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<p>1 (9:35 A.M.)</p> <p>2 CHAIRMAN:</p> <p>3 Q. Good morning. Mr. Kennedy, other than the</p> <p>4 scheduling for today and the remainder of the</p> <p>5 hearing, are there any other preliminary</p> <p>6 matters that -</p> <p>7 MR. KENNEDY:</p> <p>8 Q. I don't believe so, Chair.</p> <p>9 CHAIRMAN:</p> <p>10 Q. We do have available a potential date. I</p> <p>11 don't know if, Mr. Kennedy, you've had an</p> <p>12 opportunity to discuss with counsel for the</p> <p>13 various parties, and that would be October the</p> <p>14 18th to finalize the evidentiary portion of</p> <p>15 the hearing, and I'm assuming on the 18th that</p> <p>16 the parties would be in a position to present</p> <p>17 any final argument at that particular point as</p> <p>18 well. Is that a good assumption?</p> <p>19 HUTCHINGS, Q.C.:</p> <p>20 Q. If I might speak to that?</p> <p>21 CHAIRMAN:</p> <p>22 Q. Perhaps I need to ask the Industrial Customers</p> <p>23 first, because they'd be finishing up on the</p> <p>24 18th.</p> <p>25 HUTCHINGS, Q.C.:</p>	<p>1 Q. I had an exchange of e-mails with Mr. Kennedy</p> <p>2 last night. I don't know whether he got my</p> <p>3 second one. He did. But I had initially</p> <p>4 indicated to him that we didn't have any</p> <p>5 problem at all with the 18th. When I checked</p> <p>6 the itineraries that have been provided to me,</p> <p>7 I discovered that there was no way that I</p> <p>8 could in fact get here for 9:30 on the morning</p> <p>9 of the 18th. I can, however, get a flight on</p> <p>10 that morning, which will put me here sometime</p> <p>11 after 10:00, and would allow us to proceed say</p> <p>12 at 11:00 and carry on until we could conclude.</p> <p>13 My suggestion would be though, however, that</p> <p>14 if that has to be the case, we'd prefer if it</p> <p>15 were possible to do submissions in writing,</p> <p>16 rather than to try to do them on that day,</p> <p>17 simply by reason of the time constraints, and</p> <p>18 that would be the suggestion I'd leave with</p> <p>19 the Board. I had also mentioned to Mr.</p> <p>20 Kennedy, because at one stage I think he had</p> <p>21 mentioned the possibility of the 25th of</p> <p>22 October being available, and that could be a</p> <p>23 day when we could finish the whole thing,</p> <p>24 including submissions, if that was more</p> <p>25 convenient. But we can certainly accommodate</p>
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<p>1 the completion of the evidence on the 18th, I</p> <p>2 think, subject to starting a little bit later</p> <p>3 in the morning than we normally would. And</p> <p>4 there's always the risk, I guess, of something</p> <p>5 going wrong with that flight in the morning,</p> <p>6 but that would be a risk we'd have to</p> <p>7 undertake, I guess.</p> <p>8 CHAIRMAN:</p> <p>9 Q. Ms. Greene, do you have any comment with</p> <p>10 regard to the scheduling or particularly with</p> <p>11 regard to final argument?</p> <p>12 GREENE, Q.C.:</p> <p>13 Q. On the schedule, the 18th certainly is</p> <p>14 acceptable to Hydro. If it is the 25th, we</p> <p>15 would need to have advance notice. Right now</p> <p>16 myself and Mr. Roberts, who would be the</p> <p>17 witness, are scheduled to be in Labrador with</p> <p>18 people who are travelling from other parts of</p> <p>19 Canada and the United States on those days.</p> <p>20 So we would have to rearrange our schedules</p> <p>21 and advise other parties who are travelling</p> <p>22 from outside of the province. So we would</p> <p>23 prefer the 18th, with respect to the schedule.</p> <p>24 Obviously, if there's no alternative but the</p> <p>25 25th, we will have to change our other plans</p>	<p>1 and that of other parties and try to</p> <p>2 reschedule that other commitment.</p> <p>3 CHAIRMAN:</p> <p>4 Q. Written argument is fine with Hydro, is it?</p> <p>5 GREENE, Q.C.:</p> <p>6 Q. With respect to argument, in the past, I</p> <p>7 guess, for the Capital Budget, we have--and</p> <p>8 for the GRA, we have done written and oral,</p> <p>9 both. With respect to it, yes, written</p> <p>10 argument only is acceptable to Hydro. I have</p> <p>11 not spoken to Board counsel or to the other</p> <p>12 parties about that. One suggestion that I was</p> <p>13 going to make to them, I'll make now on the</p> <p>14 record. Based on our experience, what I was</p> <p>15 going to suggest is it might be more useful or</p> <p>16 practical if we, Hydro, replied to the other</p> <p>17 parties' written argument. In the past, for</p> <p>18 example, I would file the argument on the</p> <p>19 Capital Budget, having to deal with each and</p> <p>20 every project, because I don't know at that</p> <p>21 time the ones that the Industrial Customers</p> <p>22 are objecting to. And then I have to file a</p> <p>23 reply that zeroes in on just the projects that</p> <p>24 they object to. While there are issues of</p> <p>25 law, and the only one here being, that I can</p>

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<p>1 GREENE, Q.C.:  2 tell at this time, is the rate base issue.  3 There really aren't that many issues of law.  4 My suggestion is that Hydro would file a reply  5 once the other parties file their argument,  6 without Hydro first filing an argument.  7 CHAIRMAN:  8 Q. Mr. Hayes, any comment on these issues?  9 MR. HAYES:  10 Q. Yes, Mr. Chair. On the scheduling, the 18th  11 is acceptable to Newfoundland Power, as  12 discussed. The 25th could present a real  13 problem for us, as Mr. Alteen will be out of  14 the province and, as I indicated yesterday,  15 there's a very possible likelihood that I may  16 be at the maternity ward. So we certainly  17 would prefer the 18th. As for argument,  18 written argument is fine with us and we don't  19 have any problem with what's being suggested.  20 CHAIRMAN:  21 Q. I think it would be our preference to go with  22 the 18th, as opposed to the 25th. We'd rather  23 do it sooner, as opposed to later, and we  24 think that's in the best interest of the  25 parties. Certainly we want to deal with this</p>	<p>1 as expeditiously as possible.  2 With regard to a start time on the 18th,  3 I'm trying to accommodate you getting in.  4 You'd be flying in that morning, you  5 indicated, Mr. Hutchings? Is that correct?  6 HUTCHINGS, Q.C.:  7 Q. Yes, Mr. Chair. I could, with reasonable  8 confidence, provided the flight goes at all, I  9 should certainly be able to be here by 11:00.  10 CHAIRMAN:  11 Q. All right. Well, we'll indicate a start time  12 of 11:00 on the 18th and probably with a view  13 to initially running until approximately 1:30,  14 with some form of a break at that particular  15 point in time and trying to finish up on that  16 particular day in the afternoon. With regard  17 to the argument portion and order of  18 presentation and what have you, we'll take it  19 under advisement and we'll deal with that  20 perhaps a little bit later. With that then, I  21 guess, we're ready for the next panel.  22 GREENE, Q.C.:  23 Q. Thank you, Mr. Chair. The next area we are  24 covering is the Mobile Radio Project, and for  25 that one project, we have a panel so that Mr.</p>
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<p>1 Eric Downton and Mr. Gerard Dunphy have joined  2 Mr. Haynes on the panel for this particular  3 project, and after they're sworn, we will go  4 through what their positions are, et cetera,  5 with Hydro.  6 CHAIRMAN:  7 Q. Thank you.  8 MR. GERARD DUNPHY (SWORN)  9 CHAIRMAN:  10 Q. State your name for the record, please.  11 A. Gerard Dunphy.  12 MR. ERIC DOWNTON (SWORN)  13 CHAIRMAN:  14 Q. State your full name for the record, please.  15 A. Eric Downton.  16 CHAIRMAN:  17 Q. And I guess, Mr. Haynes, you're still under  18 oath.  19 MR. HAYNES:  20 A. Yes.  21 GREENE, Q.C.:  22 Q. For the new members of the panel, I was going  23 to introduce them and their positions at  24 Hydro. Mr. Downton, what is your current  25 position at Hydro and what are the</p>	<p>1 responsibilities of that position?  2 MR. DOWNTON:  3 A. In my current position, I'm director of  4 information systems and telecommunications in  5 the production department, and I'm responsible  6 for planning and the operations of the  7 Corporation's information systems and  8 telecommunications facilities.  9 Q. How long have you been with Hydro, Mr.  10 Downton?  11 MR. DOWNTON:  12 A. I've been with Hydro approximately 25 years.  13 Q. And during your career at Hydro, what  14 positions have you held prior to your current  15 one?  16 MR. DOWNTON:  17 A. I've held a number of positions with Hydro in  18 the telecontrol area. I've been electrical  19 plant engineer at the Holyrood generating  20 station. I've held position as project  21 manager for the energy management project, and  22 manager of the energy management systems  23 group, and manager of the telecontrol and  24 energy management systems group.  25 Q. Mr. Dunphy, what is your current position at</p>

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<p>1 GREENE, Q.C.: 2 Hydro? 3 MR. DUNPHY: 4 A. My current position is manager of the 5 infrastructure and software support section of 6 the information systems and telecommunications 7 division. 8 Q. And in that position, which is in what we call 9 the IS&amp;T area, what are your responsibilities? 10 MR. DUNPHY: 11 A. My department is responsible for the operation 12 of all of Hydro's computing and 13 telecommunications infrastructure. 14 Q. How long have you been with Hydro? 15 MR. DUNPHY: 16 A. I've been with Hydro approximately 13 years. 17 Q. And how long have you been in your current 18 position? 19 MR. DUNPHY: 20 A. Approximately one and a half years. 21 Q. Prior to your current position, what positions 22 did you hold at Hydro? 23 MR. DUNPHY: 24 A. Upon arriving at Hydro in 1991 and until 2000, 25 I held the position of Communications</p>	<p>1 engineer. From 2000 to 2002, I held the 2 positions of project leader and senior project 3 leader. 2002 to 2003, I was manager of the 4 network services section, and from 2003 5 present in my current position. 6 Q. Prior to joining Hydro, you spent some time 7 with Aliant? Is that correct? 8 MR. DUNPHY: 9 A. Yes, approximately two years with Aliant, 10 Newfoundland Telephone at the time. 11 Q. Mr. Downton, you are a professional engineer? 12 Is that correct? 13 MR. DOWNTON: 14 A. Yes, that is correct. 15 Q. And what is your discipline that you qualified 16 in? 17 MR. DOWNTON: 18 A. My major was in communications and 19 electronics. 20 Q. Mr. Dunphy, what is your professional 21 designation? 22 MR. DUNPHY: 23 A. Professional engineer. My bachelor's degree 24 was specialized in electrical engineering and 25 telecommunications option, and my master's</p>
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<p>1 degree was in the electrical field as well. 2 Q. And when did you obtain your master's? 3 MR. DUNPHY: 4 A. 1999. 5 Q. The particular project that this panel is 6 giving evidence about is the VHF Mobile Radio 7 Project, B-137. Mr. Haynes, Mr. Downton and 8 Mr. Dunphy, was the project description that's 9 contained in B-137 prepared under your 10 direction? First, Mr. Haynes, was it? 11 MR. HAYNES: 12 A. Yes, it was. 13 Q. Mr. Dunphy? 14 MR. DUNPHY: 15 A. Yes. 16 Q. And Mr. Downton? 17 MR. DOWNTON: 18 A. Yes, it was. 19 Q. Do you adopt that project description, as well 20 as all of the responses to request for 21 information on this project as your evidence 22 for the purpose of this hearing, Mr. Haynes? 23 MR. HAYNES: 24 A. Yes. 25 Q. Mr. Dunphy, do you?</p>	<p>1 MR. DUNPHY: 2 A. Yes, I do. 3 Q. And Mr. Downton, do you? 4 MR. DOWNTON: 5 A. Yes, I do. 6 Q. At this time, I'm going to ask Mr. Dunphy to 7 describe the current VHF system that Hydro 8 has. A copy of the presentation has been 9 distributed to the Commissioners and to the 10 other counsel this morning. So Mr. Dunphy, 11 could you please describe Hydro's current 12 mobile radio system? 13 MR. DUNPHY: 14 A. Certainly. Good morning, Mr. Chairman, 15 Commissioners. I'm going to speak to you this 16 morning about a project which has been 17 submitted to the Board in the past for 18 approval in 2001 and again in 2003, and it's 19 before you again this year for consideration. 20 I think it's a testament to the importance of 21 this project to Newfoundland and Labrador 22 Hydro that we are again seeking approval, and 23 the project I'm referring to is the 24 replacement of our VHF Mobile Radio System. 25 I'll start by giving you a general</p>

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<p>1 MR. DUNPHY:</p> <p>2 overview of mobile radio and mobile</p> <p>3 communications as they relate to Hydro's</p> <p>4 operations. I'll talk some about Newfoundland</p> <p>5 and Labrador Hydro's existing mobile radio</p> <p>6 system and why we need to replace it in 2005,</p> <p>7 or starting in 2005, I should say. And I'll</p> <p>8 give you some general information about the</p> <p>9 proposed replacement for the mobile radio</p> <p>10 system.</p> <p>11 Hydro's field work force is a mobile work</p> <p>12 force and mobile communications are required</p> <p>13 for our personnel as they travel to remote</p> <p>14 workplaces and as they conduct their work in</p> <p>15 those remote workplaces. Mobile</p> <p>16 communications is required for primarily voice</p> <p>17 communications between personnel that are</p> <p>18 performing switching, maintenance and</p> <p>19 emergency repair on the system. The</p> <p>20 presentations of Mr. Martin and Mr. Haynes in</p> <p>21 the past couple of days have given you some</p> <p>22 indication of the geographic scope of Hydro's</p> <p>23 operations, and in the course of conducting</p> <p>24 our work, we require mobile communications to</p> <p>25 enable us to work efficiently. Many of the</p>	<p>1 locations that our personnel are required to</p> <p>2 work in are quite remote and are only</p> <p>3 accessible by track vehicles or even by air,</p> <p>4 using helicopters.</p> <p>5 Mobile communications are required from a</p> <p>6 safety point of view as well. Personnel who</p> <p>7 are working alone have a requirement to be</p> <p>8 able to communicate in general, and in the</p> <p>9 event of emergencies, communications, on-site</p> <p>10 communications are required in order to ensure</p> <p>11 that an expeditious response is obtained.</p> <p>12 Mobile communications increase</p> <p>13 productivity because they allow personnel to</p> <p>14 communicate while at remote locations, when no</p> <p>15 other means of communications exist. There</p> <p>16 are different scenarios under which mobile</p> <p>17 communications are used. A mobile can connect</p> <p>18 to a fixed location, such as an office. They</p> <p>19 can also speak mobile to mobile and</p> <p>20 conversations can be one to one, so they can</p> <p>21 be between myself and another individual or</p> <p>22 they can be one to many, and one of the unique</p> <p>23 features of mobile radio systems is that</p> <p>24 conversations can be shared between multiple</p> <p>25 personnel in multiple locations.</p>
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<p>1 In mobile communications, the biggest</p> <p>2 consideration in the design of a system is</p> <p>3 coverage. How much territory can we reach</p> <p>4 with a mobile radio? The two major factors</p> <p>5 that affect coverage are terrain. So radio is</p> <p>6 essentially a line of sight medium and so</p> <p>7 hills and valleys and terrain will cause</p> <p>8 degradation and in some cases, blocking of the</p> <p>9 mobile radio signal. As well, radio, by it's</p> <p>10 very nature, has a finite range, and that's</p> <p>11 really a function of the power at which a</p> <p>12 radio is capable of transmitting and the</p> <p>13 frequency at which it transmits, as well as</p> <p>14 distance. I'll show you a coverage map of our</p> <p>15 existing system in a little while, that'll</p> <p>16 help demonstrate what I'm talking about here.</p> <p>17 So in this photograph that's--sorry.</p> <p>18 Thank you, Mr. O'Rielly. In the photograph on</p> <p>19 slide three you'll see some of our workers</p> <p>20 working in a remote location and using mobile</p> <p>21 radio system. The worker on the pole is</p> <p>22 attaching grounds to the system and the worker</p> <p>23 on the ground, in the foreground, who has the</p> <p>24 humorous caption in the photograph that was</p> <p>25 up when we started, is communicating either</p>	<p>1 with the energy control centre to obtain</p> <p>2 permission to work on the line or he could be</p> <p>3 communicating with another crew in a different</p> <p>4 area who are working perhaps on the same line,</p> <p>5 or he could be communicating with a supervisor</p> <p>6 or an area office.</p> <p>7 Moving on to the next slide, I just</p> <p>8 wanted to talk briefly about the different</p> <p>9 classes of service in mobile radio systems.</p> <p>10 First of all, there's the public safety</p> <p>11 system. Public safety systems are used by the</p> <p>12 so-called first responders: police, civil</p> <p>13 defence, fire and rescue. These systems are,</p> <p>14 in general, extremely rugged, extremely</p> <p>15 reliable, highly redundant and quite</p> <p>16 expensive. In fact, I don't think it's an</p> <p>17 exaggeration to say that they're the most</p> <p>18 expensive mobile radio technology.</p> <p>19 The next grade of service, if you will,</p> <p>20 is public service, and this is the type of</p> <p>21 system that would be used, and we have some</p> <p>22 examples in there of systems in Newfoundland</p> <p>23 that--or organizations in Newfoundland that</p> <p>24 use mobile radios: the power utilities,</p> <p>25 Newfoundland Power and Hydro; forestry</p>

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1 MR. DUNPHY:

2 operations, Kruger and Abitibi use mobile  
3 radio in the course of their woods operations;  
4 in the manufacturing sector, North Atlantic  
5 Refining, Voisey's Bay Nickel, the Hibernia,  
6 the Terra Nova platform, the new Whiterose  
7 platform, all use mobile radio in order to  
8 communicate effectively. And finally, there's  
9 the private class of service for private  
10 individuals.

11 So in general, power utilities and Hydro  
12 specifically rely on effective wireless  
13 communications. We use it for switching  
14 operations, for troubleshooting operations,  
15 for live line work, for emergency repairs and  
16 for general maintenance, and when we don't  
17 have these systems available, life and  
18 property can be endangered and customers will  
19 be impacted. Just a couple of examples of  
20 work where mobile radio is used. The photo on  
21 the bottom left shows the replacement of a  
22 cross arm on a steel transmission structure.  
23 This is actually work that's being performed  
24 hot. It's live line work. You can't see the  
25 conductor because it's pulled out of the way

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1 case, the mobile radio system is used  
2 primarily for safety, to coordinate the work  
3 of the person on the pole, the helicopter  
4 pilot. So there would be a person on the  
5 ground assisting and coordinating this work  
6 using the mobile radio system. As well in  
7 this case, prior to starting the work, the  
8 crew would be required to contact our energy  
9 control centre.

10 Now a little bit about our existing  
11 mobile radio system. First of all, in Hydro's  
12 operation, the mobile radio is the primary  
13 communications link between our field and  
14 energy control centre personnel. It reduces  
15 outage time by ensuring that instructions and  
16 changes are relayed promptly to personnel in  
17 the field. It increases our efficiency.  
18 Personnel do not have to travel if they need  
19 to communicate with someone who's at a remote  
20 location. They can do it from the work  
21 location. So if situations arise where advice  
22 is needed, conditions may change requiring the  
23 work to change, personnel don't have to travel  
24 to communicate and they can communicate over  
25 quite long distances.

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1 by a crane. And these crews would use mobile  
2 radio in various ways during the course of  
3 that operation.

4 First and foremost, they would contact  
5 the energy control centre prior to starting  
6 work to make sure that conditions haven't  
7 changed, that it's still safe to do the work  
8 and they can proceed, in inform energy control  
9 centre that they are about to proceed with the  
10 work. As well, during the course of that  
11 operation, if operating conditions change or  
12 weather conditions change, the crew can be  
13 informed by the energy control centre that  
14 they need to stop the work or restore the  
15 structure as quickly as possible. As well, in  
16 the event of an emergency, the crew would use  
17 mobile radio system, as I say, to contact  
18 emergency response for assistance.

19 Moving to the photo on the bottom right,  
20 the gentleman who is perched on the  
21 transmission structure there is removing an  
22 osprey nest. They're attaching a sling to the  
23 nest and the helicopter will lift the osprey  
24 nest and move it to--I believe they put it in  
25 a tree, in this instance. In this particular

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1 It's required for safety. Newfoundland  
2 and Labrador Hydro is required to provide  
3 communications to personnel who are working  
4 alone in remote locations. Any crew who's  
5 working in a remote location have to have an  
6 ability to contact an emergency response  
7 organization in the event that there is a  
8 problem.

9 It's also a communication link between  
10 work crews and the area offices. So if the  
11 crew requires communication with a supervisor  
12 who may be in their office or for some reason  
13 they may need to talk or they may need to ask  
14 for parts from a warehouse, then they can do  
15 it again from the field. It's also used as a  
16 communication's link between our fleet  
17 vehicles so one vehicle can talk to another in  
18 the course of their travel, and it's also  
19 used, as we know, by the Provincial Department  
20 of Transportation & Works for their road  
21 maintenance vehicles, and again, we'll talk a  
22 little bit more about that later.

