth so you can get ...
- 60 MR. HENDERSON: There isn't, there is some commonality
- in some of the things that we do in other departments, and
  - we certainly call upon the other departments for assistance,
- in particular, the system planning department, who have a
- very intimate knowledge of how the system works as well
- as Mr. Budgell's department. They have a lot of technical 65
- expertise on modelling the system. There is also people in
- 67 Mr. Reeves' department who have a very strong system
- knowledge that we call upon when we have, like outages
- on the system, and trying to determine what the problems 69
- were. There is a group, a system performance group in Mr.
- Reeves' department that provides assistance there for, you
- know, significant technical issues. We work well as a team
- through the Control Centre, with other departments. You 73
- 74 know, it doesn't require going through the hierarchy, if you
- like, you know, we work quite well.
- COMMISSIONER POWELL: Things move sideways as 76
- well as up and down?
- MR. HENDERSON: Yes.
- COMMISSIONER POWELL: Okay, one of the things that
- came up in Mr. Reeves' evidence, there was, we haven't ...
- we're going to get documentation on it later on and it will
- probably answer the question, but I'll ask you anyway. 82
- There was talks that Hydro has put in a pilot executive 83
- incentive plan. Does that go all the way down to yourself?
- MR. HENDERSON: No.
- COMMISSIONER POWELL: Even though you're the heart
- of the organization, they never brought you in (laughter).
- But a lot of the results that you produce, I would think, 88
- would have an effect on some of those incentive plans, 89
- because your efficiency factors, and things that you put up
- change some numbers ... I would think it would have some
- bearing on it.
- MR. HENDERSON: Yes.
- COMMISSIONER POWELL: So they always refer to you
- 95 as Mr. Henderson. That's all I have on that part of the
- question. There's just a couple of things, and this is just
- for my own information to show now how ignorant I am as

- to how utilities operate. But there's a word that you ... well
- yesterday in evidence you referred to the efficiency of Cat
- 3 Arm versus Bay d'Espoir, and you said that Cat Arm had a
- 4 higher head. What do you mean by that?
- 5 MR. HENDERSON: The different ... the height of the water
- going into the unit, that height from, or the elevation of the
- water to the level that the plant is is very high at Cat Arm
- 8 versus Bay d'Espoir. At Cat Arm we're in the vicinity of 380
- 9 meters, and at Bay d'Espoir it's more like 180 meters, so just
- based on that ratio, you would expect that Cat Arm would
- be almost twice ... use half as much water as Bay d'Espoir
- to produce a kilowatt hour, and if you look at the
- conversion factors, they come out close to that.
- 14 COMMISSIONER POWELL: So you've got to build the
- dam higher in Bay d'Espoir.
- MR. HENDERSON: Yeah, you'd have to have a very, very
- high dam if you wanted to get that up up there.
- 18 COMMISSIONER POWELL: And on page 4 of your pre-
- filed evidence you referred to, I think it's exciter ... E-x-c-i-t-
- 20 e-r-s?
- 21 MR. HENDERSON: Exciters.
- 22 COMMISSIONER POWELL: Yeah, so they're not a bunch
- of cheerleaders. So what's an exciter, because you referred
- 24 to them at Bay d'Espoir and at Holyrood, so one is a
- thermal and one is a hydro ... so what does that actually
- 26 do:
- 27 MR. HENDERSON: In simple terms, it provides the
- 28 magnetizing currents to a generator. If you like, you'd have
- to get back to basic motor theory and that sort of thing, but
- you need a magnetic field. You may be aware that there is a magnetic field in a motor and the exciter provides that
- field to the generator. In order to be able to generate you
- need to have that excitation provided, which provides the
- magnetizing current, and an exciter controls the voltage of
- 35 the unit, the output voltage.
- 36 COMMISSIONER POWELL: Okay, I was trying to get the
- 37 connection between the two types of power, if you like,
- $\,$  technical ... the other thing, I want to refer to NP-259.
- There was some ... I'm having trouble getting my mind
- $\,$  around this calculation, and that's the other issue I'd like to
- explore with you, and that's for the monthly fuel efficiency
- factor, and I'm trying to, I can't understand why you want
- to use net production and not gross.
- 44 MR. HENDERSON: Because that's the net, it's the impact
- of the plant on the system. If the plant wasn't there. It
- 46 would have no impact, and what we're trying to do is
- 47 measure the full impact of the system, which the full impact
- 48 is the net. It's what the generator produces, less what the
- generator, the plant ...

- 50 COMMISSIONER POWELL: Has available itself.
- 51 MR. HENDERSON: This is basically what it has available
- to the system.
- 53 COMMISSIONER POWELL: Yeah, but I find it hard
- 54 though. In the calculation, trying to get the efficiency of
- 55 how much kilowatts you can produce from a barrel of oil,
- you take off your own energy costs ...
- 57 MR. HENDERSON: Because of that production of getting
- that energy out of the oil requires you to use energy, like
- 59 running motors and all of that, so that's what we're trying
- to net those effects.
- 61 COMMISSIONER POWELL: But your efficiency in a barrel
- of oil, if you had another source of energy to run your
- 63 plant, it wouldn't make the efficiency of what you got out
- of a plant any greater. It may make the cost structure of the
- plant different, especially if your source of energy was less
- $\,$  than what the burning of the oil, but the efficiency that you
- 67 receive, you were able to get out of a barrel of oil wouldn't
- 68 go up or down.
- 69 MR. HENDERSON: Well, you can, what you get out of a
- 70 barrel of oil may depend on how much you're running your
- 71 motors. You know, if you put more, you might ...
- 72 COMMISSIONER POWELL: But that has nothing to do
- vith energy that you would be consuming, though.
- 74 MR. HENDERSON: If you ended up running your motors
- 75 more, and that got you a better efficiency, you'd want to
- balance the two our. You wouldn't want to just look, well
- ve got better efficiency and ignore all that extra energy
- 78 you're using in the motors. Let's say that running a motor
- 79 harder would get you more kilowatt hours out of a barrel.
- 80 COMMISSIONER POWELL: But that would be the
- 81 efficiency of the plant as a whole versus what the
- efficiency of being able to get ...
- 83 MR. HENDERSON: What we're trying to show here is the
- 84 efficiency of the plant as a whole, as opposed to just the
- generators.
- 86 COMMISSIONER POWELL: Okay, so this is not a fuel
- 7 efficiency in terms of being able to show how efficient the
- amount of energy you can get out of a barrel of oil, because
- 89 as you said before, if you're running Holyrood at an 80
- 90 percent capacity all the time, you're a lot more efficient than
- 91 the ups and downs, like the ups and downs are dictated by
- 92 hydraulic, and you really wanted to keep it down as
- 93 opposed to up ... you can improve the efficiency by
- running a motor, but then of course, everybody's costs go up, so it's not a case of trying to maximize the efficiency of
- 96 Holyrood from a pure operational point of view. It's trying
- to keep the least cost power.

- 1 MR. HENDERSON: That's, I'll say the game that we play
- 2 day in and day out, all year round.
- 3 COMMISSIONER POWELL: Yes, I can appreciate that, but
- 4 I find it hard to, looking at trying to measure efficiency,
- 5 what you're getting out of a barrel of oil versus the
- 6 efficiency of the total operation of the plant. I think they're
- two different questions, and so if you have another source
- 8 of energy to run Holyrood, assuming that you could run it
- 9 with solar collectors, and that's a quantum leap, given
- where it is, but you wouldn't have to consume any of your
- own oil to produce electricity, but it wouldn't affect the
- actual production, the efficiency, what you're getting in a
- barrel of oil.
- MR. HENDERSON: I would say it does. I mean if you put
- in solar generators there, then what you would say, those
- solar generators are being used to supply some other load,
- and, you know, the electrical system is all tied together, but
- what you're trying to do is get the net impact of the plant
- on the system. You could take Holyrood out and still have
- 20 your solar energy there to meet other loads, so that really
- doesn't, isn't a measure of your plant efficiency. You want
- 22 to get the net, you know, the full impact of the plant to the
- 23 system.
- 24 COMMISSIONER POWELL: Okay, so the thing I got, I
- won't argue the point with you, but the answer is the
- 26 monthly fuel efficiency, but actually it's the plant efficiency.
- 27 MR. HENDERSON: Yes.
- 28 COMMISSIONER POWELL: Yes.
- 29 MR. HENDERSON: This is the plant efficiency.
- 30 COMMISSIONER POWELL: Okay, and if you went on the
- 31 gross, that number down below would be substantially
- 32 different.
- 33 MR. HENDERSON: It would be higher, yes.
- 34 COMMISSIONER POWELL: Yes, and it would affect the
- 35 Rate Stabilization Plan.
- 36 MR. HENDERSON: Well ...
- 37 COMMISSIONER POWELL: It will all wash itself through
- anyway because of the costs.
- 39 MR. HENDERSON: If you ignored the, you know, the
- 40 station service, you'd have to take that into account
- somewhere else.
- 42 COMMISSIONER POWELL: Yes, that's right. We
- eventually pay for it, it's just a question of timing. That's all
- I have, Mr. Chairman.
- 45 (10:15 a.m.)
- 46 MR. NOSEWORTHY, CHAIRMAN: Thank you,

- Commissioner Powell. Thank you, Mr. Henderson. I'll ask
- 48 Commissioner Saunders to proceed with his questioning
- 49 please?
- 50 COMMISSIONER SAUNDERS: Thank you, Mr. Chair. Mr.
- Henderson, I'm going to refer you to **RH-4**, and it's slide 10,
- and on slide 10 you list telecommunication facilities for
- 53 power system operation. I think I understand all of it
- except power line carrier. Do you want to explain how that
- operates, how it works, and how it functions?
- MR. HENDERSON: Power line carrier uses the wire, if you
- 57 like, or the conductor of the transmission line. This is the
- wire whose primary function is to transfer power and
- 59 energy on the system, and you can use that wire for
- transmitting communications signals as well. You do it at a very high frequency, a higher frequency than ... we
- transmit power at 60 hertz. You can transmit ... I'm not sure
- of the frequencies, but it's a much higher frequency that
- 64 you would transmit the communications signal on the wire
- and you have filters at the end of each of the lines that the
- 66 filter will allow the high frequency electrical signal to go
- 67 through it, but not the low frequency signal, or power,
- which is the electricity, and so that high frequency signal
- will go over the wire and through the filter and then into the
- 70 communication system.
- 71 COMMISSIONER SAUNDERS: How long has that
- 72 technology been available to you?
- 73 MR. HENDERSON: We've been using it since our system
- vas put together in the 1960's.
- 75 COMMISSIONER SAUNDERS: Okay, and have there been
- any refinements to the system recently?
- 77 MR. HENDERSON: That type of system?
- 78 COMMISSIONER SAUNDERS: Yes.
- 79 MR. HENDERSON: There have been, certainly there have
- 80 been improvements made. The ... my understanding
- though is that it's becoming less common, in less common
- 82 use. It isn't as reliable. It's subject to noise. If you ever
- 83 pick up a phone that's, to use voice communications on a
- 84 power line carrier, there's a lot of humming and it's, you
- know, not a very efficient ...
- 86 COMMISSIONER SAUNDERS: It's not the preferred
- 87 method.
- 88 MR. HENDERSON: No.
- 89 COMMISSIONER SAUNDERS: Okay, and it uses the same
- 90 wire as you're using to transmit your energy?
- 91 MR. HENDERSON: Yes.
- 92 COMMISSIONER SAUNDERS: It's not a wire that's
- 93 wrapped around or separate from?

- 1 MR. HENDERSON: No, it's the exact same one.
- 2 COMMISSIONER SAUNDERS: Okay, that's fine on that
- matter, Mr. Henderson. Just one other area. We spent a lot
- 4 of time talking about maintenance at Holyrood, and I want
- to refer you to **RH-3**, and I think it's **RH-3**. Yes, it is. Page
- 6 1, at the top, Holyrood for the three years, 2000, 01, and 02.
- 7 MR. HENDERSON: Yes.
- 8 COMMISSIONER SAUNDERS: And it's \$6.5 million in
- 9 2000, and 7.5 in 01, and 6.3 in 02.
- 10 MR. HENDERSON: Yes.
- 11 COMMISSIONER SAUNDERS: This is dollars of
- maintenance costs.
- 13 MR. HENDERSON: Right.
- 14 COMMISSIONER SAUNDERS: Yes, what's the age of the
- units at Holyrood?
- MR. HENDERSON: They are 21 years old.
- 17 COMMISSIONER SAUNDERS: All three?
- MR. HENDERSON: No, I'm sorry, unit three was around
- 19 1980, so it would be ... I'm sorry ... I got ... my math is
- wrong, 31 years, and then number three would be closer to
- 21 20 or 21 years.
- 22 COMMISSIONER SAUNDERS: Number three is 20 years,
- or 21 years, you say.
- 24 MR. HENDERSON: Right.
- 25 COMMISSIONER SAUNDERS: And numbers one and
- 26 two
- MR. HENDERSON: Would be 30 or 31.
- 28 COMMISSIONER SAUNDERS: 30, what's the useful life,
- if that's the measure?
- 30 MR. HENDERSON: I believe that the Holyrood units one
- and two are fully depreciated.
- 32 COMMISSIONER SAUNDERS: Yes.
- 33 MR. HENDERSON: Recently at 30 years.
- 34 COMMISSIONER SAUNDERS: Yes.
- MR. HENDERSON: So that would be the normal useful life,
- but now there has been studies done, I think they're in
- 37 evidence, about extending the life of those units, and I
- think there's a number of more years, I don't recall the
- 39 extension, but it is a good many more years of useful life
- out of these units, and in particular, at Holyrood, I guess,
- we ... they weren't utilized at a very high level in the early
- 42 years and they're certainly being utilized a lot more now, so
- that may have led to the ability to have a longer life than
- 44 typical thermal units.