23 The Mobile Radio System that we have was  
24 manufactured by a company called ACI, which,  
25 out of interest, was a subsidiary of AGT, the

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<p>1 MR. DUNPHY:</p> <p>2 Albert Crown owned telecommunication service</p> <p>3 provider, which is now Telus. There has been</p> <p>4 some service in 1989 and it had an expected</p> <p>5 design life of ten years at the time. The</p> <p>6 system consists of a central switch and 29</p> <p>7 repeaters and the next slide will give you a</p> <p>8 more visual representation of that. But I</p> <p>9 just want to talk briefly about the functions</p> <p>10 of those two components. A repeater is</p> <p>11 essentially a radio on a mountain top and I</p> <p>12 did forget to mention earlier in my</p> <p>13 presentation, this is an example of one of the</p> <p>14 portable radios that our crews would use in</p> <p>15 the field. As you can see, it's large, it's</p> <p>16 rugged, it's designed for field use. It has a</p> <p>17 huge battery so that it can transmit at quite</p> <p>18 high power and it can be used for a long time,</p> <p>19 it can be used in cold weather conditions. So</p> <p>20 these are designed for extremely rugged</p> <p>21 conditions and this is the type of device that</p> <p>22 our crew would use in the field. As well, we</p> <p>23 have a mobile radio which performs the same</p> <p>24 functions, but it's mounted in a vehicle. So</p> <p>25 I was going to use my radio in my presentation</p>	<p>1 to demonstrate a repeater. A repeater is</p> <p>2 simply a radio, a transceiver, a radio that</p> <p>3 can send and receive located on a mountain top</p> <p>4 or a hill top, somewhere where it can cover a</p> <p>5 large service area. As I mentioned earlier,</p> <p>6 coverage is the number one criterion when</p> <p>7 designing a mobile radio system. So that</p> <p>8 radio allows me in my vehicle--or that</p> <p>9 repeater allows me in my vehicle to</p> <p>10 communicate with the rest of the system, do</p> <p>11 all the things that the mobile radio system</p> <p>12 can do. The central switch is located in</p> <p>13 Gander and that's really the brains of the</p> <p>14 operation and all the repeaters connect to</p> <p>15 that central switch, and its purpose is to</p> <p>16 connect the calls as they progress between</p> <p>17 repeaters or from repeaters to the telephone</p> <p>18 network or to the energy control center. So</p> <p>19 of the 29 repeaters we have, 25 are currently</p> <p>20 in Aliant sites and 4 are in Hydro owned</p> <p>21 sites, and one of the goals of the replacement</p> <p>22 system is to move as many repeaters as</p> <p>23 practical to Hydro-owned towers, existing</p> <p>24 Hydro-owned towers, so that we can cut down on</p> <p>25 the operating costs of the new system.</p>
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<p>1 The system provides public telephone</p> <p>2 network access, so I can use this radio to</p> <p>3 make a telephone call and vice versa.</p> <p>4 Somebody can call me from a telephone and it</p> <p>5 will be received at this radio. It has a</p> <p>6 system management capability in it and I want</p> <p>7 to talk a little bit more about this, because</p> <p>8 this is quite important to us. The existing</p> <p>9 system has a system management capability</p> <p>10 which gives us remote monitoring and</p> <p>11 diagnostics, so one of our maintenance</p> <p>12 personnel can look at a computer screen and</p> <p>13 instantly know the condition of all the</p> <p>14 repeaters on the system, he can tell which</p> <p>15 ones are in use, which ones are out of service</p> <p>16 and which ones are available for use. We can</p> <p>17 also do limited diagnostics on the system and</p> <p>18 this is used when we, in the course of</p> <p>19 management of the system. Aliant maintains</p> <p>20 our system, but Hydro manages it. So this</p> <p>21 system management is required in order to</p> <p>22 allow us to do that. It allows us to do</p> <p>23 remote monitoring, it allows us to do</p> <p>24 troubleshooting, it allows us to do</p> <p>25 diagnostics. It gives us traffic information</p>	<p>1 so we know the usage of the system. We know</p> <p>2 which radios are used in the system and we can</p> <p>3 tell the amount of usage, so that if changes</p> <p>4 are needed, we can take some action. It also</p> <p>5 allows us to permit and deny access to the</p> <p>6 system by individual radios. So if a radio</p> <p>7 were to be abused in any way or stolen, we can</p> <p>8 actually deny it access to the system.</p> <p>9 As I said, the switch and repeater</p> <p>10 equipment are maintained by Aliant and have</p> <p>11 been since the system was installed. Hydro</p> <p>12 owns approximately 300 mobile radios and 100</p> <p>13 portable radios. The radio in front of me is</p> <p>14 an example of a portable. We also have base</p> <p>15 station radios and I always lump those into</p> <p>16 the mobile radio category, simply because it's</p> <p>17 the same equipment. It's the same radio,</p> <p>18 except one is in a vehicle and one is on a</p> <p>19 desk. And the Department of Transportation</p> <p>20 and Works owns approximately 350 mobiles.</p> <p>21 Turning the page now, this is a schematic</p> <p>22 representation of our existing mobile radio</p> <p>23 system. You can see in the center there, in</p> <p>24 Gander, is the central switch and it's</p> <p>25 connected via leased facilities which are</p>

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<p>1 MR. DUNPHY:</p> <p>2 leased by Aliant to the 29 repeaters located</p> <p>3 around the Province.</p> <p>4 The next page demonstrates the coverage</p> <p>5 that we had calculated that the system</p> <p>6 provides, and this is done using a computer</p> <p>7 based coverage analysis program. I just</p> <p>8 wanted to illustrate this because it shows</p> <p>9 part of the reason that we are expending the</p> <p>10 system is to help increase coverage and Terry,</p> <p>11 if you'll move the curser over towards the</p> <p>12 Burin Peninsula there in particular, it's one</p> <p>13 example of where we intend to put additional</p> <p>14 sites on the system to help increase coverage</p> <p>15 that has been identified as being lacking. If</p> <p>16 you move the curser up there, Terry, to</p> <p>17 transmission lines 202 and 206, which travel</p> <p>18 from Bay D'Espoir to Sunnyside, you can see</p> <p>19 the coverage is quite poor; again, Bay</p> <p>20 d'Espoir to Stoney Brook the coverage is quite</p> <p>21 poor. These are examples of areas where we'll</p> <p>22 provide better on the new system.</p> <p>23 Turning to the next page, the photograph</p> <p>24 on the bottom right-hand corner is a</p> <p>25 photograph of our existing switch located in</p>	<p>1 Aliant's facility in Gander. And the switch</p> <p>2 is kind of difficult to see, it's actually the</p> <p>3 rack of equipment that's located between the</p> <p>4 two racks that have those vertical cans, yes,</p> <p>5 that's the one, Terry, thank you. That's our</p> <p>6 switch right there. Manufacturer's support</p> <p>7 for that switch is non-existent. We've been</p> <p>8 informed that the last system of this type was</p> <p>9 installed in 1991 and the manufacturer ceased</p> <p>10 to make the system at that time. The site</p> <p>11 controllers and central switch are proprietary</p> <p>12 and what that means is that there is no other</p> <p>13 system out there, there is no other equipment</p> <p>14 out there that is compatible with this system.</p> <p>15 Right now, we have adequate spares to maintain</p> <p>16 the central switch and the site controllers.</p> <p>17 I'll show you a picture of the site controller</p> <p>18 on the next slide. Repair service is</p> <p>19 extremely limited because many of the parts</p> <p>20 are no longer available. We've been unable to</p> <p>21 obtain additional spares since sometime in the</p> <p>22 mid 1990's for this system, when the</p> <p>23 manufacturer ceased to even support the</p> <p>24 sparing program. We can't test our critical</p> <p>25 spares on this system. There are certain</p>
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<p>1 spare parts that are--there are certain parts</p> <p>2 of the system, I should say, that are critical</p> <p>3 to its operation and should that part fail,</p> <p>4 the system will come down. We're unable to</p> <p>5 test the spare parts that we have; there are</p> <p>6 no facilities that exist to test those spare</p> <p>7 parts. We have been able to test some of our</p> <p>8 non-critical spare parts and have seen an</p> <p>9 extremely high failure rate just because of</p> <p>10 the age of the parts and the fact that they</p> <p>11 are sitting on the shelf for so long.</p> <p>12 In summary, this system is literally</p> <p>13 hanging by a thread and we have no confidence</p> <p>14 that--or we have no idea how long the system</p> <p>15 is going to last.</p> <p>16 Turning to the next page you'll see a</p> <p>17 picture of one of our repeaters and at the</p> <p>18 top, the black equipment there is the Motorola</p> <p>19 repeater radio. The bottom, the silver shelf</p> <p>20 of equipment there, yes, that's right, Terry,</p> <p>21 thank you, is the site controller and as I</p> <p>22 mentioned, a site controller has exactly the</p> <p>23 same problems that the switch does. The</p> <p>24 Motorola repeater equipment itself was</p> <p>25 manufacturer discontinued in 1996, so it means</p>	<p>1 that there's limited repair support, no new</p> <p>2 modules are available. A serious problem on</p> <p>3 that repeater could mean replacement of the</p> <p>4 entire repeater. The mobile and portable</p> <p>5 radios that we own are manufacturer</p> <p>6 discontinued. Most of the units are unable to</p> <p>7 be repaired. In fact, I checked our records</p> <p>8 and in the past year, we sent 22 of those</p> <p>9 original mobile and portable radios for repair</p> <p>10 and 100 percent of them were sent back to us</p> <p>11 unrepairable; parts are simply unavailable</p> <p>12 anymore. And the business issues and the</p> <p>13 concerns that we have regarding the existing</p> <p>14 mobile radio system is that the current system</p> <p>15 is physically, functionally and technically</p> <p>16 obsolete. We say it's physically obsolete</p> <p>17 because it's subject to random failure with</p> <p>18 undetermined cause. We are fortunate that we</p> <p>19 haven't had a spate of failures lately;</p> <p>20 however, in early 2003 there were a large</p> <p>21 number of failures. At the time, all the</p> <p>22 parts that were indicated by the diagnostic</p> <p>23 system to be possibly at fault were replaced</p> <p>24 and there was significant time spent in</p> <p>25 troubleshooting and attempting to isolate the</p>

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<p>1 MR. DUNPHY:</p> <p>2 problems that were causing the repeated</p> <p>3 failures. We were unable to--or I should say</p> <p>4 Aliant was unable to isolate the cause of</p> <p>5 those problems. After awhile, the problems</p> <p>6 stopped and went away, but we have no idea</p> <p>7 when that sort of behaviour will reoccur or in</p> <p>8 fact if the system does go down at some point,</p> <p>9 if it will ever come back. We can't expand</p> <p>10 the existing system because, as I said, parts</p> <p>11 are unavailable. And all components to the</p> <p>12 existing system are no longer supported, as I</p> <p>13 said. Maintenance of the VHF system is by</p> <p>14 Aliant and that's also an issue right now.</p> <p>15 There are no trained staff remaining at Aliant</p> <p>16 who are knowledgeable about the switch and the</p> <p>17 site controllers. All the staff have either</p> <p>18 retired or left the company that were</p> <p>19 originally trained on the system, and because</p> <p>20 there is no manufacturer support, the training</p> <p>21 is unavailable. In fact, Aliant will no</p> <p>22 longer provide us with a maintenance contract</p> <p>23 that covers our repair services and they do it</p> <p>24 only on a time and charges basis because they</p> <p>25 do not have any confidence that they can any</p>	<p>1 confidence that they can effectively support</p> <p>2 the system.</p> <p>3 In the event of a complete failure of the</p> <p>4 mobile radio system and I should begin by</p> <p>5 saying we believe that complete system failure</p> <p>6 is inevitable and the only question is when.</p> <p>7 This system is going to fail; we have no doubt</p> <p>8 about that. It's old, it has shown erratic</p> <p>9 behaviour in the past. We're absolutely</p> <p>10 certain that it is going to fail at some point</p> <p>11 in the future; it may be tomorrow, it may be</p> <p>12 six months from now and if we're lucky, it</p> <p>13 will last until we have a chance to replace</p> <p>14 it, but it will fail. System failure will</p> <p>15 impede Hydro's ability to do work. It will</p> <p>16 extend outages to our customers and I talked</p> <p>17 earlier about some of the reasons why we are--</p> <p>18 our field personnel are more productive when</p> <p>19 they have that system.</p> <p>20 We have indicated in our submission that</p> <p>21 this is a two-year project and we do not feel</p> <p>22 that in the event of a failure--we do not feel</p> <p>23 that replacement time is acceptable in terms</p> <p>24 of the service that we can provide to our</p> <p>25 customers and the safety of our personnel.</p>
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<p>1 GREENE, Q.C.:</p> <p>2 Q. Mr. Dunphy, you've just described the mobile</p> <p>3 radio system generally and then Hydro's</p> <p>4 current system and why, from Hydro's</p> <p>5 perspective, it is an unacceptable risk to</p> <p>6 proceed without planning to replace this</p> <p>7 system. I wonder now if you could describe</p> <p>8 how and what Hydro is proposing in this</p> <p>9 Capital Budget Proposal to address the problem</p> <p>10 with the replacement?</p> <p>11 MR. DUNPHY:</p> <p>12 A. Certainly. Mr. O'Rielly, if you could bring</p> <p>13 us back to the presentation? Hydro is</p> <p>14 proposing a complete replacement of the</p> <p>15 existing system with a new VHF Mobile Radio</p> <p>16 System. Satellite and cell phone technologies</p> <p>17 are not suitable for our long-term mobile</p> <p>18 communication's needs and I think we've</p> <p>19 provided sufficient justification in the past</p> <p>20 to explain that. In summary, cellular</p> <p>21 telephones don't provide sufficient coverage;</p> <p>22 satellite telephones don't work very well in</p> <p>23 trees, the technologies themselves are not</p> <p>24 available in emergency conditions--there are</p> <p>25 any number of reasons why those technologies</p>	<p>1 are not suitable for operation.</p> <p>2 As part of preparing and as part of</p> <p>3 compliance with P.U. Order 29 (2003), we were</p> <p>4 able to do some detailed coverage analysis in</p> <p>5 preparation for the Request for Information</p> <p>6 that we had submitted to vendors. So, we've</p> <p>7 established now that we need 39 sites in order</p> <p>8 to provide the coverage that the system needs,</p> <p>9 and I guess just in brief, five of those sites</p> <p>10 are intended to fill in some of the gaps in</p> <p>11 the existing coverage that I mentioned earlier</p> <p>12 on the transmission lines, and five of those</p> <p>13 sites are used to provide new coverage in</p> <p>14 areas that have been identified, such as</p> <p>15 Southern Labrador, Happy Valley-Goose Bay and</p> <p>16 Granite Canal. I should point out that all</p> <p>17 the repeaters will be installed at existing</p> <p>18 towers, either Newfoundland and Labrador's</p> <p>19 Hydro's or a third party. No new towers are</p> <p>20 going to be required as part of this process.</p> <p>21 We feel we can achieve the coverage that we</p> <p>22 need utilizing existing towers.</p> <p>23 Hydro intends to issue a functional</p> <p>24 specification for this system. And this is to</p> <p>25 ensure that we achieve the most appropriate</p>



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<p>1 MR. DUNPHY:</p> <p>2 solution that meets Hydro's needs at the least</p> <p>3 cost to our customers. The final technology</p> <p>4 is not determined at this point and it's</p> <p>5 really not appropriate to establish a final</p> <p>6 technology solution at this point. A</p> <p>7 functional specification encourages</p> <p>8 competitive bidding among vendors and it</p> <p>9 ensures that we'll get what is most</p> <p>10 appropriate at the least cost. Functional</p> <p>11 specification is commonly used in this type of</p> <p>12 scenario in industry. We have issued</p> <p>13 functional specifications for our Energy</p> <p>14 Management System, our microwave radio, our</p> <p>15 telephone systems, the original VHF Mobile</p> <p>16 Radio System was written around the functional</p> <p>17 specification. This is the most appropriate</p> <p>18 course of action to take at this time.</p> <p>19 So a proposed VHF Mobile Radio System</p> <p>20 will address the functional requirements of</p> <p>21 our field personnel. Our field personnel need</p> <p>22 a system that is reliable, it's easy to use,</p> <p>23 it's not complicated and it's rugged. We</p> <p>24 intend to ensure that the radio coverage will</p> <p>25 be expandable if there are future needs that</p>	<p>1 are identified. It also will support</p> <p>2 Newfoundland Power's requirements when and if</p> <p>3 it's required by them, and I think you've seen</p> <p>4 in the information that has been submitted</p> <p>5 when the Request for Information was supplied</p> <p>6 to vendors earlier this year, Newfoundland</p> <p>7 Power's requirements at the time were included</p> <p>8 in that. In summary, it will enable Hydro to</p> <p>9 operate in a manner that is efficient and in</p> <p>10 the best interest of our customers and it's</p> <p>11 the least cost option for Hydro's customers.</p> <p>12 I'd also like to talk a little bit about</p> <p>13 the participation of the Provincial Department</p> <p>14 of Transportation and Works. We're proposing</p> <p>15 that there will be a shared cost agreement</p> <p>16 between Hydro and the department. And the</p> <p>17 intention is to share capital and operating</p> <p>18 costs. If the department identifies coverage</p> <p>19 requirements that are over and above Hydro's,</p> <p>20 they would be solely borne by the department,</p> <p>21 and essentially any cost recovery from the</p> <p>22 department will result in a reduction of</p> <p>23 Hydro's revenue requirements and thereby</p> <p>24 benefit our customers. I should also</p> <p>25 summarize, I guess, our progress to this</p>
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<p>1 point. We're in fairly close consultation</p> <p>2 with the officials of the department. They</p> <p>3 have prepared a submission to Cabinet which is</p> <p>4 seeking approval for participation in the</p> <p>5 system and it's currently under review at the</p> <p>6 deputy minister level within the department.</p> <p>7 We've consulted continuously with the</p> <p>8 department throughout this process and they</p> <p>9 are well aware of our progress to date. And</p> <p>10 the department has communicated to us that</p> <p>11 this is the only viable alternative that meets</p> <p>12 their needs for mobile communications.</p> <p>13 I'd just like to summarize the most</p> <p>14 important points of my presentation. All the</p> <p>15 components of the existing system are</p> <p>16 manufacturer discontinued and spare parts are</p> <p>17 no longer available for this system. We</p> <p>18 believe a complete replacement of the existing</p> <p>19 infrastructure is the only option. We intend</p> <p>20 to issue tenders to ensure competitive</p> <p>21 bidding, to ensure that we get the most</p> <p>22 appropriate solution for our needs and our</p> <p>23 customer needs at the lowest price. And</p> <p>24 finally, I cannot stress enough this system is</p> <p>25 critical to our operations and cannot be</p>	<p>1 allowed to run to failure. Thank you very</p> <p>2 much, that concludes my presentation.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. You've already mentioned, Mr. Dunphy, that</p> <p>5 last year in the Order arising from the 2004</p> <p>6 Capital Budget hearing, the Board outlined</p> <p>7 what I had referred to as a consultative</p> <p>8 process be undertaken with Newfoundland Power.</p> <p>9 Would you please advise the Commissioners what</p> <p>10 Hydro did to respond to that Order?</p> <p>11 MR. DUNPHY:</p> <p>12 A. Yes. We received the Order in September 2003.</p> <p>13 We started our consultation process formally</p> <p>14 with Newfoundland Power in October, and I</p> <p>15 believe there was full co-operation on both</p> <p>16 parties exhibited in that process. Hydro</p> <p>17 engaged a consultant, Custom Systems</p> <p>18 Electronics Limited, to act as our consultant</p> <p>19 and to provide us with expert advice as we</p> <p>20 went through the process. And Newfoundland</p> <p>21 Power engaged Provincial Consultants to do the</p> <p>22 same for them. During the course of the</p> <p>23 analysis and discussions, we met periodically,</p> <p>24 both officials of Newfoundland and Labrador</p> <p>25 Hydro and Newfoundland Power, as well as the</p>

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<p>1 MR. DUNPHY:</p> <p>2 consultants independently when required, to</p> <p>3 review our progress, to answer outstanding</p> <p>4 questions and to decide on anything that the</p> <p>5 consultants wanted confirmed from the business</p> <p>6 point of view. We exchanged our requirement</p> <p>7 documents as ordered in P.U. 29 in early 2004</p> <p>8 and at that time, we chose to issue a Request</p> <p>9 for Information to vendors to determine</p> <p>10 whether there was a solution out there that</p> <p>11 would meet our needs and at what cost in order</p> <p>12 to assist us in developing the Capital Budget</p> <p>13 submission for this year. The proposals were</p> <p>14 analyzed, our consultant, in consultation with</p> <p>15 Hydro personnel, prepared detailed capital and</p> <p>16 operating estimates. These were sent to the</p> <p>17 Department of Transportation &amp; Works and</p> <p>18 Newfoundland Power in July, I believe. Both</p> <p>19 parties completed net present value analysis</p> <p>20 of the costs submitted and we prepared and</p> <p>21 submitted our final report, which is contained</p> <p>22 in Section G, Tab 4 of the Capital Budget</p> <p>23 Proposal.</p> <p>24 Q. Mr. Dunphy, you mentioned Hydro's consultant</p> <p>25 was Custom Systems Electronics Limited. Could</p>	<p>1 you please advise the Board who that company--</p> <p>2 a little bit about the company and why they</p> <p>3 were chosen?</p> <p>4 MR. DUNPHY:</p> <p>5 A. Custom Systems Electronics is a Newfoundland</p> <p>6 based consulting organization with extensive</p> <p>7 experience in design analysis of mobile radio</p> <p>8 systems. Custom Systems were used by the Nova</p> <p>9 Scotia Government in analysis of the province-</p> <p>10 wide mobile radio system that was installed</p> <p>11 there in late '90s or early in this century,</p> <p>12 I'm not exactly sure when. They've been</p> <p>13 consultants as well to the Provincial</p> <p>14 Government on the RCMP and RNC systems. They</p> <p>15 have extensive experience in the design of</p> <p>16 mobile radio systems.</p> <p>17 Q. And you also mention that Hydro did a Request</p> <p>18 for Information to potential suppliers of this</p> <p>19 system. Did that Request for Information</p> <p>20 include the functional requirements of</p> <p>21 Newfoundland Power as provided to Hydro by</p> <p>22 Newfoundland Power?</p> <p>23 MR. DUNPHY:</p> <p>24 A. Yes, it did.</p> <p>25 Q. And how many suppliers was the Request for</p>
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<p>1 Information sent to?</p> <p>2 MR. DUNPHY:</p> <p>3 A. The Request for Information was actually sent</p> <p>4 to ten suppliers.</p> <p>5 Q. How many suppliers responded to the request?</p> <p>6 MR. DUNPHY:</p> <p>7 A. In total, four responded which was quite</p> <p>8 responding to most people, actually, given</p> <p>9 that it was clearly indicated that it was a</p> <p>10 request for budgetary proposals.</p> <p>11 Q. I'd like now to turn to the report Hydro filed</p> <p>12 under Section G, Tab 4, and review with you</p> <p>13 first page one of that report, Mr. O'Rielly.</p> <p>14 Would you please explain there the</p> <p>15 alternatives that Hydro reviewed with respect</p> <p>16 to the mobile radio replacement?</p> <p>17 MR. DUNPHY:</p> <p>18 A. The first alternative was to analyze the</p> <p>19 possibility of extension of the existing</p> <p>20 Newfoundland and Labrador Hydro Mobile Radio</p> <p>21 System. And I think I've very clearly</p> <p>22 indicated why that was not technically</p> <p>23 possible. There are no parts available for</p> <p>24 the existing system. Alternative two was for</p> <p>25 Newfoundland and Labrador Hydro alone, on a</p>	<p>1 proposed mobile radio system. Alternative</p> <p>2 three was to accommodate Newfoundland and</p> <p>3 Labrador Hydro on an expanded Newfoundland</p> <p>4 Power system without the participation of the</p> <p>5 Department of Transportation and Works.</p> <p>6 Alternative four was the replacement of the</p> <p>7 existing Newfoundland and Labrador Mobile</p> <p>8 Radio System to meet Hydro's and the</p> <p>9 Department's requirements. And alternative</p> <p>10 five, six and seven were the replacement of</p> <p>11 the existing system with Newfoundland Power</p> <p>12 participation in 2008, 2009 and 2011.</p> <p>13 Q. Okay, Mr. O'Rielly, could we go to page 2</p> <p>14 please? Here, Mr. Dunphy, I would like to</p> <p>15 review with you and for you to explain the</p> <p>16 conclusions that were drawn following this</p> <p>17 analysis that was completed? So if you could,</p> <p>18 please, take the Commissioners through each of</p> <p>19 the conclusions there on page 2?</p> <p>20 MR. DUNPHY:</p> <p>21 A. The conclusions on page 2 from Newfoundland</p> <p>22 and Labrador Hydro's point of view is that the</p> <p>23 least cost option was for Newfoundland Power</p> <p>24 to join Newfoundland and Labrador Hydro and</p> <p>25 the Department of Transportation and Works in</p>