- 45 COMMISSIONER SAUNDERS: Yes, what studies
- specifically are you now referring to?
- 47 MR. HENDERSON: I don't remember the RFI, and I don't
- 48 have it in my collection here, but there was one that was
- done, and I think it was, I'm trying to think what the title
- 50 was. It was one that was performed by our engineering
- group to look at Holyrood.
- 52 COMMISSIONER SAUNDERS: Yes.
- 53 MR. HENDERSON: And the extension ...
- 54 COMMISSIONER SAUNDERS: Your inhouse studies.
- MR. HENDERSON: This was an inhouse study, and I am
- $\,$  familiar with it to the extent that I assembled the resumes of
- 57 all the people that were involved with that study for
- providing to a request for information.
- 59 COMMISSIONER SAUNDERS: Okay, thank you, Mr.
- 60 Henderson. That's all I have, Mr. Chair.
- 61 MR. NOSEWORTHY, CHAIRMAN: Thank you,
- 62 Commissioner Saunders. Commissioner Whalen?
- 63 COMMISSIONER WHALEN: Thank you, Chair. Good
- 64 morning, Mr. Henderson.
- 65 MR. HENDERSON: Good morning.
- 66 COMMISSIONER WHALEN: I just have a few questions
- actually, and unfortunately they go back to the hydrology.
- It's been a long time since I've looked at some of my
- by hydrology textbooks, but you may be aware that I have had
- 70 some experience, especially with the hydrology of even
- $\,$  hydro systems in some previous life. I'm just curious about
- Newfoundland Power's suggestion and proposal that
- 73 certainly seems to be coming forward in some subsequent
- testimony that will be coming forward on the use of the 30
- 75 year moving average, and I'm wondering if it would be
- 76 possible, it seems to me that we should be able to go back
- and look at your 50 year record and do some backwards
- 78 projections, if we can put it that way, if you could go back
- 79 and start at 1981 and provide ... I can do the spreadsheet,
- but I think it would be better if you did it, and provide the
- 81 information in terms of what your, in 1981, the 30 year
- record, the 30 year average will be a simple average, but it
- 83 would also be a moving average, but if you could go
- 84 forward and do your actual, your forecast and your actual
- 85 if you had used a 30 year moving average, versus your
- simple average that you're using, just based on your total
- 87 record? I'd just be interested in seeing whether or not what
- 88 you get would have been different than what you had
- 89 forecasted using those two methods, just starting in 1981.
- 90 It's a fairly simple thing to do and ...
- MR. HENDERSON: So just start using a 30 year average,
- 92 rolling average in 1981, moving forward, and you have a

- 1 new average every year ...
- 2 COMMISSIONER WHALEN: Yes.
- 3 MR. HENDERSON: Based on that 30 year ...
- 4 COMMISSIONER WHALEN: Yes, and compare it with
- 5 your prediction that you would have used if you were
- 6 using your total record, which is what you had been using,
- 7 I understand.
- 8 MR. HENDERSON: Right.
- 9 COMMISSIONER WHALEN: Is that something you can
- do fairly simply for us? It's not a ...
- MR. HENDERSON: No, that's not a ... I guess, you know,
- we could probably have that for you when we reconvene,
- I guess, after the two week ...
- 14 COMMISSIONER WHALEN: Like I said, I can do it myself.
- 15 I just think it would be better to come through you. As
- well, I'm wondering if Hydro has undertaken any time
- recently, and recently perhaps in the last five to ten years,
- any sort of an independent or, I'm going to say external or
- internal comprehensive review of your energy estimation
- 20 approach that you use in terms of how your treat your
- 21 hydrology data, and also whether or not you've had a look
- 22 at the data in any sort of a deterministic way, looking at it
- from a trend analysis perspective or a time series analysis
- to see if there have been any changes, any actual data set
- 25 that you might be able to look at the reasons for?
- MR. HENDERSON: I know we haven't done it.
- 27 COMMISSIONER WHALEN: You haven't?
- 28 MR. HENDERSON: No.
- 29 COMMISSIONER WHALEN: Okay, so you haven't done,
- 30 looking at all the inflow data for the last 50 years, there has
- not been an analysis of that data to look at trending or
- 32 impacts of weather patterns, overlaying weather patterns
- on the data set itself?
- 34 MR. HENDERSON: No.
- 35 COMMISSIONER WHALEN: Okay, as well, do you have
- 36 ... I think I know the answer to this, but do you have a
- model of your system itself that you can overlay your
- 38 hydrology forecast on and predict from a sensitivity
- analysis perspective, the impact of your forecast on the
- system operations?
- 41 MR. HENDERSON: Well, what we do, our model does, is
- it models all years.
- 43 COMMISSIONER WHALEN: Okay.
- MR. HENDERSON: Okay, so it doesn't look at just the
- forecast or the average. It looks at all years and the impact
- of all those years on our operations.

- 47 COMMISSIONER WHALEN: Okay, so it's ...
- 48 MR. HENDERSON: So what we do is we look, we take the
- 49 current circumstance reservoir level and project outwards,
- assuming that any one of the 50 years, if you like, could
- 51 reoccur starting today.
- 52 COMMISSIONER WHALEN: Okay.
- MR. HENDERSON: And how we should operate the
- 54 system in the coming week based on those ...
- 55 COMMISSIONER WHALEN: That's where your minimum
- operating curve is generated from.
- MR. HENDERSON: Yes, yeah.
- 58 COMMISSIONER WHALEN: And that minimum operating
- 59 curve is a moving curve?
- 60 MR. HENDERSON: Yes.
- 61 COMMISSIONER WHALEN: Okay, alright, just one other
- question actually. If Granite Canal had been coming on
- stream in 2002 as opposed to 2003, do you have any sense
- of what impact that would, might have had on your, your
- 65 prediction for your thermal generation?
- MR. HENDERSON: It would reduce the thermal by the
- amount that we would expect Granite Canal to produce on
- 68 average.
- 69 COMMISSIONER WHALEN: Which would be ...
- 70 MR. HENDERSON: So we're, I think we were talking of a
- 71 number 224 gigawatt hours approximately for Granite Canal
- 72 average, and if it came in halfway through the year, we'd
- have to do a split because the production wouldn't be 50
- 74 percent because you're coming in at the end of the run-off,
- 75 presumably you've got a full reservoir. You may get better
- 76 than half for the rest of the year. That would, however
- 77 much that energy turned out to be, say for argument's sake
- 78 it's 130 gigawatt hours, then that would be 130 gigawatt
- 79 hours less that we would produce at Holyrood.
- 80 COMMISSIONER WHALEN: So there is a direct one to
- one there.
- 82 MR. HENDERSON: Yes.
- 83 COMMISSIONER WHALEN: Whatever Granite Canal
- 84 comes off the other side.
- 85 MR. HENDERSON: That's right.
- 86 COMMISSIONER WHALEN: And Granite Canal is due to
- some on stream mid year 2003?
- 88 MR. HENDERSON: That's right.
- 89 COMMISSIONER WHALEN: Okay, I just had a question
- 90 noted here in terms of your forecasting as well. You said
- 91 yesterday that you always, you're forecasting for 2002 an

- average year? 1
- MR. HENDERSON: Yes. 2
- COMMISSIONER WHALEN: I bought a snowblower 3
- yesterday on the hopes that it won't be an average year. 4
- Do you always forecast an average year? 5
- MR. HENDERSON: We always use the forecast average 6 7
  - because like I think I've said that we don't know what's
- going to be happening, so all we can do is assume a normal 8
- ... to use, let's say a weather forecast that looks out that far, 9
- I would suggest to you it's not very dependable, and so we 10
- ... there are ... Environment Canada does do some kind of 11
- long-term projections, but they, when we've looked at them 12
- 13 historically, there are such a large range of error, it's not
- dependable. 14
- COMMISSIONER WHALEN: I guess you anticipated my 15
- next question, that's what I was going to ask you ... if you 16
- do go back and look at whether or not the weather lore or 17
- the fact that a wet year always follows a wet year, or a dry 18
- year always follows a dry year, those kinds of things, 19
- whether or not they have actually ... 20
- MR. HENDERSON: We've looked at that and it just doesn't 21
- happen. It's like last year was a very good year, and so far 22
- this year it's been the exact opposite. 23
- 24 COMMISSIONER WHALEN: Okay, alright. Thank you,
- Mr. Henderson. That's all I have. Chair. 25
- MR. NOSEWORTHY, CHAIRMAN: Thank you, 26
- Commissioner Whalen. I just have a few questions, Mr. 27
- Henderson, and that will be it. First of all, you put a whole 28
- new dimension on two parts hydrogen and one part oxygen 29
- for me, there's no question about that. As a former Deputy 30
- Minister of Municipal Affairs, I thought I had known as 31
- much as I could know about water measurement in terms of 32
- E-coli, Gerardia, Beaver Fever, and whatever else, but quite 33
- frankly that dealt with the quality of water, and this is 34
- dealing with the quantity, and I have a lot to learn in that 35
- regard. I try, I guess, and break fairly complex things down 36
- into simple concepts, and quite ironic, the concept that I've 37
- come up with here is the scales of justice, the two scales 38
- 39 with the pans on a fulcrum at the top, and I guess Justicia is the Roman goddess of justice, and she wore a blindfold,
- 40 and I can relate to that on the basis of this hydrology to be 41
- frank with you, and but anyway, the concept that I looked 42
- at here is really the scales of justice with a view to the 43
- hydraulic on one side, and the thermal on the other, and
- 44
- you, I guess, at the Control Centre, at the fulcrum at the top 45 46
- MS. GREENE, Q.C.: With the blindfold off (laughter). 47
- $(10:30 \ a.m.)$ 48
- MR. NOSEWORTHY, CHAIRMAN: Pardon? Balancing 49

these two, quite frankly, and I suppose on the ... and there is a conclusion that I'll reach on this. Looking at it, and Ms. Butler took you through a great deal of this, and certainly 53 I don't intend to do it again, but there are a lot of variables, I suppose, and assumptions in here. I'm looking at the water conversion factor, and I understand what that is ... converting water into the actual energy and I understand to some degree how that's arrived at, but quite clearly it is 57 dependent on measurement as it relates to the average historic sort of inflows and, and indeed, there was a considerable debate, and certainly it's a matter that rests 60 with this Board concerning the 50 year average that you 61 use versus a 30 year average, and certainly there is some 62 considerable difference in distinction depending on the assumptions again, and I think in respect of that aspect, there is also consideration and debate, and certainly it has an impact as well on the median versus the mean, I think, or the average, and indeed, there was some consideration about standard deviation and these are complex matters, no 69 question about that. Then the other aspect, another variable surrounds the fishery release and there was some 71 discussion around the 25 year average that you use there, and the average spill. All of these are, as I say, matters that 72 we will have to consider. On the other side, I think, of the 73 scales of justice that I refer to is the thermal, and again, 74 there are a number of assumptions that are around that. 75 76 Certainly the fuel conversion factor and, and the discussion around the average versus the wet and the dry 77 years, that you would use a different methodology, if you will, and certainly the price of fuel plays in that and I believe somebody had mentioned, certainly it's in the testimony that the simple two percent decrease 81 surrounding the fuel conversion factor certainly could 82 mean as much as a half a million dollars, I believe, in terms 83 of the additional costs that would be associated with the 85 system, but I think overriding these discussions in relation to the different methodologies and even time horizons, 86 there doesn't seem to be a lot of information on industry practices that might exist, and clearly your evidence is your evidence in relation to what's before us, but looking at, 90 again, coming back to Ms. Butler's cross-examination, I guess, depending on how that balance moves for every tilt, if you will, that might be towards the right-hand side of that, which would be the thermal side, 100 gigawatt hours would add \$3.3 million to the cost. So clearly, it's a critical, critical area for consideration of this Board, and I'm glad we 95 have Commissioner Whalen who has some good 96 appreciation, I think, of this issue, but certainly we will all 97 have to consider that. It's a backdrop of that, which is what we have to consider, in any event, as a board. Are there any directions or areas of improvement, or comments that you would make that might help us in our consideration of this matter. Just for example, I think ... you know, I've jotted 103 a couple of them down. I think there was a discussion,