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<p>1 MR. DUNPHY:</p> <p>2 2008. Other alternatives were shown to be</p> <p>3 more expensive than that.</p> <p>4 Q. Is it correct that it is Hydro's understanding</p> <p>5 that Newfoundland Power does not need to</p> <p>6 replace its current mobile radio system at</p> <p>7 this time?</p> <p>8 MR. DUNPHY:</p> <p>9 A. Yes, that's true.</p> <p>10 Q. The current proposal before the Board is to</p> <p>11 allow Hydro to proceed with the replacement of</p> <p>12 its mobile radio system with Work Services</p> <p>13 participating and with the ability to</p> <p>14 accommodate Newfoundland Power in the future</p> <p>15 at the time they need to replace their system,</p> <p>16 if it is the least cost option for them at</p> <p>17 that time, is that correct?</p> <p>18 MR. DUNPHY:</p> <p>19 A. I'm sorry, could you restate the question?</p> <p>20 Q. The current proposal before the Board is for</p> <p>21 Hydro to replace its current Mobile Radio</p> <p>22 System with a new system, is that correct?</p> <p>23 MR. DUNPHY:</p> <p>24 A. Yes.</p> <p>25 Q. With Work Services participating, is that</p>	<p>1 correct?</p> <p>2 MR. DUNPHY:</p> <p>3 A. Yes.</p> <p>4 Q. And with the ability of that system to be able</p> <p>5 to accommodate Newfoundland Power in the</p> <p>6 future at the time that Newfoundland Power</p> <p>7 needs to replace its system, if it is the</p> <p>8 lowest cost option for them at that time, is</p> <p>9 that correct?</p> <p>10 MR. DUNPHY:</p> <p>11 A. Yes, that's correct.</p> <p>12 Q. Now I'd like to ask Mr. Haynes a few questions</p> <p>13 with respect to the mobile radio. Mr. Haynes,</p> <p>14 as Mr. Dunphy has already said and as</p> <p>15 everybody in the room is aware, we've brought</p> <p>16 this project before the Board before. Why,</p> <p>17 from Hydro's operations and management and</p> <p>18 Board of Director's view point, did Hydro</p> <p>19 bring this radio again for approval at this</p> <p>20 time?</p> <p>21 MR. HAYNES:</p> <p>22 A. Hydro did, as you mentioned, apply for this</p> <p>23 approval on two previous occasions and in our</p> <p>24 opinion, we've been very fortuitous to have</p> <p>25 actually survived in the intervening period</p>
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<p>1 without a major failure. As Mr. Dunphy</p> <p>2 explained, it's--as it is, we're hanging by a</p> <p>3 thread. We must proceed without delay to</p> <p>4 replace this system. It will be sixteen years</p> <p>5 old by the time it's replaced, assuming</p> <p>6 approval. And as Mr. Dunphy mentioned as</p> <p>7 well, it was also designed for a ten-year life</p> <p>8 and to continue without planning an immediate</p> <p>9 replacement is just too risky and it</p> <p>10 jeopardizes reliable service to our customers.</p> <p>11 There are several significant safety</p> <p>12 implications and we are convinced--all of us</p> <p>13 are convinced that it will fail, without a</p> <p>14 doubt, sometime soon. And a planned</p> <p>15 replacement is much more expedient, it's much</p> <p>16 more cost effective than being forced into</p> <p>17 something without appropriate time to plan and</p> <p>18 replace. The system, as Mr. Dunphy again</p> <p>19 mentioned, is obsolete. There are no spares</p> <p>20 available to be purchased and it will take</p> <p>21 approximately two years to replace this</p> <p>22 system. The replacement, as we have gone down</p> <p>23 through the economic analysis with</p> <p>24 Newfoundland Power, as we've shown, is the</p> <p>25 least cost to the customers to go with the</p>	<p>1 wholesale replacement of the system. It is a</p> <p>2 critical component of Hydro's system</p> <p>3 operations, from a point of view of</p> <p>4 dispatching resources to fix repairs, to put</p> <p>5 lines back in service, to obtain the necessary</p> <p>6 work permits for crews to safely work, to</p> <p>7 efficiently work and to minimize the outage</p> <p>8 time, particularly during emergencies. And</p> <p>9 it's also used on a routine daily basis, if</p> <p>10 not hourly basis, for all work, communications</p> <p>11 with field staff right across the Island. And</p> <p>12 it is, from across the Island's point of view</p> <p>13 that our requirements are specific. We do</p> <p>14 operate the provincial grid. It covers the</p> <p>15 whole Island and we need to have effective,</p> <p>16 reliable and competent communication system to</p> <p>17 effectively do that job. The replacement as</p> <p>18 proposed will ensure continued efficient</p> <p>19 operation through routine and emergency</p> <p>20 repairs, as I mentioned and will hasten</p> <p>21 repairing the service of outage lines and</p> <p>22 equipment that otherwise would extend the</p> <p>23 outages to our customers and it could be at</p> <p>24 any time of the year. We are proposing to go</p> <p>25 with a Request for Proposals for the</p>

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<p>1 MR. HAYNES:</p> <p>2 functional specification that will allow</p> <p>3 vendors to propose cost-effective solutions</p> <p>4 that we can evaluation and meet out needs and</p> <p>5 it will also meet Newfoundland Power's needs</p> <p>6 that's been identified if that's the economic</p> <p>7 thing for them to do when their system needs</p> <p>8 to be replaced, which is not in the current</p> <p>9 horizon. The estimated capital cost which is</p> <p>10 8.4 million dollars, as Mr. Dunphy mentioned,</p> <p>11 we did send out a request and he was quite</p> <p>12 specific, we sent out a request for budgetary</p> <p>13 estimates. As you can appreciate, when we go</p> <p>14 with a specification for a system like this,</p> <p>15 every vendor has to invest money to prepare a</p> <p>16 specification and it could be 100, 200 or in</p> <p>17 some cases for some of our jobs, not</p> <p>18 necessarily this particular VHF radio, it</p> <p>19 could be in the hundreds of thousands of</p> <p>20 dollars to actually bid. They obviously want</p> <p>21 certainty that there's going to be a job at</p> <p>22 the end of the day before they're going to</p> <p>23 take that risk, which is part of the normal</p> <p>24 business, so we did get budgetary quotes from</p> <p>25 four suppliers. And we basically looked at</p>	<p>1 those numbers, we analyzed those numbers for</p> <p>2 quite a--in a very specific detail and we've</p> <p>3 arrived at a budgetary estimate of 8.4</p> <p>4 million. We think that it's an appropriate</p> <p>5 number and we're quite sure that we will come</p> <p>6 in under that number--at or under that number.</p> <p>7 Additionally, we are also assured that</p> <p>8 Work Services &amp; Transportation will be on</p> <p>9 board at the end of the day which will</p> <p>10 actually be a benefit to the ratepayer. So,</p> <p>11 you know, the final cost obviously will be</p> <p>12 evaluated after we get the functional</p> <p>13 specification and get our bids back, but we're</p> <p>14 quite comfortable this is the appropriate</p> <p>15 number, realistic and will ensure our</p> <p>16 customers continued reliable service overall.</p> <p>17 Q. Mr. Haynes, you mention that the estimate or</p> <p>18 the amount shown of 8.4 million dollars there</p> <p>19 on B-137, came following the evaluation of</p> <p>20 Requests for Proposals. Was Hydro's</p> <p>21 consultant, Custom Electronics, involved in</p> <p>22 the analysis of the bids?</p> <p>23 MR. HAYNES:</p> <p>24 A. Yes, they were.</p> <p>25 Q. And is it the advice of Hydro's expert</p>
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<p>1 consultant that this is a reasonable estimate</p> <p>2 to replace this type of system?</p> <p>3 MR. HAYNES:</p> <p>4 A. Yes, it is.</p> <p>5 Q. If you could just give a little overview to</p> <p>6 the Commissioners of the type of experience</p> <p>7 that Hydro has here--has at Hydro in the</p> <p>8 telecommunications area?</p> <p>9 MR. HAYNES:</p> <p>10 A. Yes, I would be glad to do that and I should--</p> <p>11 I could bring a little bit of experience from</p> <p>12 Churchill Falls. The Communications and the</p> <p>13 IS&amp;T division of Hydro does provide support</p> <p>14 services to Churchill Falls and in my tenure</p> <p>15 at Churchill Falls, they were of great aid to</p> <p>16 CF(L)Co and Hydro Quebec, I might add, in</p> <p>17 replacing two microwave systems across</p> <p>18 Labrador and down through Quebec, in fact. So</p> <p>19 our Communications' people have had experience</p> <p>20 in analogue microwave, digital microwave,</p> <p>21 troposcatter microwave. We have UHF radios is</p> <p>22 service in several areas. We've had fibre</p> <p>23 cable in our system, fibre communications in</p> <p>24 our system in the early 1980s. We've operated</p> <p>25 powerline carrier systems since the 60's. We</p>	<p>1 have had VHF radio system in use in excess of</p> <p>2 30 years, so from the point of view of--my</p> <p>3 confidence in the communication department, I</p> <p>4 have absolute confidence that we can provide</p> <p>5 this service, we can go out and we can specify</p> <p>6 and arrive at a right solution for our needs,</p> <p>7 and I'm one hundred percent confident that</p> <p>8 there's no issues with the technical</p> <p>9 capability of our staff to do that job. We've</p> <p>10 done similar jobs many times before.</p> <p>11 (10:30 a.m.)</p> <p>12 Q. Mr. Haynes, Hydro has actually, itself, been</p> <p>13 responsible for the current Mobile Radio</p> <p>14 System, is that correct? It oversaw the</p> <p>15 installation of that system at the time it was</p> <p>16 installed, is that correct?</p> <p>17 MR. HAYNES:</p> <p>18 A. Yes, that's correct.</p> <p>19 Q. And the microwave system?</p> <p>20 MR. HAYNES:</p> <p>21 A. Yes, that's correct.</p> <p>22 Q. And the new energy management system?</p> <p>23 MR. HAYNES:</p> <p>24 A. Yes, that's correct.</p> <p>25 Q. And the power line carrier system?</p>

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<p>1 MR. HAYNES:</p> <p>2 A. Yes.</p> <p>3 Q. So it is Hydro's view that Hydro engineering</p> <p>4 staff have expertise in the area of</p> <p>5 telecommunications, is that correct?</p> <p>6 MR. HAYNES:</p> <p>7 A. Yes, that's correct.</p> <p>8 Q. And in fact, we have staff or specialists in</p> <p>9 that area, as evidenced by Mr. Dunphy, is that</p> <p>10 correct?</p> <p>11 MR. HAYNES:</p> <p>12 A. Yes, if you recall Mr. Dunphy's job</p> <p>13 description, earlier job, he was a</p> <p>14 communications engineer. That was his primary</p> <p>15 role, to look after our communications aspects</p> <p>16 of our corporation. It is an essential part</p> <p>17 of our operation.</p> <p>18 Q. And it's one that we've been doing for a</p> <p>19 number of years, is that correct?</p> <p>20 MR. HAYNES:</p> <p>21 A. Essentially since the beginning, particularly</p> <p>22 for the last, at least, 30 years.</p> <p>23 Q. Now, you also mentioned a functional</p> <p>24 specification. I just wanted you to tell the</p> <p>25 Commissioners, what is a functional</p>	<p>1 specification and how is it different than</p> <p>2 going out for a bid or a tender for a specific</p> <p>3 item, such as a vehicle?</p> <p>4 MR. HAYNES:</p> <p>5 A. Obviously, when you go out for a tender for a</p> <p>6 vehicle or a power transformer, you identify,</p> <p>7 you know, that you want, obviously, a car or a</p> <p>8 pick-up truck or whatever. Or if you're going</p> <p>9 out for a transformer, you specify the voltage</p> <p>10 and the rating of the transformer and you know</p> <p>11 what you're going to get. It's pretty</p> <p>12 standard technology. It's evolving at a much</p> <p>13 slower pace than some of the communications</p> <p>14 things and the computer driven things that we</p> <p>15 do. We have used functional specifications</p> <p>16 for the first microwave system that we did or</p> <p>17 for the replacement microwave systems. We</p> <p>18 used a functional specification for the VHS</p> <p>19 system that was replaced in the late '80s. We</p> <p>20 used a functional specification for the, not</p> <p>21 so much this last go, but the first</p> <p>22 distributed control system of Holyrood was a</p> <p>23 functional specification. You know, it's a</p> <p>24 common thing. Even for Granite Canal, I mean,</p> <p>25 we did not go out and specify--when we</p>
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<p>1 undertook Granite Canal which a 135 million</p> <p>2 dollar project, we didn't say that we were</p> <p>3 going to, when this project was approved and</p> <p>4 we started, we didn't necessarily know exactly</p> <p>5 each and every technology that would be</p> <p>6 involved in that particular job. However, at</p> <p>7 the end of the day, we delivered that job on</p> <p>8 time and on budget. It's a common practice to</p> <p>9 go out. We don't do all the technical details</p> <p>10 up front. We want to go out and we want to</p> <p>11 gain the expertise of the vendors to come up</p> <p>12 with their solutions and I should go back to</p> <p>13 when we do actually go for an RFP, we want the</p> <p>14 vendors to know that we are going to do a job</p> <p>15 because we want them to invest the engineering</p> <p>16 time and effort, to actually exercise their</p> <p>17 skills and come back with a technology and a</p> <p>18 cost effective solution for Hydro.</p> <p>19 Q. The functional specification, I gather from</p> <p>20 your answer, is not unique to this mobile</p> <p>21 radio project as before the Board at this</p> <p>22 time?</p> <p>23 MR. HAYNES:</p> <p>24 A. That's correct.</p> <p>25 Q. In Hydro's experience, as you've outlined with</p>	<p>1 functional specifications, in your view, have</p> <p>2 they been productive and effective from</p> <p>3 Hydro's perspective?</p> <p>4 MR. HAYNES:</p> <p>5 A. Yes, I think they've been very productive and</p> <p>6 effective.</p> <p>7 Q. And is it your position that that's the most</p> <p>8 appropriate way to proceed to replace the</p> <p>9 Mobile Radio System based on Hydro's</p> <p>10 experience with these other types of projects.</p> <p>11 MR. HAYNES:</p> <p>12 A. I think it's the only way to proceed.</p> <p>13 Q. Thank you. That concludes the direct evidence</p> <p>14 at this time on the radio. And we should mark</p> <p>15 -</p> <p>16 MR. KENNEDY:</p> <p>17 Q. Chair, yes, we should--instead of using an</p> <p>18 alphabet suit of initials, I think we could</p> <p>19 use Mr. Downton's initials as he spoke</p> <p>20 specifically to the Powerpoint, so Exhibit ED</p> <p>21 No. 1.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. It would be Mr. Dunphy who spoke.</p> <p>24 MR. KENNEDY:</p> <p>25 Q. Sorry, Mr. Dunphy.</p>

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<p>1 GREENE, Q.C.:</p> <p>2 Q. GD No. 1.</p> <p>3 CHAIRMAN:</p> <p>4 Q. Okay.</p> <p>5 MR. HAYES:</p> <p>6 Q. Thank you, Chair. I'd ask if Mr. O'Rielly</p> <p>7 could perhaps bring up the report at Section</p> <p>8 G, Tab 4, the Application, please. Good</p> <p>9 morning gentlemen.</p> <p>10 MR. HAYNES:</p> <p>11 A. Good morning, Mr. Hayes.</p> <p>12 Q. I just ask that whoever feels most comfortable</p> <p>13 answering a particular question, please feel</p> <p>14 comfortable to do so. Mr. O'Rielly, if you</p> <p>15 could go to page 18 of the report, that's</p> <p>16 where we'll start. Now gentlemen, this report</p> <p>17 is the report--sorry, there you are. Thank</p> <p>18 you, Mr. O'Rielly. Now, this report,</p> <p>19 gentlemen, this is the report that resulted</p> <p>20 for the consultative process that occurred in</p> <p>21 the past year between Newfoundland Power and</p> <p>22 Hydro arising out of the Board's comments in</p> <p>23 Order P.U. 29 (2003), is that correct?</p> <p>24 MR. DUNPHY:</p> <p>25 A. Yes.</p>	<p>1 Q. Now, at the bottom of page 18, which is, in</p> <p>2 fact, the concluding paragraph of the report,</p> <p>3 yes, that's right there, Mr. O'Rielly, the</p> <p>4 concluding comment is, "overall, it is clear</p> <p>5 given that Newfoundland Power does not need to</p> <p>6 replace their system at this time, the logical</p> <p>7 way to ensure least cost is for Hydro to</p> <p>8 replace it's existing system, include</p> <p>9 Department of Transportation and Works in the</p> <p>10 system and allow for the possible integration</p> <p>11 of Newfoundland Power at a later date". And</p> <p>12 this is nutshell of what Hydro is proposing in</p> <p>13 this proceeding, correct?</p> <p>14 MR. DUNPHY:</p> <p>15 A. Yes.</p> <p>16 Q. Newfoundland Power doesn't take issue with</p> <p>17 that conclusion, however some of the numbers</p> <p>18 can be a little confounding. So, I'd like to</p> <p>19 take a few moments with the assistance of the</p> <p>20 Panel to go through some of the numbers to</p> <p>21 perhaps clarify how the consultants report</p> <p>22 leads us to that conclusion. Mr. O'Rielly,</p> <p>23 perhaps if you could go to page B-137 of the</p> <p>24 Application. Thank you and just show the</p> <p>25 table there. That's fine, thank you. Now,</p>
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<p>1 the project explanation shows capital</p> <p>2 expenditures of approximately 2.9 million</p> <p>3 dollars in 2005 and approximately 5.4 million</p> <p>4 dollars in 2006 for a total capital</p> <p>5 expenditure of approximately 8.39 million,</p> <p>6 correct?</p> <p>7 MR. DUNPHY:</p> <p>8 A. Yes, that's correct.</p> <p>9 Q. Okay. Now, Mr. O'Rielly, now if we could go</p> <p>10 back to the report at page 15, scroll to the</p> <p>11 bottom of page 15 when you get there. There</p> <p>12 you go, so we can see the table. Thank you.</p> <p>13 Table one at the bottom of page 15 shows a</p> <p>14 total capital cost estimate of approximately</p> <p>15 7.183 million dollars for Hydro's new VHF</p> <p>16 system with the Department of Transportation</p> <p>17 and Work participating. Now, is my</p> <p>18 understanding correct that the difference</p> <p>19 between that figure of 7.183 million and the</p> <p>20 8.39 million dollar figure referred to on page</p> <p>21 B-137 which we just looked at, is that the</p> <p>22 7.183 million dollars does not include the</p> <p>23 cost of user radios and certain related</p> <p>24 maintenance and training costs, is the</p> <p>25 correct?</p>	<p>1 MR. DUNPHY:</p> <p>2 A. Yes, as stated in the paragraph above, the</p> <p>3 total amount does not include the cost of user</p> <p>4 radios, maintenance and training, that would</p> <p>5 be borne solely by Newfoundland and Labrador</p> <p>6 Hydro.</p> <p>7 Q. Okay, thank you.</p> <p>8 MR. DUNPHY:</p> <p>9 A. Whereas the 8.3 million obviously does.</p> <p>10 Q. Thank you. Now, the paragraph that you were</p> <p>11 just referring to, the paragraph above the</p> <p>12 table, it starts with the following sentence,</p> <p>13 "the total capital cost estimate is 8.39</p> <p>14 dollars for a system without the participation</p> <p>15 of Newfoundland Power and 10.41 million</p> <p>16 dollars with Newfoundland Power</p> <p>17 participating".</p> <p>18 MR. DUNPHY:</p> <p>19 A. Yes.</p> <p>20 Q. Now, this means that the new VHF system would</p> <p>21 cost approximately 2 million dollars more with</p> <p>22 Newfoundland Power on it, is that correct?</p> <p>23 MR. DUNPHY:</p> <p>24 A. Yes, I believe, that's correct.</p> <p>25 Q. And that 2 million dollars does not include</p>

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<p>1 MR. HAYES:</p> <p>2 the cost of Newfoundland Power's user radios</p> <p>3 and any related training and maintenance cost,</p> <p>4 is that true?</p> <p>5 MR. DUNPHY:</p> <p>6 A. No.</p> <p>7 Q. Okay. If we could go to page 16, please, just</p> <p>8 the top of the page would be good. At table</p> <p>9 2, that's on the top of page 16 also shows an</p> <p>10 estimated capital cost for the new VHF system.</p> <p>11 Now, this table is similar to table 1, is it</p> <p>12 not, except that table 2 has Newfoundland</p> <p>13 Power participating in addition to Department</p> <p>14 of Transportation and Works?</p> <p>15 MR. DUNPHY:</p> <p>16 A. Yes, that's correct.</p> <p>17 Q. The estimated total capital cost estimate in</p> <p>18 table 2 is 9.203 million dollars approximately</p> <p>19 which is about 2 million dollars higher than</p> <p>20 the 7.183 million dollar total capital cost in</p> <p>21 table 1. Now, that 2 million dollar</p> <p>22 difference is essentially the total capital</p> <p>23 cost of adding Newfoundland Power to Hydro's</p> <p>24 new system, is that correct?</p> <p>25 MR. DUNPHY:</p>	<p>1 A. That's correct, again, user radios would be</p> <p>2 excluded from that analysis. The next</p> <p>3 paragraph actually explains the details of</p> <p>4 what included in there.</p> <p>5 Q. Okay, thank you. Is my understanding correct</p> <p>6 that the figures in table 2 were derived from</p> <p>7 the cost estimate for the total system of</p> <p>8 10.41 million dollars referred to on page 15?</p> <p>9 MR. DUNPHY:</p> <p>10 A. I'm sorry, could you restate your question?</p> <p>11 Q. The cost estimate in table 2 of 9.203 million</p> <p>12 dollars, was the derived from the total system</p> <p>13 estimate of 10.41 million dollars including</p> <p>14 Newfoundland Power which was on page 15 of the</p> <p>15 report?</p> <p>16 MR. DUNPHY:</p> <p>17 A. I believe that to be true.</p> <p>18 Q. Okay, thank you. So, from the 10.41 million</p> <p>19 dollars, the cost of Hydro's user radios,</p> <p>20 maintenance and training was taken out,</p> <p>21 correct?</p> <p>22 MR. DUNPHY:</p> <p>23 A. Yes.</p> <p>24 Q. And then the balance, in table 2 on page 16,</p> <p>25 the balance of 9.203 million dollars was</p>
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<p>1 allocated among Hydro, the Department of</p> <p>2 Transportation and Work and Newfoundland</p> <p>3 Power, correct?</p> <p>4 MR. DUNPHY:</p> <p>5 A. Yes.</p> <p>6 Q. And that allocation among the users is based</p> <p>7 on the number of repeater sites each on</p> <p>8 requires, is that true?</p> <p>9 MR. DUNPHY:</p> <p>10 A. That's true, yes.</p> <p>11 Q. Okay. So, is it correct that table 1 and</p> <p>12 table 2 show the participant shares of the</p> <p>13 estimated capital cost of Hydro's new system</p> <p>14 net of individual costs such as user radios,</p> <p>15 training and the like?</p> <p>16 MR. DUNPHY:</p> <p>17 A. Yes.</p> <p>18 Q. Thank you. Now, if we can go back to page 17,</p> <p>19 the chart on page 17 or table 4, I should say.</p> <p>20 There we go, thank you. Now, table 4 which</p> <p>21 you referred to as well in direct evidence,</p> <p>22 this provides a list of the alternatives</p> <p>23 examined and provides the cumulative present</p> <p>24 worth of the cost to Hydro, both capital and</p> <p>25 operating associated with each alternative, is</p>	<p>1 that correct?</p> <p>2 MR. DUNPHY:</p> <p>3 A. Yes.</p> <p>4 Q. Mr. O'Rielly, page 18, please? That's good,</p> <p>5 thank you. Now, on page 18, the report</p> <p>6 identifies, and I quote, "the least cost</p> <p>7 alternative for Hydro" and that's just below</p> <p>8 chart on, the paragraph below chart one, "as</p> <p>9 being a system shared with Department of</p> <p>10 Transportation and Works, with Newfoundland</p> <p>11 Power coming in either year two or three or</p> <p>12 five", correct?</p> <p>13 MR. DUNPHY:</p> <p>14 A. Yes.</p> <p>15 Q. And if we look back at table 4 on page 17, we</p> <p>16 find the costs associated with those</p> <p>17 particular alternatives in Items 5, 6, and 7</p> <p>18 respectively, is that correct?</p> <p>19 MR. DUNPHY:</p> <p>20 A. Yes.</p> <p>21 Q. Now, on page 18 again, the report identifies,</p> <p>22 the second paragraph below the chart, the</p> <p>23 second most economical option as being the</p> <p>24 sharing of the new VHF system by Hydro and the</p> <p>25 Department of Transportation and Works,</p>

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<p>1 MR. HAYES: 2 correct? 3 MR. DUNPHY: 4 A. Yes. 5 Q. And if go back to page 17, table 4, the costs 6 associated with that solution are found in 7 Item 4, is that correct? 8 MR. DUNPHY: 9 A. Yes. 10 Q. And that option is generally referred to as a 11 consultants report as alternative 4, is that 12 correct? 13 MR. DUNPHY: 14 A. I believe so, yes. 15 Q. Do you want to just confirm that? 16 (10:45 a.m.) 17 MR. DUNPHY: 18 A. If I can refer back to the executive summary. 19 Can you quote a specific page? 20 Q. Go to page 1. 21 GREENE, Q.C.: 22 Q. Page one, yes. 23 MR. DUNPHY: 24 A. Yes, I'm sorry. 25 MR. HAYES:</p>	<p>1 Q. Okay, thank you. And alternative 4 is the 2 alternative Hydro is proposing in this 3 proceeding which is a replacement VHF radio 4 system with Department of Transportation and 5 Works sharing the new system and with 6 Newfoundland Power continuing to use its 7 existing system for the foreseeable future, is 8 that correct? 9 MR. DUNPHY: 10 A. Yes. 11 Q. Now, the figures in the cumulative present 12 worth column in table 4, those represent the 13 capital and operating costs of Hydro only, is 14 the correct? That's page 17. 15 MR. DUNPHY: 16 A. Yes, yes, it does. 17 Q. Yes. I notice when Ms. Greene was examining, 18 you referred to, in the conclusions, on page 2 19 as being from Newfoundland and Labrador 20 Hydro's point of view. 21 MR. DUNPHY: 22 A. Yes. 23 Q. Yes. So, the identification of the least cost 24 alternative for Newfoundland and Labrador 25 Hydro on page 18 of the report again, that is</p>
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<p>1 made without reference to Newfoundland Power's 2 costs and only refers to least cost in terms 3 of Hydro's cost. 4 MR. DUNPHY: 5 A. That's true. 6 Q. Do I understand that correct? 7 MR. DUNPHY: 8 A. Yes. 9 Q. So, we go back to the conclusion that I 10 started my questions with on the bottom of 11 page 18 again, "that given that Newfoundland 12 Power does not need to replace their system at 13 this time, the logical way to ensure least 14 cost is for Hydro to replace it's existing 15 system, include Department of Transportation 16 and Works in the system and allow for the 17 possible integration of Newfoundland Power at 18 a later date". This is a conclusion regarding 19 what is the least cost from the perspective of 20 the overall electrical system or put another 21 way, for the electricity consumers of the 22 province, is the correct? 23 MR. DUNPHY: 24 A. Yes, I believe so. 25 Q. You were convinced that what Hydro is</p>	<p>1 proposing for the replacement of its VHF radio 2 system is least cost proposal for meeting 3 Hydro's technical requirements and the least 4 cost for the electrical system, is that 5 correct? 6 MR. DUNPHY: 7 A. Yes, I believe so, yes. 8 Q. Thank you, those are all my questions, Mr. 9 Chair. 10 CHAIRMAN: 11 Q. Thank you. I think, Mr. Hutchings, before you 12 start with your cross-examination, we'll take 13 a 15 minute break. 14 HUTCHINGS, Q.C.: 15 Q. Fine, Mr. Chair. 16 (BREAK - 10:48 a.m.) 17 (RESUME - 11:07 a.m.) 18 CHAIRMAN: 19 Q. Mr. Hutchings. 20 HUTCHINGS, Q.C.: 21 Q. Thank you, Mr. Chairman. Good morning, 22 gentlemen. I just have a few very general 23 questions in respect to this project since 24 we've spent a fair bit of time discussing it 25 on other occasions. First of all, Mr. Haynes,</p>



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1 HUTCHINGS, Q.C.:  
 2 just on the generality of the way Hydro is  
 3 dealing with capital budget items, we asked a  
 4 question in the 2004 Capital Budget Hearing,  
 5 and I don't think we need to bring up the  
 6 answer, it's very straightforward, but it was  
 7 IC-49 last time, and it was a question of how  
 8 Hydro would rank in terms of order of priority  
 9 for most essential to least essential, the  
 10 projects in the budget. And the response was  
 11 basically that Hydro considers all projects  
 12 included in the application to be of a  
 13 priority nature and required to provide  
 14 reliable service and facilities to its  
 15 customers. And I take it that's still Hydro's  
 16 position?

17 MR. HAYNES:

18 A. It's Hydro's position, yes.

19 Q. And has been Hydro's position in respect of  
 20 capital budgeting, I guess at least since the  
 21 time that it was required to come before this  
 22 Board for approval?

23 MR. HAYNES:

24 A. Our view is that the budgets that have gone  
 25 through our internal process from the point of

1 view or review by various VPs and the  
 2 divisions and the management committee and the  
 3 Board of Directors, basically what's before  
 4 the Board apparently is priority projects.  
 5 Q. Okay. And I presume that Mr. Martin correctly  
 6 stated the executive position of Hydro  
 7 yesterday when in response to Commissioner  
 8 Powell on the issue of deferral of projects,  
 9 Mr. Martin said there are lots of other  
 10 projects that are deferred that we don't,  
 11 either don't think they're justified at the  
 12 particular time or that they can be deferred.  
 13 So that's correct, is it not, that Hydro does  
 14 look at the possibility of deferring any  
 15 project that is proposed with a view to cost  
 16 saving, obviously?

17 MR. HAYNES:

18 A. Yes. As I said, when go down through the  
 19 process of reviewing all the internally  
 20 generated Capital Budget proposals, we look at  
 21 that, we assess them, we, sometimes we'll move  
 22 them off for a year or two or sometimes  
 23 they're delayed beyond a five-year period  
 24 because, yes, it's a nice thing to do, but  
 25 it's not a priority, we don't think it's

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1 essential to do it at this time, so.  
 2 Q. Right, okay. I wonder if we could now look  
 3 briefly at the response to IC-38? No, for the  
 4 2005 Capital Budget. I don't think we want to  
 5 go back to vehicles. Here we asked for  
 6 production of the previous project  
 7 descriptions that had been provided in respect  
 8 of this VHF mobile radio system. And if we  
 9 could go to Attachment 1 on the next page?  
 10 This is the initial proposal that Hydro put  
 11 forward in 2001 for the 2002 Capital Budget  
 12 for the replacement of the VHF mobile radio  
 13 system, is that correct?

14 MR. HAYNES:

15 A. Yes, that's correct.

16 Q. That was a little less than half a page, I  
 17 guess, in terms of the description and this  
 18 was what Hydro put before the Board initially  
 19 for the purpose of having this, say, \$8.3  
 20 million approved? Is that correct?

21 MR. HAYNES:

22 A. Yes.

23 Q. Okay. That proposal was revised twice, I  
 24 think, during the course of the hearing in  
 25 2001. And if we go to the next page, we'll

1 find the first revision, which was October  
 2 31st, 2001. And that basically indicated that  
 3 instead of a one-year project, this was going  
 4 to be a two-year project split between the  
 5 years 2002 and 2003. And that was--and  
 6 there's some additional information in the  
 7 nature of the project that was described at  
 8 that time, correct?

9 MR. HAYNES:

10 A. Yes.

11 Q. Okay. And then that was further revised on  
 12 the next page on November 30th, 2001 which I  
 13 think simply added the note at the bottom  
 14 indicating that this wasn't a project that  
 15 could be completed in one year and would be  
 16 required to go over two years. Is that  
 17 correct?

18 MR. HAYNES:

19 A. That's correct.

20 Q. Okay. And then if we go to the next page of  
 21 the response, I think we find the capital  
 22 project explanation for the 2004 Capital  
 23 Budget that we dealt with last year, and that  
 24 is a much more substantial document that goes  
 25 on with a number of attachments and includes a

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<p>1 HUTCHINGS, Q.C.:  2 business case for the replacement of the radio  3 system which was dated March 25, 2003. I  4 think that's the next page after the one  5 that's up there now. And that's the project  6 that you, I think, all three of you gentlemen  7 spoke to last year as well. Isn't that  8 correct?  9 MR. HAYNES:  10 A. Yes, it is.  11 Q. Yes, okay. And if we could turn to page 13 of  12 that business case? The conclusion which is  13 there on the screen now at the end is that  14 Hydro should proceed with the installation of  15 the mobile trunked radio system as soon as  16 possible as any further delay will likely  17 result in the unavailability of any system due  18 to the deteriorating performance of the  19 current system, correct?  20 MR. HAYNES:  21 A. Yes.  22 Q. Okay. So is it fair to say that in the fall  23 of 2001 it was Hydro's best engineering  24 judgment that this system had to be replaced  25 in 2002 and that that project could not then</p>	<p>1 be deferred?  2 MR. HAYNES:  3 A. Yes, that's correct. I think as I mentioned,  4 we consider ourselves to have been very  5 fortuitous to have survived this long without  6 a major impairment of the system. But on any  7 technical things, I would refer to Mr. Dunphy  8 to clarify any issues that we've had with the  9 system.  10 Q. Right, okay. But Hydro did not put the  11 project ahead again for its 2003 Capital  12 Budget, did it?  13 MR. HAYNES:  14 A. No. Obviously we were responding to the, I  15 guess, the rejection of the proposal by the  16 Board and went back for a serious review of  17 the whole thing and to reaffirm ourselves that  18 this was the right thing to do and that was  19 our conclusion.  20 Q. Okay.  21 MR. HAYNES:  22 A. For the previous submission and certainly for  23 this submission.  24 Q. If we could look now to the response to IC-39  25 from this year? This outlines the operating</p>
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<p>1 experience in respect to the system. And the  2 2004 experience included here is up to,  3 according to the response, September 17, 2004.  4 And that has been quite a bit more positive  5 than the 2003 experience, hasn't it?  6 MR. HAYNES:  7 A. The numbers to date I would defer to Mr.  8 Dunphy to talk about a specific performance of  9 the system.  10 Q. Okay.  11 CHAIRMAN:  12 Q. Mr. Hutchings, excuse me, which IC is this?  13 HUTCHINGS, Q.C.:  14 Q. This is 39.  15 CHAIRMAN:  16 Q. 39, thank you.  17 HUTCHINGS, Q.C.:  18 Q. So, Mr. Dunphy, would you agree with me that  19 the performance of the system in the calendar  20 year 2004 to date, that is to say, to  21 September 17, 2004, has been more positive  22 than the performance in 2003?  23 MR. DUNPHY:  24 A. Certainly. We've been extremely lucky. The  25 system has performed well to this time.</p>	<p>1 However, as I stated in my presentation,  2 failure is random in occurrence. We don't  3 know when it will fail, we don't know if it  4 will fail this afternoon, we have no idea.  5 What we do know is that the system is quite  6 old, it's quite a long time beyond its  7 expected design life, it hasn't been supported  8 for many years and that it's only a matter of  9 time before it will. But we certainly can't  10 predict when that catastrophic failure will  11 be, we only expect that it is going to come.  12 11:15 a.m.)  13 Q. Yes. And as we already touched on, I guess,  14 it was Hydro's best engineering judgment that  15 this project was required to be undertaken in  16 2002, correct?  17 MR. DUNPHY:  18 A. I would say at the time it was prudent. I  19 think now it's critical that it be replaced.  20 Q. Okay. Do you know the effect on the ratepayer  21 of the deferral of this project from 2002 to  22 now an in service date of 2006?  23 MR. DUNPHY:  24 A. No, sir, I don't.  25 Q. Okay. Did you hear Mr. Powell's questions to</p>

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1 HUTCHINGS, Q.C.:  
 2 Mr. Martin yesterday where he referred to Mr.  
 3 Roberts' evidence about the impact on revenue  
 4 requirement of the \$33.9 million that would go  
 5 into rate base in 2005?  
 6 MR. DUNPHY:  
 7 A. I certainly remember it in general terms, yes.  
 8 Q. Yes, okay. And there was \$1.7 million in  
 9 additional revenue required as a result of  
 10 that \$33.9 million in rate base, correct?  
 11 MR. DUNPHY:  
 12 A. I'd have to refer back to confirm that.  
 13 Q. Yeah. Well, you can refer to Mr.--perhaps  
 14 we'll bring up Mr. Roberts' evidence, the  
 15 finance evidence at page 6. And at the top of  
 16 that page you can see that the impact on  
 17 revenue requirement of the inclusion in rate  
 18 base of approximate 33.9 million of 2005  
 19 capital expenditures related to projects  
 20 completed and in service in 2005 would be an  
 21 increase of approximately \$1.7 million?  
 22 MR. HAYNES:  
 23 A. Yes.  
 24 Q. Okay. And would you agree with me then that  
 25 the inclusion in rate base of this \$8. 3

1 million project would result in an increase in  
 2 revenue requirement in the range of \$400,000?  
 3 MR. HAYNES:  
 4 A. I would suggest that Mr. Roberts would be the  
 5 most appropriate person to answer that  
 6 question.  
 7 Q. Okay. But if the effect is proportional, then  
 8 that would be the result, would it not?  
 9 MR. HAYNES:  
 10 A. I'm not sure it is proportional. I'm not  
 11 qualified to answer that question.  
 12 Q. Okay. No, I'm not asking you if it is  
 13 proportional. I'm saying if it is  
 14 proportional then that would be the effect,  
 15 correct?  
 16 MR. HAYNES:  
 17 A. Possibly, but Mr. Roberts would have to  
 18 confirm that.  
 19 Q. Okay. And the three or four years deferral of  
 20 that, if in fact, it is in fact a \$400,000  
 21 item would amount to a 1.2 to 1.6 million  
 22 dollar saving to ratepayers from the deferral  
 23 of this project from 2002 to 2006, is that  
 24 correct?  
 25 MR. HAYNES:

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1 A. That's only correct if your assumptions are  
 2 correct, which I really cannot -  
 3 Q. On that assumption, on the assumptions that  
 4 I've put to you?  
 5 MR. HAYNES:  
 6 A. - I really cannot testify if that's correct or  
 7 not. Mr. Roberts would be the most  
 8 appropriate -  
 9 Q. Okay. On the assumptions that I put to you,  
 10 would you agree with that?  
 11 GREENE, Q.C.:  
 12 Q. Mr. Chair, at this point I do have problems  
 13 with the assumptions that Mr. Hutchings is  
 14 putting forward. We can explain what the  
 15 revenue requirements means, we can explain how  
 16 customers are not impacted until rates get  
 17 changed and the actual costs get incorporated  
 18 into the rates. And if Mr. Hutchings wish to  
 19 pursue this line of questioning, Hydro's  
 20 position is it should be done through the  
 21 financial witnesses, not through the operation  
 22 and engineering witnesses. Because he's now  
 23 getting into how rates are set and what the  
 24 impact are on rates and we are not offering  
 25 these witnesses for that purpose.

1 CHAIRMAN:  
 2 Q. I think I have to concur with that, Mr.  
 3 Hutchings, subject to, you know, you making a  
 4 comment on it. But, I don't know that the  
 5 assumptions by these particular witnesses  
 6 would be in that regard very helpful to the  
 7 Board.  
 8 HUTCHINGS, Q.C.:  
 9 Q. I thought it was pretty straightforward in  
 10 terms of the assumptions that were put and I  
 11 would have thought that the witness would be  
 12 able to deal with it, Mr. Chair. But in any  
 13 event, we can deal with it with a later  
 14 witness and the issue will be fully canvassed  
 15 then. Those are all the questions I have for  
 16 the panel, Mr. Chair.  
 17 CHAIRMAN:  
 18 Q. Thank you, Mr. Hutchings. Mr. Kennedy?  
 19 MR. KENNEDY:  
 20 Q. Thank you, Chair. Members of the panel,  
 21 gentlemen. There was reference made to the  
 22 fact that part of the thinking, if you will,  
 23 that Hydro is employing when putting forward  
 24 this project as proposed is to minimize or  
 25 lessen its dependence on third parties, and

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1 MR. KENNEDY:

2 specifically Aliant. You mentioned the fact  
3 that you want to bring some of your towers  
4 into Hydro owned facilities, if you will. I'm  
5 wondering if you could just explain exactly  
6 what--how this proposal works in that regard?  
7 Is there a shift away from using third party  
8 services contemplated or will it be about  
9 equal to what you're now using?

10 MR. DUNPHY:

11 A. I guess first off to explain to the members of  
12 the Board, the intention here is to utilize  
13 Hydro's existing microwave radio towers. Mr.  
14 Haynes mentioned yesterday that we have a  
15 microwave radio system which starts in St.  
16 John's and terminates in Deer Lake and Bay D'  
17 Esprit. And in order to reduce operating  
18 costs we intend to move to Hydro owned sites  
19 wherever practical for these radio repeaters.  
20 There are operating costs associated with  
21 having those in third party sites. So that  
22 specifically is what we were referring to  
23 there. I guess in answer to one of the  
24 questions, one of the PUB questions regarding  
25 maintenance of the system, that's the other

1 component, really. And if you can just give  
2 me a moment, I'll find the specific question.  
3 Mr. O'Rielly, could you bring us -

4 MR. O'RIELLY:

5 Q. (Inaudible).

6 MR. DUNPHY:

7 A. Yes, thank you. We've indicated that the  
8 system will be installed in a wider geographic  
9 area than the existing one. And we don't have  
10 personnel, and we don't intend to hire  
11 personnel to maintain the system in that area.  
12 However, we will certainly consider utilizing  
13 Hydro's existing forces to maintain the system  
14 in our existing sites and thereby assist in  
15 minimizing the operating costs. But that will  
16 require more detailed analysis, really, of  
17 whatever proposals we receive.

18 MR. KENNEDY:

19 Q. You referenced the fact that the switch is  
20 currently located in Gander. If I'm  
21 paraphrasing incorrectly, please advise me,  
22 but that Hydro is having difficulty accessing  
23 expertise within Aliant to be able to maintain  
24 that switch. I think you referenced that most  
25 of the people that used to take care of that

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1 switch, who works for Aliant but used to take  
2 care of that switch for Hydro have since  
3 retired or moved off, if you will, to other  
4 positions, presumably, but that there's a void  
5 inside of Aliant, is that correct?

6 MR. DUNPHY:

7 A. Yes. With respect to the maintenance of this  
8 particular piece of equipment. But I think  
9 that the primary cause of that is the fact  
10 that there is no manufacturer support. I  
11 think it's fair to say, and I know I can't  
12 speak for Aliant, but I think it's fair to say  
13 that Aliant would have the personnel available  
14 to maintain the system if additional training  
15 were available. My only point was that that  
16 ability is not there. They can't take  
17 advantage of any additional training. So that  
18 adds, through attrition of the people who were  
19 originally trained the knowledge base, if you  
20 will, has declined.

21 Q. And so is it safe to assume then that Hydro  
22 itself is unable to at this point provide  
23 expertise to Aliant to assist with the  
24 maintaining of the switch in Gander, current  
25 switch?