- there's room to move in terms of the fuel conversion factor, 1
- once that becomes available at the end of the year. I think 2
- that was one area that may improve the forecast. The other 3
- 4 one. I think, was a discussion around the conversion on
- the hydro side, if you will, for revisiting this after the 5
- efficiency improvements have been made to the system 6
- 7 essentially?
- MR. HENDERSON: What we have provided is the 8
- conversion factors after the improvements were made. We 9
- went with the new EMS and the economic dispatch, and so 10
- on, in the early nineties, so we've only used the conversion 11
- factors since then. So we thought that that was a valid way 12
- to go to reflect our most recent experience. 13
- MR. NOSEWORTHY, CHAIRMAN: Right. 14
- MR. HENDERSON: So ... 15
- MR. NOSEWORTHY. CHAIRMAN: I think there was 16
- discussion about more recent information in terms of the 17
- upgrades that you've actually done being factored into 18
- 19 that.
- MR. HENDERSON: The upgrades are also factored in. 20
- They are part of that record. They came in over a number 21
- 22 of years, so they are having an impact on it, depending on
- the length of time since the improvements were made, but 23
- they weren't all done in one year. 24
- MR. NOSEWORTHY, CHAIRMAN: Right, but I thought 25
- there was a discussion around the improvement in terms of 26
- the length of time bringing the upgrades into the formula 27
- on a more updated basis, if you will. 28
- MR. HENDERSON: The thing to do, I think, is as time goes 29
- on, those conversion factors ... as we gain more experience 30
- and we have greater variances in our hydraulic production, 31 those conversion factors will start to trend to a new number 32
- that would be more ... the difficulty at this point in time is 33
- that we don't have a lot of years since the runners were 34
- replaced at Bay d'Espoir, to get a real good handle on it 35
- because we've had some good years, and but those 36
- particular years, because they were good water years, you 37
- tend not to run your hydro quite as efficiently as you 38
- would if they were not so good water years because you're 39
- trying to avoid having to spill water. Once it's spilled, 40
- that's the worst efficiency you can have, so during that 41
- period of time there was a considerable amount of time 42
- where we were just running our hydro units as hard as we 43
- could to make sure we used every drop of water we could,
- 44
- so that had a tendency to bring our conversion factors for 45
- the hydro plants a little lower than they would be in a better 46 year, so there is a play in there of those factors, and 47
- unfortunately we don't have a lot of years of experience 48
- since the runners were replaced to get the full appreciation 49
- of their impact. 50

- MR. NOSEWORTHY, CHAIRMAN: Any other areas?
- MR. HENDERSON: I can't think of any that ...
- MR. NOSEWORTHY, CHAIRMAN: Any other focus that
- you might put on this for the Board at this point in time, I
- guess, and certainly there has been a lot of information
- that's been provided and ...
- MR. HENDERSON: I can't think of anything off the top of 57
- 58 my head. I mean the way we've done it and treated this is
- let's get some experience so that we know what
- improvement we're getting because it's so dependent on 60
  - system load and the variability of the hydrology as to how
  - your actual conversion factors at Holyrood and the
  - conversion factors for our hydro plants come out, and
  - we've struggled with this, because back in the early
- 64
- nineties, I think I mentioned this earlier on, was that when 65 we put in the new Energy Control Centre, we had some
- discussion at the Board about the improvements we were 67
  - going to get and we, I did a lot of work myself in trying to
- determine if we can actually see the improvement, but there
- was so many variables in there, there was no way of pulling 70
- it out because we had no ... what you want to do is 71
- compare performance before and after, and see the 72
- improvement, but when you looked at the years before the
- Control Centre went in versus the years after, they were so
- totally different, the load levels were different, the
- generation mix was different, the water conditions were
- different, and they just threw the thing out of whack. You
- couldn't do it, so you need a longer period of time to get a 78
- good blend of wet and dry years and load variations and so
- on to get a really good handle on it, so it's a difficult area to
- really predict, so that's why we depended on, let's get some
- years of experience to see, in fact, how well we do.
- MR. NOSEWORTHY, CHAIRMAN: So there's no particular additional advice or direction you can give us at
- this point in time?
- MR. HENDERSON: I wish I could suggest something but
  - I can't think of anything off the top of my head, I'm sorry.
- MR. NOSEWORTHY, CHAIRMAN: Just on page 7 of your
- direct testimony, it outlines there in some terms what I will
- call sort of the protocol for the management of the system. 90
- I mean you referred to the economic dispatch, and what I
- understand from that is basically it's sort of the economic
- loading of the operation that's done by the Control Centre
- to a degree.
- MR. HENDERSON: That's right.
- MR. NOSEWORTHY, CHAIRMAN: It's how it manages
- the system. Could you just give us, and I think Mr.
- Kennedy refers to this as the 30,000 foot view, but could
- you give us some idea of the protocol that actually occurs 100 within the system as to what's on stream at any given time,

- and how the additional components, depending on load,
- 2 would kick in?
- 3 MR. HENDERSON: Okay, the, one of the first components
- 4 in determining how we, what generators we put on is the
- 5 water levels in the reservoirs.
- 6 MR. NOSEWORTHY, CHAIRMAN: Yes.
- 7 MR. HENDERSON: So the water levels in the reservoirs are input into our computer program that we use, and we run 8 that every week, and it takes into account, as I was 9 explaining to Commissioner Whalen, all the different 10 hydrological sequences that we could see, and it comes up 11 with a recommendation, the program does. It tries to 12 13 optimize looking at thermal costs versus the hydraulic, the water available, if you like, and the, and making sure that 14 we always retain enough water to meet a dry period. It 15 comes up with a recommendation for splitting our 16 generation between our different units. We use that along 17 18 with our engineering judgement and experience, the three people, engineers in our department, and we get together 19 every week and we review this and determine a mix of our 20 hydro units for that week. What we will determine is how 21 many hours per day we will operate our different hydro 22 23 units. For instance, Hines Lake, we may decide to run it for 18 hours a day, and similarly for Upper Salmon. Cat Arm, 24 we will determine a similar type of thing, what level of 25 output or how many hours we will operate the unit, and 26 also within that mix is we will determine a level for 27 production for Holyrood. 28
- MR. NOSEWORTHY, CHAIRMAN: So are these, are these 29 generally quite interchangeable, one week to the next? I 30 mean is there a real management system that goes on here? 31 Clearly Bay d'Espoir is your largest. I mean that would be, 32 I would assume, operating to some degree on a continuous 33 basis where it can. What generally would be the next areas, 34 for example, that would come into play? Are your nugs 35 always operating? 36
- 37 MR. HENDERSON: Yes.
- 38 MR. NOSEWORTHY, CHAIRMAN: They are ...
- MR. HENDERSON: The nugs, we would, in our analysis, 39 almost becomes, I'll say a load modifier. It reduces the 40 amount of load that we have to supply from our generation 41 that we have control over, so nugs are running all the time. 42 The Star Lake one is pretty well always running. It's about 43 17 or 18 megawatts, 24 hours a day. The Rattle Brook one 44 is a smaller plant and it's a little more variable, but it doesn't 45 have a major impact. It's only four megawatts, and typically 46 it's probably around one and a half, or something like that, 47 so it doesn't have a major impact. Some of the things that 48 do have impact is the hydraulic conditions of our 49 customers. For instance, in particular, Deer Lake Power has 50