1 MR. DUNPHY:

2 A. We can provide minimal assistance, but not  
3 really. We have the same issues. Additional  
4 training is unavailable. Many of the people  
5 who were involved in the system are currently  
6 enjoying their retirements and the knowledge  
7 simply is not there to take advantage of.

8 Q. Okay. So, I guess it begs the question then  
9 of how do we or how does Hydro intend to avoid  
10 ending up in the same position with this new  
11 system where is there an intention for you to  
12 acquire your own expertise or is it entirely a  
13 reliance on the third party?

14 MR. DUNPHY:

15 A. No. Certainly we have--as with the existing  
16 system we have trained our people in the past  
17 and we fully intend to train our own people in  
18 the maintenance of the system and particularly  
19 in the management of the system.

20 Q. And the budget figures that counsel for  
21 Newfoundland Power was bringing you through  
22 and indicating the difference between your  
23 overall budget amount and the amount that was  
24 in your document and some of it related to, I  
25 believe, training costs associated with the

<p style="text-align: right;">Page 81</p> <p>1 MR. KENNEDY: 2 new system? 3 MR. DUNPHY: 4 A. Yes. There would be two types of training. 5 There would be training for our maintenance 6 personnel, there would also be user training. 7 Any change in the system will require us to 8 retrain the users in how to access the system. 9 Q. Related to that, if you could just look at 10 PUB-21? And this question asks that in the 11 event of a failure of the Aliant network, what 12 would be the impact on the operation of the 13 proposed MRS and line work in progress. Has 14 Hydro considered alternative means of backhaul 15 (phonetic) communications for backup? So, as 16 a related question then, in addition to you-- 17 in addition to Hydro relying on Aliant or 18 whoever the ultimate vendor is, but Aliant, 19 presumably, if you were to choose them in 20 providing you with service for the system, 21 you're also relying in part, as I understand 22 it, on Aliant's network in order for this 23 mobile radio system to work? 24 MR. DUNPHY: 25 A. Yes, that's true.</p>	<p style="text-align: right;">Page 82</p> <p>1 Q. And so, is there redundancies built into your 2 design or some other approach taken which 3 would minimize the exposure that Hydro has to 4 relying on the Aliant network? 5 MR. DUNPHY: 6 A. Yes, there are. The intention is to utilize 7 wherever possible Hydro's existing facilities 8 to minimize the reliance on Aliant's network. 9 Unfortunately, because of the geographic 10 reality of Newfoundland, in many locations 11 there are no other alternatives available that 12 are cost effective. So, the design would, as 13 far as possible, minimize the ability of an 14 outage in the network to affect the overall 15 system. 16 Q. You indicated that at one point that in 17 bringing--on your direct in going through the 18 power point presentation that it was not 19 appropriate at this time to choose the final 20 technology solution. Is that correct? 21 MR. DUNPHY: 22 A. Yes. 23 Q. Could you tell me why it's not appropriate at 24 this time to choose the final technology 25 solution?</p>
<p style="text-align: right;">Page 83</p> <p>1 MR. DUNPHY: 2 A. Well, there are many different equipment 3 vendors and suppliers in the marketplace that 4 can provide a solution. In many cases there 5 is only one vendor of a particular technology. 6 If we were to preselect and insist that a 7 particular technology was going to provide our 8 needs, then one particular vendor knows that 9 they are chosen and they can choose to bid the 10 system appropriately. By developing a--or 11 inappropriately as may be the case, I guess. 12 By utilizing a function of specification and 13 indicating what the system has to provide we 14 can do a much more--or ensure that a much more 15 competitive process is used so that different 16 vendors will propose cost effective solutions. 17 This is commonly used, it was used, as Mr. 18 Haynes indicated, in many different instances 19 in the past to assure we're getting the most 20 appropriate solution at the time. The other 21 point to make is that a year, in technology 22 terms a year is a lifetime. And if we are 23 looking at, you know, going forward with this 24 project in 2005, there can be new technologies 25 that have appeared on the market that are more</p>	<p style="text-align: right;">Page 84</p> <p>1 cost effective. There can be more 2 technologies that have been withdrawn from the 3 market. I think our existing system is an 4 example of that in that it was, by the mid 5 1990s it was no longer an alternative on the 6 market. 7 Q. So, to paraphrase then, the strategy, if you 8 will, is to maintain a horse race of sorts 9 with your potential suppliers so that you get 10 competitive bids from various suppliers? 11 MR. DUNPHY: 12 A. Yes. 13 Q. Okay. Let's just assume for a moment that 14 approval is given for the project. Could you 15 just bring me through what the process will be 16 in Hydro after that approval is given and 17 bring us up to the actual contract let, if you 18 will? 19 (11:30 a.m.) 20 MR. DUNPHY: 21 A. Well, in general terms we would complete a 22 specification which included specific contract 23 terms, legal and other conditions. We would 24 complete the detailed engineering analysis 25 confirming that the function of specifications</p>

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1 MR. DUNPHY:

2 that we have are sufficient and don't need to  
3 be changed in any way. We would make sure  
4 that there was a process in place that would  
5 determine how the competitive bids would be  
6 evaluated, so we would decide in more detail  
7 what was important to be evaluated in the bids  
8 and we would then issue a tender. For a  
9 system of this size the development of the  
10 contract would, you know, take several months  
11 and tender responses from vendors would  
12 probably take, you know, at least a month if  
13 not two. Once the tenders were received, they  
14 would be evaluated for their technical and  
15 financial implications and the technology  
16 would be selected.

17 Q. So without holding Hydro to specific dates,  
18 when would you expect to be in a position to  
19 be able to issue a tender?

20 MR. DUNPHY:

21 A. I'd like to give that a little bit more  
22 thought. I haven't reviewed the proposed  
23 schedule in quite sometime.

24 Q. You were referencing months, I think. So is  
25 it safe to assume that if we assume approval

1 is given, that it would take a number of  
2 months before you would actually be in a  
3 position to issue your tender?

4 MR. DUNPHY:

5 A. Yes. And we've talked about some preliminary  
6 dates for that. I think that Mr. Downton can  
7 correct me if I'm wrong, but, you know, that  
8 would probably be in the first quarter,  
9 sometime in the first quarter of 2005 to  
10 finalize all those requirements.

11 Q. Okay. And assuming your turn around, you  
12 indicated that you would expect maybe a month  
13 or so for tenders to actually be received by  
14 or bids by Hydro and then that there's an  
15 evaluation process that would take place and  
16 then eventually you would select your  
17 technology. That would be the general  
18 process?

19 MR. DUNPHY:

20 A. I would hesitate to say, to suggest that one  
21 month would be sufficient. In fact, many,  
22 many tenders, vendors will request extensions  
23 on, so it would probably be a bit longer than  
24 that.

25 Q. Okay. So, would we be safe in assuming that

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1 it would take at least six months, say, for  
2 you to be in a position of actually selecting  
3 the technology that Hydro wants to employ for  
4 the system?

5 MR. DUNPHY:

6 A. Yeah, I think it would be safe to say it would  
7 be at least six months.

8 Q. And you have the budgeting spread over two  
9 years, correct, there's an in service date  
10 expected of 2006, correct?

11 MR. DUNPHY:

12 A. Yes.

13 Q. Would you actually contemplate starting  
14 construction of your system in 2005 though?  
15 Part of the 2 million 914 for 2005, presumably  
16 some of that relates to actual construction of  
17 a new system?

18 MR. DUNPHY:

19 A. I believe, yes, that there would be an  
20 assumption there that a limited amount of  
21 construction would be completed in 2005.

22 Q. And you're relying on the existing system  
23 while you're putting the new system in? In  
24 other words, it has to be completely installed  
25 before you would actually be able to flip over

1 to your new system?

2 MR. DUNPHY:

3 A. It's a bit preliminary to say that. In fact,  
4 the RFI that we issued specifically asked  
5 vendors to address the issue of doing a phased  
6 replacement so that we could get the switch  
7 out first. So I don't really know if that  
8 would be the case.

9 Q. Okay. If we could just pull up PUB-10 for  
10 just a moment? And, gentlemen, this question  
11 asked please explain how the capital and  
12 operating costs were derived. And this is the  
13 summary of findings from your mobile radio  
14 system summary and finding, page 15. And as  
15 you just indicated, you have a specification  
16 or an RFP that you issued but that there's no  
17 final technology that's being selected. And  
18 so, that begged the question of, well, if  
19 there is no final technology selected, how was  
20 it that Hydro was able to derive capital and  
21 operating costs in order to conduct its  
22 analysis. And you indicate that it was  
23 through a detailed analysis of the proposal  
24 received and Hydro's consultant and Hydro  
25 personnel reviewed the estimates for accuracy

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<p>1 MR. KENNEDY:</p> <p>2 and completeness and adjustments were made</p> <p>3 where warranted based on estimates for similar</p> <p>4 work and previous experience. So was the</p> <p>5 costing data that Hydro used in its analysis</p> <p>6 and as detailed in its summary of findings</p> <p>7 derived from a compilation of the proposals</p> <p>8 that were received in reply your RFP or was it</p> <p>9 one particular vendor's proposal that these</p> <p>10 costing datas was based upon?</p> <p>11 MR. DUNPHY:</p> <p>12 A. No. It was actually a compilation.</p> <p>13 Q. Mr. Haynes, this would be a question directed</p> <p>14 more towards you as a follow-up to a line of</p> <p>15 questions that I pursued yesterday with you.</p> <p>16 And that had to do with your budgeting</p> <p>17 variances where there's detailed engineering</p> <p>18 work yet to be done. Do you recall those</p> <p>19 questions?</p> <p>20 MR. HAYNES:</p> <p>21 A. Yes.</p> <p>22 Q. And we were talking about what would be an</p> <p>23 acceptable level of plus or minus off of your</p> <p>24 original budget estimate where you both have,</p> <p>25 where you have an MPV and where you don't MPV.</p>	<p>1 Do you recall those questions?</p> <p>2 MR. HAYNES:</p> <p>3 A. Yes, I do.</p> <p>4 Q. Okay. In light of the fact that Hydro hasn't</p> <p>5 selected a final technology and therefore that</p> <p>6 there is an assumed chance that the project</p> <p>7 chosen could be technically quite different</p> <p>8 than what's presently contemplated, could you</p> <p>9 give the Board some indication of how accurate</p> <p>10 you fell the costing data is as indicated in</p> <p>11 your actual proposal and what you would expect</p> <p>12 to be a reasonable variance from those budget</p> <p>13 proposals?</p> <p>14 MR. HAYNES:</p> <p>15 A. And Mr. Gerard can correct me if I'm wrong,</p> <p>16 because I'm going to step a little bit into</p> <p>17 the--in the weeds a little bit. But the</p> <p>18 estimate that the--when we went for a request</p> <p>19 for quotations to the ten or so vendors, we</p> <p>20 received four that was analyzed, scrutinized</p> <p>21 and basically a lot of discussion on what</p> <p>22 actually went into that particular estimate of</p> <p>23 \$8.4 million. And I was involved in some of</p> <p>24 those discussions on those numbers. Those</p> <p>25 technologies are all very similar. It would</p>
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<p>1 be our estimation that any different</p> <p>2 technology would actually be less than that,</p> <p>3 not more than that. We think that there is a</p> <p>4 reasonable number for what the vendors came</p> <p>5 back with. We did have four reputable vendors</p> <p>6 come back and obviously they didn't spend two</p> <p>7 months, you know, preparing a detailed</p> <p>8 estimate, it's a budgetary number. We're</p> <p>9 comfortable that that is an accurate budgetary</p> <p>10 number. And in fact, if they were to come</p> <p>11 back with an alternate technology, obviously</p> <p>12 for us to entertain it, it would be cheaper.</p> <p>13 If they come back with an alternative that's</p> <p>14 10 or 15 million dollars, obviously we'd have</p> <p>15 to look a little bit harder. But, we do need</p> <p>16 a VHF radio system, and the specifications,</p> <p>17 the functional specifications allows us to and</p> <p>18 allows the vendors to propose technology that</p> <p>19 will meet our needs at the least cost.</p> <p>20 Q. Would you be able to provide comment on when</p> <p>21 you think--when you would consider the project</p> <p>22 to have gone outside its scope from what's</p> <p>23 being proposed?</p> <p>24 MR. HAYNES:</p> <p>25 A. The scope, I don't think that we would</p>	<p>1 actually go outside the scope. The scope is a</p> <p>2 functional specification. There are two</p> <p>3 things that we would obviously be concerned</p> <p>4 with. One is a change of scope where actually</p> <p>5 we are doing something different than we</p> <p>6 originally proposed and all we propose is to</p> <p>7 replace the VHF radio. So, you know, there</p> <p>8 will not be a change in scope, per se. There</p> <p>9 obviously may be a change in the estimated</p> <p>10 capital cost. I'm reluctant to say there's a</p> <p>11 number that, you know, would force us to come</p> <p>12 back and reconsider the job, because we do</p> <p>13 need a VHF radio. It's, you know, I'm</p> <p>14 reluctant to sit on a number that actually</p> <p>15 identifies a specific number. It is reported</p> <p>16 to the Board routinely, anyway.</p> <p>17 Q. Would you--you mentioned about at its essence</p> <p>18 this is a proposal to replace the mobile radio</p> <p>19 system and you've developed the spec. Would</p> <p>20 you consider the ability of Department of</p> <p>21 Transportation Works to participate in this</p> <p>22 system as being a must for that technical</p> <p>23 specification?</p>

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1 MR. HAYNES:

2 A. No, in the estimates that were done and in the  
3 net present values that were done, we did do  
4 the case where Hydro would go alone, without  
5 Newfoundland Power's involvement or without  
6 Works Services or Department of Transportation  
7 and Works. I believe the present worth was in  
8 the order of \$14 million, I believe, going  
9 from memory, and we have no--I think in the  
10 2003 hearing we talked about the participation  
11 of Department of Transportation. Now  
12 basically they pay on a monthly basis. We  
13 would obviously prefer that they would pay on  
14 a capital contribution basis. We have no  
15 reservations--we have no thoughts whatsoever  
16 that Department of Transportation and Works  
17 will not be a tenant or a partner or whatever  
18 in this particular system.

19 Q. There's probably too many no's -

20 MR. HAYNES:

21 A. Well, maybe. Anyway.

22 Q. - both in mine and in yours, and I think we  
23 started crossing them off.

24 MR. HAYNES:

25 A. Anyway, what I'm saying is that -

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1 Q. Yes, and that's your specification right now,  
2 but you're indicating that if, assuming  
3 approval is given and you move forward into  
4 2005, you're going to put out tenders to  
5 potential suppliers and then wait to get the  
6 bids back and then do your evaluation, and you  
7 may end up selecting a technology different  
8 than the one that you're currently  
9 contemplating, in the sense that the  
10 technology could be shifting right before your  
11 eyes. Did I gather that correctly?

12 MR. HAYNES:

13 A. That's possible, but our focus is the  
14 functionality, not necessarily the technology.

15 Q. Right, and so I think we're close. So the  
16 technical specification that you currently  
17 have does not preclude the Department of  
18 Transportation and Works or Newfoundland Power  
19 from participating in this system?

20 MR. HAYNES:

21 A. No, I don't think so.

22 Q. Right. Can Hydro commit to that whatever  
23 system it does choose as a result of the bids  
24 that you receive and evaluate that whatever  
25 technology is chosen will not preclude the

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1 Q. I'm not sure if we left with no or yes, but -

2 MR. HAYNES:

3 A. - the Department of Transportation and Works  
4 use our system. It's critical to their  
5 operation as well, and we certainly--I mean,  
6 if they were to back out tomorrow, for any  
7 reason, obviously we would have some concern.  
8 We have no expectation that would happen.  
9 Q. Yes. So can I phrase it then that right now,  
10 the ability of the Department of  
11 Transportation and Works to participate in  
12 this project is one of the key requirements of  
13 your specifications? In other words, your  
14 specifications of your system -

15 MR. HAYNES:

16 A. Would not change if Works Services and  
17 Transportation were not there. Our functional  
18 specification would not be any different if  
19 the Department of Transportation and Works  
20 were not involved. That's been stated before.

21 Q. Okay. And you're saying that's the case as  
22 well for Newfoundland Power?

23 MR. HAYNES:

24 A. Newfoundland--our specification encompasses  
25 all of Newfoundland Power's requirements.

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1 Department of Transportation and Works or  
2 Newfoundland Power from being able to  
3 participate in the system? Is that a  
4 consistent -

5 MR. HAYNES:

6 A. It should not, but that's a very -

7 Q. - requirement throughout?

8 MR. HAYNES:

9 A. That's a very technical question, but it  
10 should not preclude anybody from  
11 participating, Newfoundland Power or the  
12 Department of Transportation and Works.  
13 Gerard.

14 MR. DUNPHY:

15 A. It's certainly our intention that it will not  
16 preclude anyone, Department's participation or  
17 Newfoundland Power's, no. I think we've  
18 stated that or at least I had intended to  
19 state that in the presentation that I gave  
20 earlier that the system will meet Newfoundland  
21 Power's requirements.

22 Q. So is that a commitment that Hydro is making,  
23 that the system that's ultimately chosen will  
24 not preclude the Department of Transportation  
25 and Works or Newfoundland Power from being



<p style="text-align: right;">Page 97</p> <p>1 MR. KENNEDY: 2 able to participate in the project if they 3 wished to do so? 4 MR. HAYNES: 5 A. That is a part of the functional 6 specification. That would be a change in 7 scope if we were to somehow arrive at that, 8 which would be very unlikely. 9 Q. And if it's a change in scope in the project, 10 would you feel it incumbent upon Hydro to come 11 back to the Board to seek a change in its 12 approval or seek reapproval, if you will, of 13 the project? 14 MR. HAYNES: 15 A. I guess so. I mean, obviously the cost is one 16 of the driving factors. If that's a 17 significant change of scope or if that's a 18 part of the order, for instance, that we have 19 to include provisions for that and we could 20 not do that, obviously we would have to advise 21 the Board. 22 Q. Just one final series of questions. PUB-22 23 was actually an RFI addressed to Newfoundland 24 Power, seeking some information concerning 25 their participation in this system. Have you</p>	<p style="text-align: right;">Page 98</p> <p>1 had an opportunity to be able to review 2 Newfoundland Power's reply? 3 MR. HAYNES: 4 A. Yes, certainly we've reviewed their reply. 5 Q. Just have one straightforward question. Did 6 Hydro conduct its own independent confirmation 7 of Newfoundland Power's calculations as 8 presented in PUB-22? 9 MR. HAYNES: 10 A. I don't think we - 11 MR. DOWNTON: 12 A. No. 13 MR. HAYNES: 14 A. We're quite confident that Newfoundland Power 15 can undertake that. 16 Q. I'm sorry? 17 MR. HAYNES: 18 A. We're quite confident Newfoundland Power has 19 presented the facts. We would not--we have 20 not done that. 21 Q. And gentlemen, I just want to go through now 22 the Board's order in P.U.B. 29 to confirm that 23 the directions were expressly complied with, 24 and if we could just pull that up, please. 25 Yes, P.U.B. 29 (2003). I'm sorry, P.U. 29,</p>
<p style="text-align: right;">Page 99</p> <p>1 and it's page 33, Mr. O'Rielly. Do you have a 2 copy of the - 3 CHAIRMAN: 4 Q. Page 33? 5 MR. KENNEDY: 6 Q. Page 33, Chair, yes. 7 MR. O'RIELLY: 8 Q. It doesn't appear to be there. 9 MR. KENNEDY: 10 Q. Okay, I think what I can do is sort of 11 paraphrase. Gentlemen, I believe you have a 12 copy of the Order in front of you there on 13 the--do you have a copy of the actual 14 directions of the Board flowing out of P.U. 15 29? I think it's actually in your own summary 16 of findings. 17 MR. HAYNES: 18 A. That's right. 19 MR. DOWNTON: 20 A. Page three, I believe of the report. 21 Q. Yes. 22 MR. DUNPHY: 23 A. We don't have the actual Order, but we have 24 copied the sections of the Order that were 25 relevant into the document.</p>	<p style="text-align: right;">Page 100</p> <p>1 Q. Yes, yes, I remember seeing them in your - 2 GREENE, Q.C.: 3 Q. Page three? 4 MR. KENNEDY: 5 Q. There we go. So the directions were, first, 6 "Newfoundland Power shall submit to Hydro 7 technical requirements document, including a 8 detailed engineering assessment of the 9 functional requirements needed by Newfoundland 10 Power for operating a mobile VHF system into 11 the foreseeable future." Was that completed? 12 MR. DUNPHY: 13 A. Yes. If you refer to Section 3 actually of 14 this report, Mr. O'Rielly, it starts on page 15 seven. We actually went through in point by 16 point and described the activities that were 17 undertaken to comply with the requirements of 18 the Order. 19 Q. Yes. And Hydro generated a detailed working 20 specification of the new system and selected 21 and delivered a technical specification 22 document to Newfoundland Power, that too, that 23 was completed?</p>

<p style="text-align: right;">Page 101</p> <p>1 MR. DUNPHY:</p> <p>2 A. Yes.</p> <p>3 Q. Three is incumbent on Newfoundland Power, as</p> <p>4 is four and five. Six, and I believe you've</p> <p>5 spoken to this, that sharing agreements with</p> <p>6 the Works Services and Transportation have</p> <p>7 been firmed up to the extent possible, prior</p> <p>8 to your submitting this proposal?</p> <p>9 MR. DUNPHY:</p> <p>10 A. Yes, I would concur with that wording, to the</p> <p>11 extent possible.</p> <p>12 Q. That's all the questions I have, Chair,</p> <p>13 members of the panel. Thank you, gentlemen.</p> <p>14 CHAIRMAN:</p> <p>15 Q. Ms. Greene, do you have any redirect?</p> <p>16 GREENE, Q.C.:</p> <p>17 Q. Yes, I do have a couple of areas. The first</p> <p>18 is with respect to the proposed schedule</p> <p>19 should Hydro receive approval for this</p> <p>20 project. I understood, Mr. Downton, from your</p> <p>21 answers, that Hydro expects to be ready by mid</p> <p>22 2005 approximately to be able to award the</p> <p>23 contract to a successful bidder. Is that</p> <p>24 correct?</p> <p>25 MR. DOWNTON:</p>	<p style="text-align: right;">Page 102</p> <p>1 A. I would say very approximately, yes.</p> <p>2 Q. And that Hydro anticipates work actually being</p> <p>3 done on the radio system in the last half of</p> <p>4 the year? Is that correct?</p> <p>5 MR. DOWNTON:</p> <p>6 A. Yes.</p> <p>7 Q. Mr. Haynes, with respect to the line of</p> <p>8 questioning on the level of comfort of the</p> <p>9 cost estimate, you mentioned that you yourself</p> <p>10 were involved with the evaluation of the bids</p> <p>11 that were received with Mr. Downton and Mr.</p> <p>12 Dunphy. Is that correct?</p> <p>13 (11:48 a.m.)</p> <p>14 MR. HAYNES:</p> <p>15 A. Yes, very briefly, but I was involved.</p> <p>16 Q. And was Hydro's external consultant involved</p> <p>17 in the evaluation of the bids received?</p> <p>18 MR. HAYNES:</p> <p>19 A. Very much so.</p> <p>20 Q. With respect to the cost estimate, you've been</p> <p>21 involved in review of other cost estimates for</p> <p>22 other significant projects for Hydro? Is that</p> <p>23 correct?</p> <p>24 MR. HAYNES:</p> <p>25 A. That's correct.</p>
<p style="text-align: right;">Page 103</p> <p>1 Q. Your level of confidence, with respect to the</p> <p>2 numbers submitted, how would you describe your</p> <p>3 level of confidence for that cost estimate</p> <p>4 versus other estimates we have put before this</p> <p>5 Board?</p> <p>6 MR. HAYNES:</p> <p>7 A. Very confident.</p> <p>8 Q. Hydro regularly reports to the Board. What</p> <p>9 has its experience been with respect to</p> <p>10 changes in scope and changes in exceeding the</p> <p>11 capital cost estimate?</p> <p>12 MR. HAYNES:</p> <p>13 A. Changes of scope are extremely rare.</p> <p>14 Basically occasionally it happens, but it's</p> <p>15 very rare. On the cost estimates, generally</p> <p>16 speaking, we bring most projects in, certainly</p> <p>17 on the bottom line, fairly close to the</p> <p>18 estimate. In cases, we have actually been</p> <p>19 under a bit. The number of times that we go</p> <p>20 over is rare.</p> <p>21 Q. So would the Board be able to take comfort by</p> <p>22 looking at Hydro's past experience with</p> <p>23 respect to its ability to bring a project in</p> <p>24 certainly within the budget?</p> <p>25 MR. HAYNES:</p>	<p style="text-align: right;">Page 104</p> <p>1 A. Yes, I certainly think they should.</p> <p>2 Q. And the Granite Canal project, for which you</p> <p>3 were directly responsible, \$135 million</p> <p>4 project, did that come in on budget and on</p> <p>5 schedule?</p> <p>6 MR. HAYNES:</p> <p>7 A. We are still on budget with that project, and</p> <p>8 still on--and was on schedule.</p> <p>9 Q. And that was done to a functional</p> <p>10 specification?</p> <p>11 MR. HAYNES:</p> <p>12 A. Yes. Obviously when you go out and build a</p> <p>13 project of that size, which included by the</p> <p>14 way a communication system, a microwave</p> <p>15 communication system, very comprehensive</p> <p>16 project that all came in on budget.</p> <p>17 Q. Do you have any reason, at this point in time,</p> <p>18 as the executive responsible for Hydro, to</p> <p>19 question with any degree of uncertainty the</p> <p>20 estimate that's before this Board?</p> <p>21 MR. HAYNES:</p> <p>22 A. No, none whatsoever.</p> <p>23 Q. Now looking at some of the questions, which</p> <p>24 really almost go to the capital budget process</p> <p>25 review and when a utility reports back on a</p>

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<p>1 GREENE, Q.C.:  2 change in the scope, as you've indicated,  3 Hydro, it's rare for there to be a change in  4 the scope of the project?  5 MR. HAYNES:  6 A. Yes.  7 Q. If there's a change in the scope of the  8 project in a significant way, does it require  9 the approval of the Board of Directors of  10 Hydro?  11 MR. HAYNES:  12 A. Yes, it does.  13 Q. And we have reported--we have not had occasion  14 to report those to the Board because we have  15 had none in the last number of years, have we?  16 MR. HAYNES:  17 A. I don't believe there have been any of any  18 consequence whatsoever.  19 Q. Those are all the questions that I have in  20 redirect.  21 CHAIRMAN:  22 Q. Thank you, Ms. Greene. Commissioner Powell,  23 do you have any questions?  24 COMMISSIONER POWELL:  25 Q. Just a couple of items. Mr. Haynes, this</p>	<p>1 project, \$8.4 million, this just includes the  2 cost of the installation, the training of  3 staff?  4 MR. HAYNES:  5 A. When we--it is common that when we buy a new  6 system, the initial training is usually a part  7 of the contract. So there is some training  8 element in this particular capital budget, and  9 that's not unusual, for the initial training.  10 It doesn't cover obviously recurrent training  11 that happens in two years, five years,  12 whatever, but the initial training is a part  13 of the package.  14 Q. Okay. There was reference, I noticed in one  15 of your slides, to users and you mentioned  16 Abitibi's name, which struck me, and I haven't  17 heard them and mobile radio connect. Has  18 there been any discussions with them vis-a-  19 vis--assume they must have a mobile radio  20 system and -  21 MR. DUNPHY:  22 A. We understand they have a mobile radio system  23 that they use for their woods operations.  24 Q. Is there any discussions with any of the  25 Industrial Customers about them taking</p>
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<p>1 advantage of yours to help reduce their--they  2 have a emphasis on cost reduction, so -  3 MR. HAYNES:  4 A. If I could, one of the issues, that if we were  5 to--in the information that was provided, I  6 don't recall the IC number, but there was a  7 question posed here or at least in one of the  8 reports we got, indeed, the federal--CRTC. It  9 is not our intent or proposal to be a common  10 carrier. If we were to go out and solicit  11 business from everybody else, that's a whole  12 different regulatory process and that's not  13 our intention. Under the CRTC rules, we are  14 quite confident that we, and if Newfoundland  15 Power, if it's in their economic interest at  16 some future point in time, that can be  17 accommodated, but to go beyond to be a common  18 carrier, it is a completely different project  19 than we were anticipating. We're basically  20 focused on the utility and the Department of  21 Transportation and Works are permitted because  22 they are our shareholder to CRTC.  23 Q. But if any of the Industrial Customers are  24 able to work around that and they found it was  25 in their best economic interest to maybe</p>	<p>1 partnership with you, you wouldn't be opposed  2 to investigating that?  3 MR. HAYNES:  4 A. Well, obviously we would investigate it. We  5 will investigate anything that will bring  6 benefit to the rate payer.  7 Q. The other thing I noticed or my impression,  8 listening to your argument and reading the  9 material, we're looking at a project that  10 could get up to \$10 million and it probably  11 only has a 10-year life. So you're looking at  12 a million dollars a year without operating  13 costs, and since Hydro would appear more of a  14 maintaining the system mode right now, as  15 opposed to building new structures, that from  16 just a cost point of view, you may find  17 alternate things to do. But from a  18 reliability to customers, having a mobile  19 radio system would be the way to go, in terms  20 of communicating between what you're doing and  21 the control centre and in the field. So would  22 it be fair to say this is more of a  23 reliability issue than it is--because it may  24 not be least cost to your customers that they  25 got to go down with power for two hours, but</p>

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<p>1 COMMISSIONER POWELL:</p> <p>2 it may be, to use the expression, the cheapest</p> <p>3 way for Hydro to repair a line?</p> <p>4 MR. HAYNES:</p> <p>5 A. The overall reliability at your meter socket,</p> <p>6 for instance, I mean, relies on a multitude of</p> <p>7 different things that we do. It relies on us</p> <p>8 planning the generation appropriately, doing</p> <p>9 the right system dispatch from our control</p> <p>10 centre, or responding to outages and faults</p> <p>11 and the things that Mr. Martin mentioned on</p> <p>12 the wood pole lines and other projects. So</p> <p>13 this, you know, the VHF radio project allows</p> <p>14 us to contribute to the overall reliability of</p> <p>15 the system to all customers. So it is, and</p> <p>16 what we looked at, from a least cost point of</p> <p>17 view, was what is the most cost effective way</p> <p>18 for us to provide this service to our</p> <p>19 operating staff, and it's the reliability of</p> <p>20 this system which also contributes to the</p> <p>21 reliability at the meter socket. The meter</p> <p>22 socket view as I would refer to it sometimes.</p> <p>23 It contributes to less outages and when there</p> <p>24 is an outage, to a more timely restoration of</p> <p>25 service. I don't know if that answers your -</p>	<p>1 Q. Yes. No, you sort of covered it off. I was</p> <p>2 trying to, myself, balancing and being an</p> <p>3 accountant and saying okay, if I were to put</p> <p>4 my bottom line, that I probably wouldn't have</p> <p>5 a mobile system, I could do it. But from my</p> <p>6 customers point of view, their bottom line may</p> <p>7 shrink because they don't have their power to</p> <p>8 run their whatever.</p> <p>9 MR. HAYNES:</p> <p>10 A. Yes, and that would also apply to the</p> <p>11 commercial customers.</p> <p>12 Q. Yes.</p> <p>13 MR. HAYNES:</p> <p>14 A. And the household customers as well, for</p> <p>15 financial considerations.</p> <p>16 Q. Just one, you mentioned, I guess, to Mr.</p> <p>17 Kennedy, the technology, one of you mentioned,</p> <p>18 a year today is a lifetime in technology. You</p> <p>19 read now about one time just trying to put two</p> <p>20 different technologies on one pole was an</p> <p>21 impossibility, and then the ability to have</p> <p>22 multi things on poles came about. Now you</p> <p>23 read about having one line having multiple</p> <p>24 technologies going through it, in terms of</p> <p>25 putting power, voice, data all through the</p>
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<p>1 same line. Is that an option, I mean, being</p> <p>2 explored? When you're putting out your</p> <p>3 request for proposals, I mean, and technology</p> <p>4 is that an open ended--when you request</p> <p>5 proposals and you say you haven't decided on</p> <p>6 your technology, is that an open ended, in</p> <p>7 terms of vendors being able to be ahead of the</p> <p>8 crowd, so to speak?</p> <p>9 MR. DUNPHY:</p> <p>10 A. I'm not quite sure if I understand the</p> <p>11 question, but I guess part of the reason we</p> <p>12 believe the functional specification is the</p> <p>13 most appropriate way to go is because there</p> <p>14 are technology changes and there's--do develop</p> <p>15 new systems or new ways of doing things that</p> <p>16 may meet our requirements that will change</p> <p>17 from time to time, and so if I understand your</p> <p>18 question correctly, we certainly try to</p> <p>19 structure these types of things so that they</p> <p>20 are as flexible as possible in the longer</p> <p>21 term. We try and keep a long-term view when</p> <p>22 we do these things. Did that answer your</p> <p>23 question?</p> <p>24 (12:00 p.m.)</p> <p>25 Q. Yes, definitely. Just I know enough to know I</p>	<p>1 don't know, but you have a thing, accountant's</p> <p>2 language, but you may have a more narrow</p> <p>3 straight jacket than what you envision. So</p> <p>4 what I gather is that when you look--you're</p> <p>5 looking, you want a communication system that</p> <p>6 satisfies all the specs, but how they deliver</p> <p>7 it, you'll leave that up to them and then</p> <p>8 you'll judge it, whether that fits?</p> <p>9 MR. HAYNES:</p> <p>10 A. Yes, I believe that's correct.</p> <p>11 Q. Those are all the questions I have, Chair.</p> <p>12 Thank you very much.</p> <p>13 CHAIRMAN:</p> <p>14 Q. Commissioner Martin?</p> <p>15 COMMISSIONER MARTIN Q.C.:</p> <p>16 Q. No.</p> <p>17 CHAIRMAN:</p> <p>18 Q. Mr. Dunphy, I'm just wondering if--I think</p> <p>19 you've referenced the phrase catastrophic</p> <p>20 failure of the system. When you refer to a</p> <p>21 catastrophic failure, is that relegated to the</p> <p>22 switch?</p> <p>23 MR. DUNPHY:</p> <p>24 A. If the switch fails, then the system itself</p> <p>25 will cease to function.</p>

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<p>1 CHAIRMAN:</p> <p>2 Q. I appreciate that, but is the term</p> <p>3 catastrophic failure of the system, you know,</p> <p>4 would that be relegated to the switch?</p> <p>5 MR. DUNPHY:</p> <p>6 A. Yes.</p> <p>7 Q. You know, what would be another example of a</p> <p>8 catastrophic failure?</p> <p>9 MR. DUNPHY:</p> <p>10 A. Yes, that would be the only catastrophic</p> <p>11 failure of the entire system. If a site</p> <p>12 controller fails, and if you recall the</p> <p>13 photograph that it showed of the site</p> <p>14 controller at our particular repeater site,</p> <p>15 that would only affect that individual</p> <p>16 location.</p> <p>17 Q. Indicate you've depleted--you haven't depleted</p> <p>18 your spare parts for the switch at this</p> <p>19 particular point in time, but practically</p> <p>20 speaking, it's depleted?</p> <p>21 MR. DUNPHY:</p> <p>22 A. Practically speaking, as far as we're</p> <p>23 concerned, yes, it is depleted. We don't know</p> <p>24 the condition of those spares.</p> <p>25 Q. Again, no way to test them at all?</p>	<p>1 MR. DUNPHY:</p> <p>2 A. None whatsoever.</p> <p>3 Q. Or at least the critical components?</p> <p>4 MR. DUNPHY:</p> <p>5 A. Yes.</p> <p>6 Q. Okay. It may be indicated here somewhere, and</p> <p>7 it may have come out in the evidence, but</p> <p>8 what's the anticipated life expectancy of any</p> <p>9 new system that you put in place?</p> <p>10 MR. DUNPHY:</p> <p>11 A. It's a difficult question to answer. We</p> <p>12 certainly try and maximum the life of any</p> <p>13 projected system. We're hoping to get 15</p> <p>14 years from it, from a new system.</p> <p>15 Q. Would you look for a commitment from--you</p> <p>16 know, from manufacturers or suppliers of parts</p> <p>17 and technical information in that regard?</p> <p>18 MR. DUNPHY:</p> <p>19 A. We have put wording to that effect in many of</p> <p>20 our previous contracts. A commitment that a</p> <p>21 manufacturer will stand by is often difficult</p> <p>22 to maintain because circumstances change,</p> <p>23 companies are acquired or go out of business.</p> <p>24 But we certainly do try and ensure that we're</p> <p>25 maximizing the life of any system like this</p>
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<p>1 that we procure.</p> <p>2 Q. Construction in 2005 that you referred to in</p> <p>3 the 2.9, can you give me an example of what</p> <p>4 would fall within that term, construction?</p> <p>5 You're not putting up new towers and what have</p> <p>6 you.</p> <p>7 MR. DUNPHY:</p> <p>8 A. No.</p> <p>9 Q. So I mean, you're involved with putting up</p> <p>10 your repeaters and -</p> <p>11 MR. DUNPHY:</p> <p>12 A. Yes, that would--well, one of Mr. Kennedy's</p> <p>13 questions was about, you know, how we would</p> <p>14 actually replace the system, and there are two</p> <p>15 ways to do it. There's a phased</p> <p>16 implementation whereby two systems would</p> <p>17 operate in parallel or one of the alternatives</p> <p>18 that was identified in the RFI is to address</p> <p>19 if there's any way to put in the new switch</p> <p>20 first, so that we'd decrease the reliance on</p> <p>21 the existing one. So yes, that 2.9 million</p> <p>22 would include, you know, installation of</p> <p>23 equipment in some fashion, either switches or</p> <p>24 possibly in repeater sites.</p> <p>25 Q. If the VHF radio system were approved, as you</p>	<p>1 present it in his particular budget, you know,</p> <p>2 if there were a catastrophic failure of the</p> <p>3 current system in like six months or what have</p> <p>4 you, what would be the impact and how would</p> <p>5 that be dealt with?</p> <p>6 MR. DUNPHY:</p> <p>7 A. Well, I think the impact would be overall</p> <p>8 that, you know, we'd certainly be less</p> <p>9 efficient in our operations. If the system</p> <p>10 failed totally and we could not bring it back,</p> <p>11 we'd certainly look at--assuming that the</p> <p>12 project was approved, we'd certainly look at</p> <p>13 any ways within the system being supplied that</p> <p>14 could mitigate that problem. I'm not quite</p> <p>15 sure what we would do in the event that the</p> <p>16 system failed and we know, you know, we had no</p> <p>17 communications. Obviously we would have to</p> <p>18 equip people with an inferior form of</p> <p>19 communication.</p> <p>20 Q. You don't have a current contingency plan or</p> <p>21 anything like that?</p> <p>22 MR. DUNPHY:</p> <p>23 A. We don't. No, we don't have a -</p> <p>24 Q. I mean, given the fact that you've indicated</p> <p>25 that, you know, it's not a question of whether</p>

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<p>1 CHAIRMAN: 2 the system will fail, but when it will fail, I 3 mean, what's in place at the moment to deal 4 with that type of situation? 5 MR. DUNPHY: 6 A. Yes. No, we haven't developed a written 7 contingency plan at this point. 8 Q. That's all the questions I have. Thank you. 9 Do either of the parties have any questions 10 arising out of the Board's inquiry? 11 GREENE, Q.C.: 12 Q. I just wanted one follow up, and I guess it's 13 for Mr. Haynes or Mr. Downton. Mr. Dunphy 14 just said we have no written contingency plan, 15 but what would happen in the event of a system 16 failure and how would operations respond to 17 that, Mr. Haynes? 18 MR. HAYNES: 19 A. If there was a catastrophic failure of the 20 system, obviously we would rely on cell phones 21 and satellite phones to the extent that we 22 have them, and probably acquire some more to 23 do it. It would--that's not what we're-- 24 that's not a satisfactory replacement for the 25 VHF. That would provide us--we would</p>	<p>1 obviously be handicapped for the interim 2 period while it's being replaced or repaired. 3 So we will continue to operate. We would 4 anticipate that outages will be a little bit 5 extended, if we get into emergency situations, 6 and I would like to add a little--one slight 7 thing to Gerard's response, that if we had 8 awarded a tender and there was a catastrophic 9 failure, our only remedy is to go back and to 10 get the vendor to expedite that and that would 11 be at a cost obviously. His proposal is based 12 on, I presume, you know, his shop time and so 13 on. If we were to go back and to fast track 14 that process, fast tracking would actually 15 cost us additional monies. But from a 16 contingency point of view, it's satellite, VHF 17 and just a slower response and slower getting 18 permits out, getting lines fixed. There is no 19 alternative, you know. There is no functional 20 alternative out there to the VHF radio system 21 in the areas we operate. 22 Q. So it would be a matter of additional cell 23 phone coverage where possible and the other 24 thing would be more travel between crews, so 25 they can communicate what is ongoing and more</p>
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<p>1 time in responding to the energy control 2 centre? 3 MR. HAYNES: 4 A. That's correct. 5 Q. So there would be an impact on operations, but 6 we would still be able to deliver power? 7 MR. HAYNES: 8 A. Yes, but we would be impaired from responding 9 as we would prefer to, as we need to really. 10 Q. That's the only thing I had arising. Thank 11 you, Mr. Chair. 12 CHAIRMAN: 13 Q. Thank you. Mr. Hayes? 14 MR. HAYES: 15 Q. None arising, Mr. Chair. 16 CHAIRMAN: 17 Q. Mr. Hutchings? 18 HUTCHINGS, Q.C.: 19 Q. Nothing, thank you, Mr. Chair. 20 MR. KENNEDY: 21 Q. Chair, just wanted to point out, for the 22 benefit of Commissioner Powell, related to a 23 question concerning the participation of 24 Abitibi. There is an RFI. It's PUB-7, which 25 has attached to it a letter from Industry</p>	<p>1 Canada, and I believe the letter will be self- 2 explanatory in providing further detail into 3 the response by the witness on why that's 4 potentially not workable, if you will, for 5 Hydro because of the common carrier status 6 that Hydro would end up acquiring by virtue of 7 an arrangement with a private entity like 8 that. 9 CHAIRMAN: 10 Q. Thanks, Mr. Kennedy. Thank you, gentlemen. 11 Who'd be your next witness, Ms. Greene? 12 GREENE, Q.C.: 13 Q. Mr. Chair and Commissioners, our next area to 14 be covered are the remaining IS&amp;T projects, 15 other than the radio. So this is where Mr. 16 Dunphy gets excused and he can now enjoy his 17 Thanksgiving weekend coming up, and we have 18 Mr. Nichols to join the panel. Mr. Downton 19 and Mr. Haynes stay, and they're hoping that 20 they get to enjoy their Thanksgiving weekend 21 too, and they may be finished. So I would 22 suggest, if it's convenient, possibly just a 23 five-minute break to allow the exchange of the 24 people there.</p>