- a large generating station and ACI in Grand Falls, they have impact, so we take them into account in our model. We model their hydraulic system as well. So all of those, but they all were sort of treated as load modifiers and so then the ...
- MR. NOSEWORTHY, CHAIRMAN: So load modifiers, that would be at the, sort of toward the end of the system, if you will, in terms of calling these on?
- MR. HENDERSON: When we look at the load that Hydro's generating units has to meet, we would take away what they are supplying to come up with the load that we have to meet, and then we would sort of use that analysis then to determine how we're going to use our generators to meet what's left, and so the water levels really dictate how much we produce at Holyrood, and at Holyrood we will determine if we are going to run it, say at an average of 300 megawatts, or 400, or something like that. That will change, 67 not necessarily weekly. It really changes when we have a 69 significant rainfall event or something like that, or we see a significant dry period. It will change. It won't necessarily change weekly, unless we have like a storm that came through St. John's a few weeks ago, if that had occurred at Bay d'Espoir, that would have dramatically changed, and you'd see a big shift from one week to the next.
- 75 MR. NOSEWORTHY, CHAIRMAN: It may very well be in 76 here. I haven't seen it. The power purchases in terms of 77 ACI, Corner Brook, and the nugs, is that contained in an 78 exhibit here?
- MR. HENDERSON: There are a number of RFI's dealing with some issues with power purchases.
- MR. NOSEWORTHY, CHAIRMAN: Okay, okay, I'll find that. Thank you. Just on page 3 of your direct testimony, okay, line 14 where it talks about the increase of 59.6 83 percent. It says this increase is due to Hydro's experience with water to energy conversion factors and the 85 implementation of the management system in '89, the addition of 10 years of hydrology for that, and the 87 inclusion of Roddickton. So am I understanding that correctly, that Roddickton in terms of the physical plant itself would clearly add to the system but the others are a matter of manipulating the factors that are concerned, and 91 the conversion factors, and the hydrological data in 92 producing that additional 60 gigawatt hours?
- 94 MR. HENDERSON: That's right, the, it's basically adding 95 another ten years of hydrological record or inflow record, 96 and the conversion factors that we experienced since the 97 last rate hearing, and the addition of the Roddickton mini-98 hydro.
- 99 MR. NOSEWORTHY, CHAIRMAN: So it's not any actually physical ... it's a matter of the data changing.

- 1 MR. HENDERSON: That's the net result of the data
- 2 change.
- 3 MR. NOSEWORTHY, CHAIRMAN: Runners and exciters,
- 4 I think Mr. ... on page 8 of your direct testimony, Mr.
- 5 Henderson, there's a reference, I think, down at the bottom
- of the page here, the ECC staffed 24 hours, and in addition
- 7 to system control manages after-hours rural system
- 8 customer trouble, so do they actually respond to customer
- 9 ... I mean do they actually conduct, or are involved in
- 10 customer service?
- 11 (10:45 a.m.)
- MR. HENDERSON: Yes, our 1-800 number for trouble calls
- after hours goes into the Control Centre, and the Control
- 14 Centre staff will, if they get a call will call the on-call person
- for that area and ask them to go to see to that customer.
- MR. NOSEWORTHY, CHAIRMAN: So the rural systems,
- this is what you're referring to, is it?
- MR. HENDERSON: That's right, and it covers all rural
- systems, if there is a call that came from Nain, it would
- 20 come into the Control Centre at night, and we would call
- somebody, now we wouldn't get many from Nain because
- in Nain people will call the guy, everybody in Nain knows
- 23 who operates the plant and they'll probably call him
- 24 directly.
- MR. NOSEWORTHY, CHAIRMAN: Sure, I'm sure, yes,
- and they're probably in part getting blamed for this
- increase, I would think. But that's, essentially that's Mr.
- Reeves' area, it's just that it would be a matter of facilitating
- the customer response.
- 30 MR. HENDERSON: That's correct.
- 31 MR. NOSEWORTHY, CHAIRMAN: In that area, okay. On
- 32 RH-3 and RH-2, just a question on reconciliation. RH-3
- shows the difference, I believe, between 2001 filed and 2000
- actual as roughly a million dollars.
- 35 MR. HENDERSON: Yes.
- 36 MR. NOSEWORTHY, CHAIRMAN: Okay, in terms of
- 37 system equipment maintenance. That difference is
- showing up at \$687,000, and the description, I think, on
- 39 note one indicates that with regard to the hydro plant,
- upgrades there that total the \$687,000, but it appears that
- 41 the actual difference based on **RH-3** is a million dollars.
- MR. HENDERSON: I think the, I think there's confusion as
- to what you're comparing. We're comparing in RH-1, I
- think ... I have to ...
- 45 MR. NOSEWORTHY, CHAIRMAN: **RH-1**, it shows the
- difference here on ... I'm looking under maintenance
- 47 materials, and it shows the difference between the
- approved budget and the budget as filed of \$687,000.

- 49 MR. HENDERSON: That's right, that's comparing 2000 ...
- 50 that's two different forecasts, if you like, for 2001. The
- other is comparing 2000.
- 52 MR. NOSEWORTHY, CHAIRMAN: My mistake, sorry
- 53 about that, yeah, okay. I thought they were apples and
- apples. I notice there's a new Vice-President that's been
- 55 appointed recently. In terms of management meetings and
- 56 that that you would participate in, how often do they
- 57 generally occur?
- 58 MR. HENDERSON: I would have a weekly meeting with
- 59 Mr. Haines.
- 60 MR. NOSEWORTHY, CHAIRMAN: Okay, and you would
- 61 discuss any issues surrounding your area at that weekly
- 62 meeting?
- 63 MR. HENDERSON: Obviously, any problems arising can
- be discussed at any time. There's a good communications
- 65 path there.
- 66 MR. NOSEWORTHY, CHAIRMAN: Okay, that's all I have.
- 67 Thank you very much, Mr. Henderson.
- 68 MR. HENDERSON: You're welcome.
- 69 MR. NOSEWORTHY, CHAIRMAN: It's ten to 11:00.
- 70 Perhaps what we could do now is break and then we'll
- 71 return for questions on matters arising, okay? Fifteen
- 72 minutes, thank you.
  - (break)
- 74 (11:15 a.m.)