<p style="text-align: right;">Page 121</p> <p>1 CHAIRMAN:  2 Q. Okay.  3 GREENE, Q.C.:  4 Q. Or we can carry on. It's really up to you.  5 CHAIRMAN:  6 Q. No, perhaps we'll take a break. It's 10  7 after. This next panel -  8 GREENE, Q.C.:  9 Q. Will be very short, from my perspective. We  10 have no presentations. I have to qualify Mr.  11 Nichols, and we have very short direct, we  12 have.  13 CHAIRMAN:  14 Q. Well, we'll probably take at least at 10-  15 minute break in any event. Thank you.  16 (BREAK - 12:09 p.m.)  17 (RESUME - 12:24 p.m.)  18 MR. ANGUS NICHOLS (SWORN)  19 CHAIRMAN:  20 Q. Can you state your full name for the record,  21 please?  22 MR. NICHOLS:  23 A. Angus Nichols.  24 CHAIRMAN:  25 Q. And Mr. Haynes and Mr. Downton, you're still</p>	<p style="text-align: right;">Page 122</p> <p>1 under oath.  2 GREENE, Q.C.:  3 Q. Thank you, Mr. Chair. At this time, I'm just  4 going to introduce Mr. Nichols and get him to  5 give a little bit of his background. You've  6 already heard about Mr. Haynes and Mr.  7 Downton. Mr. Nichols, what is your current  8 position with Hydro?  9 MR. NICHOLS:  10 A. My current position with Hydro is manager of  11 technology, planning and project delivery.  12 Q. And that's in what we call the IS&amp;T  13 department? Is that correct?  14 MR. NICHOLS:  15 A. That is correct.  16 Q. And what are the responsibilities of your  17 current position?  18 MR. NICHOLS:  19 A. The current responsibilities of my position is  20 for developing, establishing, the corporate IT  21 strategy policy and also the delivery of all  22 IT projects.  23 Q. How long have you been with Hydro, Mr.  24 Nichols?  25 MR. NICHOLS:</p>
<p style="text-align: right;">Page 123</p> <p>1 A. I've been with Hydro 22 years.  2 Q. And what positions have you held during your  3 career at Hydro?  4 MR. NICHOLS:  5 A. During my time with Hydro, I've worked in the  6 telecontrol department as a control systems  7 programmer. In 1985, I went with the MIS  8 department, at that time, and was a systems  9 programmer. From there, I went to a senior  10 systems analyst in the MIS department. In the  11 year 2000, I was appointed manager of computer  12 operations with the amalgamation of the  13 telecontrol department and the MIS department.  14 And in 2003, I was appointed manager of  15 technology planning and project delivery.  16 Q. And Mr. Nichols, in the witness profile that  17 was filed for you, it is indicated that you  18 graduated from Memorial University in 1981  19 with a Bachelor of Science degree in Computer  20 Science. Is that correct?  21 MR. NICHOLS:  22 A. That is correct.  23 Q. This panel will be talking about the IS&amp;T  24 projects that are listed on pages A-9 and A-10  25 of the application, with the exception of the</p>	<p style="text-align: right;">Page 124</p> <p>1 mobile radio project, as we've already talked  2 about that project. For the three gentlemen  3 there, Mr. Haynes, Mr. Downton and Mr.  4 Nichols, were the project descriptions for the  5 IS&amp;T projects, as listed on page A-9 prepared  6 under your direction? Mr. Haynes?  7 MR. HAYNES:  8 A. Yes, they were.  9 Q. Mr. Downton?  10 MR. DOWNTON:  11 A. Yes, they were.  12 Q. And Mr. Nichols?  13 MR. NICHOLS:  14 A. Yes, they were.  15 Q. And do you accept them as your evidence for  16 the purpose of this hearing?  17 MR. HAYNES:  18 A. Yes.  19 MR. DOWNTON:  20 A. Yes, I do.  21 MR. NICHOLS:  22 A. Yes, I do.  23 Q. Thank you, Mr. O'Rielly. If we look at page  24 A-9, the first heading that we see there under  25 the bigger heading of Information Systems and</p>

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<p>1 GREENE, Q.C.:</p> <p>2 Telecommunications is software applications,</p> <p>3 and the first project that is underneath that</p> <p>4 one is the energy management system, where the</p> <p>5 Board has already approved \$3.1 million and we</p> <p>6 are requesting approval for \$5.5 million for</p> <p>7 the continuation of that project. Mr.</p> <p>8 Downton, would you please describe what that</p> <p>9 project is for the Board?</p> <p>10 MR. DOWNTON:</p> <p>11 A. Yes. What's being proposed for 2005 is the</p> <p>12 continuation of the project. It will be the</p> <p>13 third year of the project to replace the</p> <p>14 energy management system. The energy</p> <p>15 management system is the computer system and</p> <p>16 the software applications which support the</p> <p>17 energy management system. As noted, the</p> <p>18 project completion has changed from February</p> <p>19 2006 to June 2006. It was decided to put some</p> <p>20 additional time into what we call the planning</p> <p>21 phase of the project, which was really the</p> <p>22 contract preparation, to ensure that Hydro</p> <p>23 received the best possible technical solution</p> <p>24 and thus, the best financial price as well.</p> <p>25 The contract was signed in June 2004. At</p>	<p>1 present, we have received the software</p> <p>2 development system, which really is used to</p> <p>3 take the Hydro-specific information and thus</p> <p>4 enable it to be put into the energy management</p> <p>5 system. We've also started extensive staff</p> <p>6 training and the vendor has also started to</p> <p>7 build the system.</p> <p>8 Q. When will the project be complete?</p> <p>9 MR. DOWNTON:</p> <p>10 A. The project will be complete in June 2006.</p> <p>11 Q. The next two significant projects of page A-9</p> <p>12 are applications enhancements and the</p> <p>13 applications environment. What types of</p> <p>14 projects would you typically find in these two</p> <p>15 categories?</p> <p>16 MR. NICHOLS:</p> <p>17 A. The types of projects in these two categories</p> <p>18 really is the applications environment upgrade</p> <p>19 and really application enhancements. Hydro</p> <p>20 expects, on an ongoing basis, to have these</p> <p>21 requirements to keep our existing software</p> <p>22 applications current, and so that would be the</p> <p>23 ones in the applications environment</p> <p>24 discussion. The upgrades are done to ensure</p> <p>25 that we have vendor support and we also start</p>
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<p>1 to provide functionality, which these new</p> <p>2 application enhancements will provide.</p> <p>3 Hydro does not proceed with any upgrades,</p> <p>4 skips over a lot of upgrades sometimes, so we</p> <p>5 don't upgrade on a--you know, every time that</p> <p>6 a new release comes out, we don't upgrade. We</p> <p>7 have a policy of where we look at the business</p> <p>8 requirements. We look at the operating</p> <p>9 system, you know, that would have to be run to</p> <p>10 support those functionalities and things like</p> <p>11 that. So we really look at each one and see</p> <p>12 which ones should be done and which ones</p> <p>13 shouldn't be done. An example of this is in</p> <p>14 the application before you, the Help Desk</p> <p>15 software, which was installed in the year</p> <p>16 2000, and we've run that system now for four</p> <p>17 years and we're now upgrading it to a Release</p> <p>18 10, which we've skipped over two releases at</p> <p>19 this point in time, and it also has to be--it</p> <p>20 has to basically be done, also because it's</p> <p>21 not supported in the environment that we have</p> <p>22 at this point in time.</p> <p>23 The other aspect of these types of</p> <p>24 applications is software applications</p> <p>25 enhancements for the business. An example of</p>	<p>1 this would be under that project is the KPI</p> <p>2 application where we are upgrading that. We</p> <p>3 are doing changes to that KPI site so</p> <p>4 basically to help the business make better</p> <p>5 decisions on their day-to-day basis and what</p> <p>6 not. The other thing that we do a lot with</p> <p>7 our technology is we reuse the technology that</p> <p>8 we already have in house and that KPI</p> <p>9 technology is going to be actually built on an</p> <p>10 application that we've had in place and we use</p> <p>11 for other things, and we will expand upon that</p> <p>12 one.</p> <p>13 Another example I could give you in that</p> <p>14 project is the facilities modelling software,</p> <p>15 which is used to assist our--it's going to be</p> <p>16 used to assist our engineering staff in</p> <p>17 assessing the possible risk management</p> <p>18 strategies as related to the Hydro plant</p> <p>19 facilities. Another example of how we reuse</p> <p>20 our technology in this way is that</p> <p>21 application, when we looked at it, was</p> <p>22 actually going to be built on the same</p> <p>23 technology that we use for our KPI site, so</p> <p>24 that way we get leverage out of technology as</p> <p>25 far as we can, to get the most bang for the</p>



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<p>1 MR. NICHOLS: 2 buck, as one would say. 3 Q. And just to explain for the Commissioners, 4 you've mentioned KPI. That is short for Key 5 performance indicator? Is that correct? 6 MR. NICHOLS: 7 A. Oh yes, yes. Yes, that's correct. 8 Q. And the key performance indicators are a new 9 regulatory requirement for Hydro? Is that 10 correct? That the Public Utilities Board has 11 asked Hydro to start reporting on key 12 performance indicators, as part of the last 13 General Rate Application? 14 MR. NICHOLS: 15 A. That is correct, and I believe there's seven 16 altogether. 17 Q. And this software application will allow us to 18 collect that information on a regular basis, 19 so that we will be able to monitor and report 20 as required? 21 MR. NICHOLS: 22 A. That is correct. 23 Q. Turning then to the next category, which is 24 computer operations, there are two projects 25 under this main category I'd like to address.</p>	<p>1 The first is listed there as the I series 2 replacement, and here I wonder if you could 3 describe that project, please? 4 MR. NICHOLS: 5 A. The I series server is the name for our AS 400 6 line of computers which IBM makes. IBM has 7 had a long history. They brought this machine 8 out in 1988, I believe, as a system 36. They 9 keep changing the name on it, and so it's gone 10 from a system 36 to an AS 400 to now it's 11 called an I series machine. 12 This server is used to support our J.D. 13 Edwards application, which includes such 14 functions as the financial, the materials 15 management and inventory, the HR payroll, the 16 engineering and construction, the asset 17 maintenance and customer service systems. 18 These applications are used on a day-to-day 19 basis to do everything from paying suppliers 20 to running the payroll, to creating work 21 orders for customer incidents, and to 22 answering questions by our customers on their 23 electrical bills. 24 Another software that runs on that 25 machine is the reporting showcase tool called</p>
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<p>1 Showcase, which is also supported on this 2 server, and this software is used by our 3 employees to produce reports from the J.D. 4 Edwards system on a day-to-day basis. 5 This project proposes the replacement of 6 the AS 400 server because of capacity 7 limitations that are adversely affecting 8 Hydro's ability to meet its business and 9 customer demands. To give example, we've 10 suspended--we've had to suspend the report 11 writer on the system because we have to 12 basically get the customer billing, get the 13 payroll actually to complete because of the 14 capacity problems on this machine, and also 15 another example, we've had to suspend report 16 writing and queries on the system to get 17 customer billing systems to complete on time. 18 Q. So the types of applications that are on the 19 server that you just described relate to those 20 that are key parts of Hydro's operations? Is 21 that correct? 22 MR. NICHOLS: 23 A. Yes. Back in 1999, '97, we started to install 24 what we call our J.D. Edwards system, and at 25 that time, its ERP system, which stands for</p>	<p>1 enterprise resource planning system, and what 2 it does, it brings together a lot of, you 3 know, functions within a business together. 4 So basically, it's used for planning the work 5 for the people out in the plant on a day-to- 6 day basis. If there's a problem with a thing, 7 they would create a work order on that system 8 and then it would be used for them to plan 9 their work and get that work. It would also 10 be used for our general ledger, accounts 11 payable, that type of thing. 12 Q. So it's everything from how the work gets 13 done, right up to paying suppliers, et cetera, 14 isn't it? 15 MR. NICHOLS: 16 A. That's correct. 17 Q. And it has run into capacity problems? Is 18 that correct? 19 MR. NICHOLS: 20 A. That is correct. 21 Q. The next project that I'd like to talk about 22 is the end-user Evergreen program. Could you 23 please describe that project, Mr. Nichols?</p>

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<p>1 MR. NICHOLS:</p> <p>2 A. This project is a continuous program of the</p> <p>3 replacement of the PC infrastructure, and one</p> <p>4 of the things, this is the last year of a</p> <p>5 replacement on a replacement which we've</p> <p>6 previously done in the past under a lease</p> <p>7 arrangement. So this is the last year of</p> <p>8 replacing machines that we had under lease,</p> <p>9 and we do not own. As well as replacing the</p> <p>10 PCs at that--you know, when we do this</p> <p>11 project, we will also be replacing the</p> <p>12 operating system on the replacement units so</p> <p>13 they will be brought up to the current</p> <p>14 revision, in order to ensure continued vendor</p> <p>15 support.</p> <p>16 In the first year, 2003, Hydro looked at</p> <p>17 three options and chose the least cost option</p> <p>18 to deal with, which was the replacement of the</p> <p>19 PCs under the lease program. In preparation</p> <p>20 of the 2005 budget, we again reviewed Hydro's</p> <p>21 options and chose the least cost alternative,</p> <p>22 which was the continuation of the strategy</p> <p>23 that the Board approved in 2003 and 2004.</p> <p>24 Q. So from Hydro's perspective, this is the third</p> <p>25 year of a program already approved by the</p>	<p>1 Board? Is that correct?</p> <p>2 MR. NICHOLS:</p> <p>3 A. That is correct.</p> <p>4 Q. Go to page A-10, please, Mr. O'Rielly. This</p> <p>5 page completes the listing of projects under</p> <p>6 IS&amp;T. The first category there is called</p> <p>7 "Network services." Here, of course, we have</p> <p>8 the radio we've already dealt with, and there</p> <p>9 is one other project, which is replace the</p> <p>10 operational data and voice network that's</p> <p>11 currently in progress, which is down there</p> <p>12 under upgrade of technology. Could you please</p> <p>13 describe that project for the Commissioners,</p> <p>14 please?</p> <p>15 MR. NICHOLS:</p> <p>16 A. Yes. The operational data and voice network</p> <p>17 is the network which carries the data between</p> <p>18 the energy management system and what we call</p> <p>19 the RTUs or the computers that are in our</p> <p>20 various generating, transmission and</p> <p>21 distribution sites. Basically it provides</p> <p>22 voice communications as well between the</p> <p>23 energy control centre, our various sites and</p> <p>24 also our major customers. This network is</p> <p>25 critical to ensuring reliable service to our</p>
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<p>1 customers. The Board, in 2003, approved the</p> <p>2 study for the replacement of this project.</p> <p>3 For 2005, we are proposing, in the second year</p> <p>4 of the two-year project, that we see this</p> <p>5 project to completion, which entails the build</p> <p>6 and implementation of that proposed in 2004.</p> <p>7 Q. Thank you. That concludes our direct evidence</p> <p>8 on this area.</p> <p>9 CHAIRMAN:</p> <p>10 Q. Thank you, Ms. Greene. Mr. Hayes?</p> <p>11 MR. HAYES:</p> <p>12 Q. Thank you, Chair. I just have a couple of</p> <p>13 questions for the panel and they all relate to</p> <p>14 the same essential topic, and that's with</p> <p>15 respect to the cost recovery from CF(L)Co of a</p> <p>16 couple of projects. There are actually three</p> <p>17 projects in the capital budget that have that</p> <p>18 line item, and perhaps I could start with the</p> <p>19 first one, and if the explanation is the same</p> <p>20 for all three, then somebody could perhaps</p> <p>21 indicate that. Please, Mr. O'Rielly, if you</p> <p>22 could go to page B-124, and that's the project</p> <p>23 explanation for corporate applications</p> <p>24 environment, and panel, you will note in the</p> <p>25 table, under project costs, that there's a</p>	<p>1 line item there, down towards the bottom--</p> <p>2 that's fine, Mr. O'Rielly. Right there is</p> <p>3 great--which indicates a cost recovery from</p> <p>4 CF(L)Co of a portion of the total capital cost</p> <p>5 of this project. And I was wondering if</p> <p>6 somebody on the panel could explain for us how</p> <p>7 the appropriate level of cost recovery from</p> <p>8 CF(L)Co is determined?</p> <p>9 MR. DOWNTON:</p> <p>10 A. I guess to go back to your first comment, it's</p> <p>11 the same formula that's used for all three</p> <p>12 projects.</p> <p>13 Q. Okay. Well, in that case perhaps I can just</p> <p>14 reference the other two projects. The other</p> <p>15 one is at B-125 and that's the project</p> <p>16 replacement for the I series replacement, and</p> <p>17 B-132, which is the security strategy</p> <p>18 deployment project. So for all of those, the</p> <p>19 formula is the same, is it?</p> <p>20 MR. DOWNTON:</p> <p>21 A. Yes.</p> <p>22 Q. Okay. Well perhaps, Mr. Downton, you'd like</p> <p>23 to explain for us how that's done?</p>

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1 MR. DOWNTON:

2 A. Basically we have a formula that we use for  
3 shared services with CF(L)Co and as it relates  
4 to capital budgets, and the percentage of the  
5 cost that we recover from CF(L)Co is based on  
6 19 percent. The 19 percent is made up of four  
7 components. It's made up of J.D. Edwards  
8 users, Lotus Notes databases, Lotus Notes  
9 licenses, and PC users. So we basically take  
10 those four components and then we average four  
11 of them to get 19 percent.

12 Q. Okay. And perhaps you can explain for us what  
13 the rationale is behind that formula?

14 MR. DOWNTON:

15 A. Basically J.D. Edwards and Lotus Notes are  
16 basically the two primary systems that are  
17 used throughout the organization, and of  
18 course, the PCs themselves. Everyone who's  
19 connected to the network and accesses these  
20 applications would have a computer, whether it  
21 be a--it doesn't really matter what kind of  
22 computer, whether laptop, desktop or thin  
23 client. And so we basically looked at this  
24 will give us an idea of usage of the  
25 application--of the services by CF(L)Co.

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1 first sentence there, that "the Mary March  
2 Hill microwave site requires some upgrading to  
3 ensure that the site's infrastructure  
4 condition does not further deteriorate." Are  
5 we to take it from that, that units of  
6 property, which is a term of course which has  
7 been used throughout these hearings, are not  
8 going to be replaced or bettered by any of  
9 this work, but at best only maintained at  
10 their current condition?

11 MR. DOWNTON:

12 A. No, basically this work is to enhance and  
13 extend the life of this particular site.

14 Q. How will it enhance the life service period  
15 for this site?

16 MR. DOWNTON:

17 A. Well basically, the design life for these  
18 particular towers is in the area of 20 to 25  
19 years, and basically, I guess what's been  
20 noted in the inspection is that we have  
21 significant rusting and corrosion on the  
22 tower. If that basically rusting and  
23 corrosion is not abated, then basically it  
24 will lead to what we consider a premature  
25 life. So what we are looking at here is to do

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1 MR. NICHOLS:

2 A. I would just like to add also that that is  
3 reviewed on a yearly basis. We review that  
4 every year, that ratio.

5 Q. And so there are no other projects in the  
6 capital budget to which that sort of allocator  
7 should apply?

8 MR. DOWNTON:

9 A. Yes, that is correct. This is only used for  
10 shared services.

11 Q. Thank you. Those are all my questions for the  
12 panel, Chair.

13 CHAIRMAN:

14 Q. Thank you, Mr. Hayes. Mr. Hutchings?

15 HUTCHINGS, Q.C.:

16 Q. Mr. Coxworthy has a few items first, and then  
17 I'll carry on.

18 CHAIRMAN:

19 Q. Mr. Coxworthy.

20 MR. COXWORTHY:

21 Q. Thank you, Chair. Good afternoon, gentlemen.  
22 If we could turn to Project B-141, the  
23 microwave site refurbishing under the network  
24 services? And I wanted to start off by noting  
25 in the project justification section, the

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1 work that will mitigate that and extend the  
2 life.

3 Q. So when you say that it is a 20-25 year  
4 service life for the site, are you referring  
5 specifically to the tower, the metal structure  
6 of the tower at this site as being something  
7 that has a design life of 20 to 25 years?

8 MR. DOWNTON:

9 A. The typical design life of these towers, yes,  
10 is in that order.

11 Q. And so the painting, is this a replacement of  
12 an earlier coating of paint that would have  
13 been applied to this tower when it was first  
14 installed or perhaps was on the tower  
15 structures when it was installed?

16 MR. DOWNTON:

17 A. The tower originally came painted, as part of  
18 the asset, and then on a regular basis, we  
19 will determine if painting is appropriate and  
20 significance of the painting on this is in the  
21 order of about \$50,000.

22 Q. Is there a recommended practice with respect  
23 to painting to avoid the development of rust,  
24 as to how often that should occur with  
25 structures like this, exposed to the type of

<p style="text-align: right;">Page 141</p> <p>1 MR. COXWORTHY: 2 elements, of course, that they would be 3 exposed to? 4 MR. DOWNTON: 5 A. On the advise that we get from, I guess, our 6 structural engineers, they indicate that once 7 you get to what they consider to be a level 8 four rusting. They basically look at one 9 being low and five being high. They recommend 10 that you initiate the paint--or actually, it's 11 a little bit more than just the paint because 12 you have to go and scrape. You also have to 13 touch up any places where the galvanization 14 has deteriorated and apply the paint. 15 Q. So the recommendation is you wait until it 16 gets to level four, then you apply--you do the 17 things you've just described, including 18 painting? 19 MR. DOWNTON: 20 A. It is based on the judgment of the structural 21 engineer. 22 Q. Have these towers or this particular tower, I 23 should say, reached that level four of 24 rusting? 25 MR. DOWNTON:</p>	<p style="text-align: right;">Page 142</p> <p>1 A. Yes. Basically that was identified in 2002. 2 Basically it was identified that we were 3 between level three and level four corrosion 4 and I guess, on the advice of our structural 5 engineer, he indicated that we should look at 6 painting this tower within the next two years. 7 Q. This tower hasn't been previously repainted 8 since it was installed? 9 MR. DOWNTON: 10 A. Not that I'm aware of. 11 Q. How much of the \$290,000 approximately is 12 comprised of this painting portion of the 13 project? 14 MR. DOWNTON: 15 A. I think I indicated, it's in the order of 16 about \$50,000. 17 Q. Thank you. The galvanization of the anchor 18 heads, how much is that of the overall? 19 MR. DOWNTON: 20 A. That is somewhere in the area of about 21 \$30,000. 22 Q. And were they originally galvanized? 23 MR. DOWNTON: 24 A. Yes, basically. 25 Q. So this is regalanization?</p>
<p style="text-align: right;">Page 143</p> <p>1 MR. DOWNTON: 2 A. It's a regalanization - 3 Q. Is that a fair - 4 MR. DOWNTON: 5 A. - because of detected corrosion. 6 Q. Is there a similar sort of level two, three, 7 four process that's gone through there? 8 MR. DOWNTON: 9 A. That wasn't identified in the same degree. I 10 guess, the recommendation from the structural 11 engineer was to regalanize in the next couple 12 of years. 13 Q. And the guys at level four, I presume there 14 are other guy wires at other levels that 15 aren't being replaced. Why do they need to be 16 replaced at this time? 17 MR. DOWNTON: 18 A. Again, it's based on the recommendation from 19 the structural engineer. He noted corrosion 20 on those particular guys. There was no 21 corrosion noted at that time on the other 22 guys, so all we're recommending is to replace 23 the ones that there is noted corrosion on. 24 Q. And the corrosion that's been all three of 25 these components that we've talked about so</p>	<p style="text-align: right;">Page 144</p> <p>1 far, is that basically attributable to the 2 ordinary wear and tear to be expected on this 3 type of equipment, in the area that it's been 4 installed? 5 MR. DOWNTON: 6 A. I guess when you look at the life expectancy, 7 yes. 8 Q. If you do the type of maintenance that you're 9 going to be doing, the type of refurbishment 10 as you've characterized it, how much longer 11 can you expect to extend the life of this 12 site, beyond the--or of these components, I 13 should say, of this site beyond the 20 to 25 14 years? 15 MR. DOWNTON: 16 A. In my estimation, I guess discussions, we 17 expect that we should be able to extend the 18 life upwards to 40 to 50 years for these 19 sites. 20 Q. So maybe as much as double again? 21 MR. DOWNTON: 22 A. Yes. 23 Q. And then when you get to that point again, at 24 40 years, of course depending on how much 25 additional wear and tear, but is it possible</p>

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1 MR. COXWORTHY:

2 that simply by applying the paint, replacing  
3 some of the guy wires again, regalvanizing the  
4 anchor heads, you might get another 15-20  
5 years out of this site, even beyond the 40?