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- 75 MR. NOSEWORTHY, CHAIRMAN: Thank you, moving to
- 76 questions on matters arising, and I'll ask Newfoundland
- 77 Power to begin please?
- 78 MS. BUTLER, Q.C.: Thank you, Mr. Chairman. Mr.
- 79 Henderson, I only have two questions arising, and they
- both relate to questions from the Chair himself.
- 81 MR. HENDERSON: Uh hum.
- 82 MS. BUTLER, Q.C.: The first, I believe, is in relation to a
- 83 report which you mentioned and which had discussed
- 84 Holyrood's condition.
- 85 MR. HENDERSON: Yes.
- 86 MS. BUTLER, Q.C.: And I think you'll find it at NP-59. I
- 87 don't know if it's electronically scanned. Okay, we have to
- 88 look at the hard copy. Mr. Henderson, the question that
- 89 Newfoundland Power had asked in relation to this request
- 90 for information was to provide copies of the report on the
- 91 condition surveys that were completed on Holyrood
- 92 thermal units one and two.
- 93 MR. HENDERSON: Yes.

- MS. BUTLER, Q.C.: And a copy of the condition survey 1
- which was completed in 1999 was attached. Is this the 2
- condition survey that you mentioned in your evidence? 3
- MR. HENDERSON: That's it. 4
- MS. BUTLER, Q.C.: Okay, I'm corrected by my learned 5
- friend here. I think it arose from a question of Mr. 6
- Saunders, and not yourself, but in any event, I wonder, Mr. 7
- Henderson, could you just read conclusion five? 8
- MS. GREENE, Q.C.: Is it page 21? 9
- MS. BUTLER, Q.C.: Yes, it is page 21. 10
- MR. HENDERSON: Thank you. The three units in the 11
- Holyrood generating station should be capable of reliable 12
- operation for a period of at least 20 years if operated as 13
- they have in the past. If the annual operating hours are 14
- increased significantly in future years, this conservative 15
- estimate of remaining useful life should be reassessed. In 16
- practice, when the accumulated operating time on a unit 17
- nears 200,000 hours, Hydro should implement a more 18
- detailed life management extension program as has been 19
- done by other utilities having mature power plants. 20
- MS. BUTLER, Q.C.: And this report, of course, is dated 21
- 1999. Okay, thank you. Mr. Chairman, in relation to a 22
- question that you put to Mr. Henderson, you said you 23
- 24 thought that there was some suggestion that the movement
- of a simple two percent difference in the fuel conversion 25
- factor would result in a difference of \$500,000. I just want 26
- to refer, if I might, to NP-262, and the answer that was 27
- given there, Mr. Henderson, is in fact on the screen. In this 28
- particular example, it was a two percent reduction in the 29
- forecast Holyrood fuel efficiency factor that we were 30
- addressing, and I think the answer that was given says, 31
- starting at line 7, assuming the cost of service is 32
- established as per your application at \$20.00 a barrel, using 33 a 610 kilowatt hour conversion factor, the impact on 2002
- 34 results would be, first of all, an increase to the RSP balance
- 35
- of approximately \$500,000, and secondly, a reduction in 36
- Hydro's net income of approximately \$1.5 million, is that 37
- correct? 38
- MR. HENDERSON: That's right. 39
- MS. BUTLER, Q.C.: I just wanted to make that reference, 40
- Mr. Chairman, for a complete answer. Thank you very 41
- much, and thank you, Mr. Henderson. 42
- MR. HENDERSON: You're welcome. 43
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. 44
- Butler. I'll move to the Industrial Customers. Mr. 45
- Hutchings, please? 46
- MR. HUTCHINGS: Thank you, Mr. Chair. I apparently had 47
- the same two notes that Ms. Butler had, so we have no 48

- questions arising.
- MR. NOSEWORTHY, CHAIRMAN: Thank you. Mr.
- Browne or Mr. Fitzgerald?
- MR. FITZGERALD: We have no questions arising from
- that, Mr. Chairman, thank you.
- MR. NOSEWORTHY, CHAIRMAN: Let's go back to
- 55 counsel?
- MR. KENNEDY: Nothing arising, Chair.
- MR. NOSEWORTHY, CHAIRMAN: If I had known this 57
- before the break I might have been ...
- MS. GREENE, Q.C.: I would have kept you after the break
- though.
- MR. NOSEWORTHY, CHAIRMAN: Pardon?
- MS. GREENE, Q.C.: I would have kept you after the break.
- MR. NOSEWORTHY, CHAIRMAN: On redirect?
- MS. GREENE, Q.C.: I have no redirect for Mr. Henderson,
- so that completes Mr. Henderson's testimony on behalf of
- Hydro. 66
- MR. NOSEWORTHY, CHAIRMAN: Thank you very much,
- Mr. Henderson.
- 69 MR. HENDERSON: You're welcome.
- MS. GREENE, O.C.: If it's appropriate at this time, I have a
- 71 number of documents to file in relation to undertakings that
- have been given since the commencement of the hearing.
- MR. NOSEWORTHY, CHAIRMAN: Sure.
- MS. GREENE, Q.C.: And for the first time I felt
- disorganized with the documents because they all come in
- (inaudible) copies here this morning, so you'll have to bear
- with me for a moment, I don't have them in the order ... the 77
- first document that I have to circulate relates to an 78 undertaking that was given during cross-examination of
- Mr. Wells by counsel for Newfoundland Power, and the 80
- undertaking is found in the transcript of September 25th at 81 page 5 where Mr. Wells undertook to provide a list of the
- contracts where we contract out a labour component of the
- work, so I have to distribute at this time the contracted out 84
- services since 1998, and I guess this should be marked as 85
- undertaking Hydro number ...
- MR. KENNEDY: U-Hydro No. 5. 87

# **U-HYDRO NO. 5 ENTERED**

- MS. GREENE, Q.C.: So this is a listing of contracts where
- Hydro has contracted out services that otherwise may have
- been done inhouse, and what we would refer to as contract 91
- services with a labour content. The next document that I
- have to distribute relates to an undertaking that was given

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by Mr. Wells on September 26th to the Consumer Advocate, and at that time Mr. Wells undertook to consider the suggestion of the Consumer Advocate regarding a communications campaign, and Mr. Wells undertook to consider the advisability of undertaking a communications campaign at this time on the price of No. 6 fuel, its impact on rates, and the need to conserve, and what I have to file in response to that undertaking are two letters; one from Newfoundland Power signed by Mr. Philip Hughes, who is the President and Chief Executive Officer, and one from Mr. Wells, and when you ... you can see when you receive copies of the documentation that representatives of both utilities have met to consider the suggestion and while the position of each utility is set out in the letter, the conclusion with respect to the particular question is that in the opinion of both utilities, it would not be appropriate to start that communications campaign at this time, but it would be more appropriate at the conclusion of the hearing when we know the specific impact on the rates and we would be able to advise customers in that context following the hearing, but I have copies of both letters to distribute at this time. And again to mark this, I guess it could be undertaking Hydro number

MR. KENNEDY: Yes.

# **U-HYDRO NO. 6 ENTERED**

MS. GREENE, Q.C.: The next document that I have to distribute relates to a request of Commissioner Saunders to Mr. Reeves, and the undertaking is found on the transcript of October 5th, and covers two pages, pages nine and ten, but it relates to the cost of fuel for vehicles split by on-road and off-road, and it also included a request to provide a sample type of report that Hydro would receive from PHH as well as a copy of a typical type of report that Mr. Reeves would receive with respect to those costs as well, so I have a copy of documentation to distribute now at this time in response to that request.

MR. KENNEDY: U-Hydro No. 7, counsel.

## **U-HYDRO NO. 7 ENTERED**

MS. GREENE, Q.C.: The next documentation that I have to distribute relates to a request from Commissioner Saunders. Again, it was made on October 5th, and the undertaking was found on page ten, and it is covered in lines 58 to 65 of the transcript, and Commissioner Saunders asked that we provide copies of the policies relating to the use of vehicles, and I have copies of two policies to distribute at this time in response to that request, and I guess this would be undertaking number 8 for Hydro.

MR. KENNEDY: U-Hydro No. 8.

## **U-HYDRO NO. 8 ENTERED**

MS. GREENE, Q.C.: The next undertaking relates to the calculation of the diesel fuel expense and this was a request from counsel for Newfoundland Power which is found in the transcript of October 5th at page 29, line 37 to 48, and it related to a reconciliation of the amount for diesel fuel as shown in JC Roberts Schedule No. 1, with that indicated in NP-219, and I have a schedule to distribute at this time in response to that undertaking.

MR. KENNEDY: That would be U-Hydro No. 9.

### **U-HYDRO NO. 9 ENTERED**

MS. GREENE, Q.C.: The next undertaking relates to reliability centered maintenance, and this was a request from counsel for Newfoundland Power found in the transcript of October 5th, and there are a number of references at pages 30, 31, and 32 of the transcript, and Hydro was asked to provide the cost of the implementation of RCM as well as the projected savings arising from the implementation of RCM. I have a copy of a schedule to distribute at this time in response to that undertaking.

MR. KENNEDY: U-Hydro No. 10.

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#### **U-HYDRO NO. 10 ENTERED**

MS. GREENE, Q.C.: That completes the documentation that I have to file in response to previous undertakings. I have one correction which isn't an undertaking but when Mr. Reeves was responding to questions from Commissioner Powell he noticed on slide eight of his presentation, that one of the lines had not been properly coloured, so I have a copy of a revised slide eight to correct that, and it was one very small line, if you will recall, so it wasn't in response to an undertaking, but I would like to file a revised slide eight to make that correction. And just to update where we are, our records would indicate that we have four items to still respond to. One is the undertaking given to Ms. Andrews on October 5th relating to the incentive plan for management. That will be circulated early next week, which would be a description of that plan. The second related to a request of the Consumer Advocate to provide an update after discussions with the Department of Municipal Affairs on the possible relocation of Harbour Deep, and that we will provide later. We would assume that the later we file it, the more relevant or more current it would be in terms of the exact plan, and we have already been in discussions with the Department of Municipal Affairs and plan to file that at a later time in the hearing. The third item relates to the 1997 actual cost of service, which will be filed in response to the information request of the Industrial Customers, IC-18, and this would be the last piece of information to satisfy the agreement reached with the Industrial Customers with respect to IC-18. That cost of service will be filed early next week. And the fourth items arises from Commissioner Whalen's request

- this morning, so those, according to our records, would be 1
- the four outstanding items. As indicated, two will be 2
- addressed early next week, Harbour Deep will come later, 3
- 4 and we will also address later the request of Commissioner
- Whalen this morning. Thank you, Mr. Chair. 5
- MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms. 6
- 7 Greene, very much.
- MR. KENNEDY: Just one ... the revised sheet, just for the 8
- purposes of labelling that, I was just going to label it RH 9
- No. 4 (revision). 10

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- MS. GREENE, Q.C.: It's DWR ... 11
- MR. KENNEDY: I'm sorry, DWR. 12
- MS. GREENE, Q.C.: Would the number change? 13
- MR. KENNEDY: It would, yeah. 14

#### **EXHIBIT DWR-4 (revised)**

- MR. NOSEWORTHY, CHAIRMAN: Thank you, Counsel. 16
- I guess that concludes the proceedings for today. We will 17
- see those of you who are travelling to St. Anthony, I 18
- guess, on Monday. For others, we are scheduled for the 19
- whole group, including others, we are scheduled to 20
- reconvene on October the 29th to deal with the cost of 21
- capital, and we will look, I guess, probably toward the end 22
- 23 of next week for what may be on our calendar for St. John's
- during the public participation days. It's limited right now. 24
- It may expand, and we'll make a decision as to whether we'll 25
- sit on those days to deal with evidence, but I think it's 26
- probably only appropriate that we perhaps not revisit that 27
- until the end of next week, in any event, but clearly we'll 28 have to give people sufficient notice to prepare if we are
- 29 going to sit on evidence at the end of that week. Would 30
- Mr. Browne, if there's any updates you could give us 31
- throughout even today as to what might be facing us in St.
- 32
- Anthony, we'd appreciate that, and any additional 33
- information. 34
- MR. BROWNE, Q.C.: I'll work on it throughout the 35
- afternoon. 36

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- MR. NOSEWORTHY, CHAIRMAN: Sure. 37
- MR. BROWNE, Q.C.: And I just got more messages from 38
- the Confederation Building there during the break that they 39
- now have some names to put to presenters, and I'll pass 40
- these on to the Board as soon as I have them. 41
- MR. NOSEWORTHY, CHAIRMAN: Thank you very much. 42
- We'll, as I said, for those, we'll see you in St. Anthony, for 43
- others, we'll see you on the 29th of October if not before. 44
- Thank you very much, and have a good weekend. 45
  - (hearing adjourned)