6 MR. DOWNTON:

7 A. That is a possibility. Other factors may come  
8 into play. Basically the -

9 Q. Assuming that the equipment itself doesn't  
10 become obsolescent, I suppose. I mean, the  
11 microwave--I presume that would be obviously  
12 an overriding. But if the actual microwave  
13 technology is not been superseded in some  
14 sense in that period.

15 MR. DOWNTON:

16 A. I was thinking more of environmental factors,  
17 such as the Canadian Electrical Association.  
18 Canadian standards basically dictate standards  
19 and also if there's any additional ice loading  
20 requirements. But other than that, what  
21 you're saying is correct.

22 Q. The only other component that's been  
23 identified here is a detailed electrical  
24 system assessment. Does that involve testing  
25 the electrical systems at the site?

1 MR. DOWNTON:

2 A. Basically, within the detailed electrical  
3 system, we know that the light system, the  
4 lighting system on the tower has to be  
5 replaced and that's in here.

6 Q. This is the external lighting?

7 MR. DOWNTON:

8 A. That's correct, and then we're also looking at  
9 doing a detailed electrical assessment on all  
10 aspects of the electrical at this particular  
11 site?

12 Q. You say you know the lighting needs to be  
13 replaced. Is it actually non-functioning now?

14 MR. DOWNTON:

15 A. Well, basically, some of the components in the  
16 lighting system are basically not repairable.  
17 So basically, it is an electronic system that  
18 basically drives the lighting system, and we  
19 basically can't get parts for that any more  
20 either.

21 Q. So you know it needs to be repaired, so I  
22 guess in what sense does there have to be a  
23 further assessment? Is this really a repair  
24 replacement?

25 MR. DOWNTON:

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1 A. Well, we know that the lighting system will be  
2 repaired. I guess, what we're also looking at  
3 is the whole aspect of the transfer switches,  
4 the backup power system, the conduit basically  
5 on the tower for the lighting, and -

6 Q. So you'll be testing to see if those are still  
7 functioning the way they ought to be  
8 functioning? Is that -

9 MR. DOWNTON:

10 A. Well, I don't have that level of detail. I  
11 guess all I'm saying is that we want to carry  
12 out an assessment of the electrical equipment.

13 Q. Has that been done before at this site, do you  
14 know? Any level of assessment of the  
15 electrical system in the last 20-25 years,  
16 since it was installed?

17 MR. DOWNTON:

18 A. Not that I'm aware of.

19 Q. Not that you're aware of. Has the  
20 deterioration that you described at the Mary  
21 March Hill site impaired its operations, the  
22 microwave operations of Hydro in any way to  
23 date?

24 MR. DOWNTON:

25 A. It has not impaired the operations, I guess,

1 the Mary March Hill site is one of our most  
2 important sites--actually, it's only one of  
3 eleven that we installed back in 1979, 1980.  
4 I guess what we are looking at is to ensure  
5 that the infrastructure is maintained at a  
6 level which would ensure continued reliable  
7 operation. The Mary March Hill site is, for  
8 those who may not know where Mary March is,  
9 but Mary March Hill is next to Buchans, and  
10 that particular site carries a teleprotection  
11 for transmission lines between Buchans and  
12 Stoney Brook. It also carries the SCADA for  
13 the Hind's Lake and Cat Arm remote Hydro  
14 sites, as well as all the SCADA for the  
15 Northern Peninsula and the west coast, I  
16 basically go through that site. I also have  
17 operational voice and administrative data and  
18 if that site fails, we'll also--Aliant will  
19 not be able to provide services in the  
20 Buchans/Millertown area, so basically it's a  
21 critical site, from our perspective.

22 Q. If the refurbishment that's being proposed  
23 does not proceed, Mr. Downton, in 2005, is the  
24 tower in danger of structural failure if it's  
25 not painted in 2005?

<p style="text-align: right;">Page 149</p> <p>1 MR. DOWNTON:</p> <p>2 A. I guess based on the advice of our structural</p> <p>3 engineer and I say our structural engineer is</p> <p>4 not a Hydro structural engineer. For the most</p> <p>5 part, we use internal and external and in this</p> <p>6 particular case, an outside structural</p> <p>7 engineer recommended that this work be done</p> <p>8 and as such, we figure that it is prudent to</p> <p>9 follow his direction.</p> <p>10 Q. But I guess to use a term that's been used in</p> <p>11 respect of an earlier project, this is not</p> <p>12 "hanging by a thread" in terms of the</p> <p>13 structural integrity of this site, that if</p> <p>14 things aren't done in 2005, that you're going</p> <p>15 to have a failure of the structural elements</p> <p>16 of this site?</p> <p>17 MR. DOWNTON:</p> <p>18 A. No, I don't want to speak for the engineer in</p> <p>19 particular, but it was his recommendation that</p> <p>20 this work be done in this time frame.</p> <p>21 Q. Within what time frame?</p> <p>22 MR. DOWNTON:</p> <p>23 A. Basically with--well the inspection was done</p> <p>24 in 2002, his recommendation that we do this</p> <p>25 work in the next two to three years.</p>	<p style="text-align: right;">Page 150</p> <p>1 Q. For this particular site?</p> <p>2 MR. DOWNTON:</p> <p>3 A. Yes.</p> <p>4 Q. Because you did mention there are other sites</p> <p>5 that were built around the same time period.</p> <p>6 MR. DOWNTON:</p> <p>7 A. We have other sites that were built around the</p> <p>8 same time period, we do annual inspections on</p> <p>9 those sites and we are in the process now of</p> <p>10 doing a detailed review on all of the sites.</p> <p>11 Q. Have some of those other sites also been</p> <p>12 recommended for this type of refurbishment</p> <p>13 within the next two or three years by the same</p> <p>14 structural engineer?</p> <p>15 MR. DOWNTON:</p> <p>16 A. There have not been any--the study is not</p> <p>17 complete so there have not been any formalized</p> <p>18 recommendations at this point.</p> <p>19 Q. Only in respect of this particular site?</p> <p>20 MR. DOWNTON:</p> <p>21 A. That's correct.</p> <p>22 Q. Thank you, Mr. Downton. If we could move on</p> <p>23 then to a project B-143, Mr. Chair, which is</p> <p>24 the replace remote terminal units for phase 6</p> <p>25 of that project? And as noted, this is phase</p>
<p style="text-align: right;">Page 151</p> <p>1 6 of a 9-phase plan to replace all of the</p> <p>2 obsolete RTUs at Bay d'Espoir. How has the</p> <p>3 priority been determined for those</p> <p>4 replacements, obviously this has been done</p> <p>5 over a period of years, how did it come to be</p> <p>6 decided that these two remote terminal units</p> <p>7 would be made to wait to this point for</p> <p>8 replacement?</p> <p>9 MR. DOWNTON:</p> <p>10 A. When we brought this program to the Board in</p> <p>11 2000, we had laid out a list of stations, I</p> <p>12 guess, in our estimation at that time we</p> <p>13 looked at the priority based on what we were</p> <p>14 doing at the various sites; in particular,</p> <p>15 where we needed to add additional</p> <p>16 functionality or points, what we call</p> <p>17 additional telemetry points to the various</p> <p>18 sites. We did those first and where we also</p> <p>19 were changing facilities at other sites, like</p> <p>20 Springdale, Bottom Brook and a couple of other</p> <p>21 sites, we did those next because it made more</p> <p>22 sense, so we wouldn't have to redo work. And</p> <p>23 I guess these particular sites are now being</p> <p>24 brought forward.</p> <p>25 Q. So with respect to the first category you</p>	<p style="text-align: right;">Page 152</p> <p>1 referred to, which I think you said that they</p> <p>2 have already been enhanced or had some</p> <p>3 additional equipment added, telemetry points I</p> <p>4 think was one of the examples. Was there an</p> <p>5 enhanced or increased need for reliability</p> <p>6 then with respect to those RTU units that</p> <p>7 called for those to have a priority of</p> <p>8 replacement over, for instance, the ones that</p> <p>9 are being proposed for 2005?</p> <p>10 MR. DOWNTON:</p> <p>11 A. I guess in my estimation, the remote terminal</p> <p>12 units are all at the same priority. They all</p> <p>13 provide us with the ability or with the energy</p> <p>14 management system, the energy control center,</p> <p>15 to dispatch our transmission, generation and</p> <p>16 distribution assets. I guess, we recognized</p> <p>17 when we brought the program forward in 2000,</p> <p>18 it was not--it did not make sense to try and</p> <p>19 change out 32 RTUs in one year, so what we</p> <p>20 brought forward was a managed plan to replace</p> <p>21 the obsolescent infrastructure and we did it</p> <p>22 trying to take into account the various other</p> <p>23 factors that play out.</p> <p>24 (1:00 p.m.)</p> <p>25 Q. When you say it didn't make sense or you</p>

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<p>1 MR. COXWORTHY:</p> <p>2 recognized that it didn't make sense to change</p> <p>3 all 32 at once, what were the reasons for</p> <p>4 that, why it didn't make sense?</p> <p>5 MR. DOWNTON:</p> <p>6 A. I guess a couple of reasons. One, I would</p> <p>7 focus on the fact that to bring in and try to</p> <p>8 replace 32 units in one year would be a</p> <p>9 significant disruption to the business. What</p> <p>10 we also took into consideration is that we</p> <p>11 wanted to try to extend the life as much as we</p> <p>12 could of the infrastructure that we had in</p> <p>13 place and I think we've done that. Again, if</p> <p>14 you look at the plant RTU that was installed</p> <p>15 in 1980, the economic life for those units are</p> <p>16 typically ten years. Technical life is ten to</p> <p>17 fifteen years and those particular units will</p> <p>18 get anywhere from 20 to 26 years of service</p> <p>19 before they're finally changed out. So I</p> <p>20 think we've demonstrated what we are trying to</p> <p>21 do, again, is to extend the life as much as we</p> <p>22 can.</p> <p>23 Q. Is there any more urgency in replacing these</p> <p>24 two particular RTU units that are being</p> <p>25 proposed for 2005 now, then there was when you</p>	<p>1 started this replacement project? Have they</p> <p>2 become any more urgent to replace in the</p> <p>3 interim?</p> <p>4 MR. DOWNTON:</p> <p>5 A. I guess from my perspective what I looked at</p> <p>6 is that these units are six years older than</p> <p>7 the units that we replaced in 2000. The</p> <p>8 manufacturer stopped supporting the Quindar</p> <p>9 units in 1993, so right now, I mean, we are--</p> <p>10 even if you go to 2005, you're looking at 12</p> <p>11 years past the time that we've been able to</p> <p>12 get any spares or any kind of manufacturer</p> <p>13 support for these facilities. So I guess from</p> <p>14 our perspective, yes, the urgency is there to</p> <p>15 continue with the program and to ensure that</p> <p>16 we have infrastructure which is able to</p> <p>17 deliver the services to our customers in a</p> <p>18 reliable fashion.</p> <p>19 Q. You've mentioned the fact that the Quindar</p> <p>20 units, the customer support or the</p> <p>21 manufacturer support is no longer there and I</p> <p>22 do note in the project justification that one</p> <p>23 of the reasons that has been advanced for this</p> <p>24 replacement at this time is that spares are no</p> <p>25 longer available for these systems?</p>
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<p>1 MR. DOWNTON:</p> <p>2 A. Yes, manufacturer support and spares, third-</p> <p>3 party repair services are not available.</p> <p>4 Q. And my question, Mr. Downton, was, was it</p> <p>5 possible or could it have been possible or is</p> <p>6 it still possible from the RTUs that have</p> <p>7 already been replaced, were they or could they</p> <p>8 have been a source of spares for the remaining</p> <p>9 RTUs, including these two?</p> <p>10 MR. DOWNTON:</p> <p>11 A. We have kept some spares which we think are</p> <p>12 critical to help us through the remainder of</p> <p>13 this replacement program.</p> <p>14 Q. So the statement "spares are no longer</p> <p>15 available for these systems" would have to be</p> <p>16 qualified, at least to that extent, that there</p> <p>17 are some critical spares that have been saved</p> <p>18 from the previously replaced RTUs?</p> <p>19 MR. DOWNTON:</p> <p>20 A. Well I think that when we use the term</p> <p>21 "spares" in relation to what you'd get from a</p> <p>22 manufacturer, I usually think that you're</p> <p>23 getting new spares, something that has not</p> <p>24 been in service for 20 to 25 years, so I would</p> <p>25 caution the use of, the fact that we are</p>	<p>1 taking things out of service after 20 or 25</p> <p>2 years and using any spares to give you the</p> <p>3 same sense of security of a spare that you</p> <p>4 just got off the shelf from a manufacturer.</p> <p>5 Q. And I take your point, Mr. Downton, because I</p> <p>6 think, you know, everyone would accept that</p> <p>7 new spares from the manufacturer are not</p> <p>8 equivalent to spares that have been</p> <p>9 cannibalized from equipment that's been taken</p> <p>10 out of commission, and fair enough. But also,</p> <p>11 would it also be fair to say that when you are</p> <p>12 getting new spares from the manufacturer,</p> <p>13 you're expecting that they will have a certain</p> <p>14 period of reliable utility and that what we're</p> <p>15 talking about here, of course, where these are</p> <p>16 intended to be replaced at some point, you're</p> <p>17 not looking for that same length of time of</p> <p>18 reliability from your spares?</p> <p>19 MR. DOWNTON:</p> <p>20 A. You're not looking at for the same length of</p> <p>21 time, nor do I expect it either, based on my</p> <p>22 previous experience.</p> <p>23 Q. Has there been actually any reason since you</p> <p>24 started this program to use, I've called them</p> <p>25 "cannibalized spares", but spares that have</p>

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1 MR. COXWORTHY:

2 been salvaged from previously replaced RTUs,  
3 has there been any opportunity to actually use  
4 those in any of the RTUs that haven't been  
5 upgraded?

6 MR. DOWNTON:

7 A. We've basically, from what I understand, we've  
8 probably done it once or twice and what we  
9 found is that some of the spares which we had  
10 in our inventory didn't work when we put them  
11 in the RTUs.

12 Q. Have you been able, though, to eventually find  
13 the spares that would allow the RTUs to  
14 continue to operate?

15 MR. DOWNTON:

16 A. Yes, otherwise they would have been replaced  
17 by now.

18 Q. Thank you, Mr. Downton. Mr. Chair, if we  
19 could move on to project B-144 which is the  
20 replacement of the air conditioners at Stoney  
21 Brook and Deer Lake. And I guess I would  
22 highlight at the outset that unlike some  
23 earlier air conditioner systems we've  
24 discussed earlier in these hearings, these are  
25 air conditioning systems in communication's

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1 to a centrally installed air conditioning  
2 system and in both places what's being  
3 proposed is purchasing a new air conditioning  
4 unit. Would this be sort of a window  
5 installed -

6 MR. DOWNTON:

7 A. I would say a window-wall type of install.

8 Q. So if we could discuss the Stoney Brook unit,  
9 which is stated in the operating experience as  
10 having been installed approximately 15 years  
11 ago and is being described as not functioning,  
12 the heating and humidification are not  
13 functioning. Is the air cooling function -

14 MR. DOWNTON:

15 A. The air cooling is functioning, yes.

16 Q. Okay, and from the point of view, this--in  
17 this case, this is a communications room  
18 exclusively? In the case of Stoney Brook it's  
19 not co-mingled with office space in terms of  
20 the air conditioning need?

21 MR. DOWNTON:

22 A. No, it's exclusively communications equipment.

23 Q. And are you aware of whether there is any  
24 standards that apply to the ambient  
25 temperatures in which communications equipment

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1 rooms, as opposed to air conditioning for  
2 office space. But I'd ask you--I assume it's  
3 Mr. Downton who may be responding to this, are  
4 these, in fact, limited to rooms that are  
5 housing communication systems or are they also  
6 including office space?

7 MR. DOWNTON:

8 A. Yes, both.

9 Q. They're both, are they?

10 MR. DOWNTON:

11 A. Basically I should clarify because after  
12 discussion with air conditioning systems we  
13 had earlier, these are actually units as  
14 opposed to systems and that's what is being  
15 proposed here, that we're replacing air  
16 conditioning units. Basically we looking--in  
17 the proposal at Stoney Brook Terminal Station  
18 is for the communications room. At the Deer  
19 Lake office what we're looking for is a unit  
20 to cool what we consider the administrative  
21 area of that office, of the Deer Lake office,  
22 and also in that administrative area we have  
23 communications equipment as well.

24 Q. Thank you for that clarification, Mr. Downton.  
25 When you say "unit" I guess this is as opposed

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1 of the type that's at Stoney Brook are  
2 supposed to be kept at?

3 MR. DOWNTON:

4 A. I know there are standards, I do not know what  
5 those detailed standards are.

6 Q. There was some discussion, again, in the  
7 context of office space and for human  
8 occupancy of ASHRAE standards, but if I say  
9 that to you, you would say you're simply not  
10 familiar with what those standards are?

11 MR. DOWNTON:

12 A. I know basically the typical standards are for  
13 a certain temperature at a certain humidity.

14 Q. So do we know then whether at Stoney Brook  
15 whether the communications equipment that's  
16 being kept in that communications room,  
17 whether or not it's being kept outside of any  
18 established standard or whether in fact it's  
19 still being maintained within an established  
20 standard for ambient temperature?

21 MR. DOWNTON:

22 A. I do not know that detail. I guess all I can  
23 indicate again is that the unit cannot be  
24 repaired and again, Stoney Brook  
25 communications room houses the microwave radio



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1 MR. DOWNTON:  
 2 equipment that supports the teleprotection on  
 3 the lines to Bay d'Espoir. Stoney Brook is in  
 4 Grand Falls, by the way, so basically it  
 5 supports the teleprotection on the lines to  
 6 Bay d'Espoir, on the lines to Buchans, on the  
 7 line to the mill in Grand Falls, as well as  
 8 the line going towards Gander. It also  
 9 carries the voice and data that goes into the  
 10 operational data equipment that goes into the  
 11 mill in Grand Falls. So from our perspective,  
 12 this is a critical site. I guess when I first  
 13 received this request, to be quite honest, I  
 14 basically felt that maybe we should repair  
 15 this under an emergency--on an emergency  
 16 basis, but I felt that we should be putting  
 17 these things through the proper process, so  
 18 that's basically why this is being submitted.  
 19 Q. Has there actually been any difficulty  
 20 encountered with the use of the communications  
 21 equipment at this site as a result of the non-  
 22 functioning of the heating and humidification  
 23 functions?  
 24 MR. DOWNTON:  
 25 A. Not as yet, and I guess what we want to ensure

1 is that it doesn't happen.  
 2 Q. Well how would it happen? I guess you haven't  
 3 been able to tell me in relation to standards  
 4 how a problem might arise, how -  
 5 MR. DOWNTON:  
 6 A. Well basically if the air conditioning in a  
 7 room fails, the equipment that's in a room is  
 8 still going to generate heat, the temperature  
 9 is going to rise and at some point in time,  
 10 the equipment will fail.  
 11 Q. But if you're not able to tell me that in  
 12 reference to any standards, how are you able  
 13 to make that statement?  
 14 MR. DOWNTON:  
 15 A. Because I've worked at it for 25 years, I've  
 16 basically seen air conditioners fail in  
 17 computer rooms and I've seen disk drives fail,  
 18 I've seen computers fail, I've seen radio  
 19 equipment fail, so I guess I recognize that  
 20 when a temperature gets up in the area of,  
 21 I'll use the fahrenheit scale, 80 to 85  
 22 degrees, equipment will fail.  
 23 Q. The concern is with heat, excessive heat and  
 24 of course, the cooling function is still  
 25 working. Is there any reason to think that

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1 the cooling function won't continue to  
 2 operate?  
 3 MR. DOWNTON:  
 4 A. Well I guess our concern is that if it does  
 5 fail, we can't even repair it.  
 6 Q. How long have the heating and humidification  
 7 functions been non-functioning on this unit?  
 8 MR. DOWNTON:  
 9 A. This was brought to my attention this year.  
 10 Q. And I guess my question was for how long has  
 11 it been non-functioning?  
 12 MR. DOWNTON:  
 13 A. I do not know, I guess my understanding is  
 14 that this problem occurred this year.  
 15 Q. Required parts are not available. Can you  
 16 give us any insight as to what efforts have  
 17 been made to determine that?  
 18 MR. DOWNTON:  
 19 A. I guess we brought in an air conditioning  
 20 company to look at the unit and their  
 21 determination was that this thing could not be  
 22 fixed and parts were not available for it.  
 23 Q. Thank you, Mr. Downton. If we could move on  
 24 then to the air conditioning unit again, I  
 25 believe you said at the Deer Lake office, it's

1 started that it's inadequate and does not meet  
 2 the requirements of an indoor air quality  
 3 assessment. When was the Deer Lake office air  
 4 conditioning unit in question here installed?  
 5 MR. DOWNTON:  
 6 A. This particular, two to three years ago we  
 7 basically purchased a portable unit and put it  
 8 in this area. I guess primarily because, I  
 9 guess, complaints, if you want to call it  
 10 that, from our staff that especially in the  
 11 July/August time frames it was very warm to  
 12 the point, same sorts of problems identified  
 13 by Mr. Martin earlier. But also in the last  
 14 two years we have put some monitoring  
 15 equipment in this particular location. We  
 16 used what we call the administrative area, the  
 17 office, to house two units; one is used to  
 18 monitor the microwave radio equipment, the  
 19 alarm and monitoring equipment on that, as  
 20 well as the alarm and monitoring for  
 21 operational voice and data network. And I  
 22 guess we've used this system and what we found  
 23 is that it does not provide adequate cooling  
 24 capacity. So I guess what we've brought  
 25 forward here as a proposal to put in a unit

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1 MR. DOWNTON:

2 which will provide adequate cooling capacity  
3 for that particular area alone. We not  
4 looking at cooling capacity for the total  
5 building.

6 Q. Do you know what the cost was of the  
7 inadequate unit that was purchased two or  
8 three years ago?

9 MR. DOWNTON:

10 A. It was less than \$1000.00.

11 Q. And what of this \$55,000 expenditure, how much  
12 of that approximately, to your knowledge, is  
13 going to the Deer Lake office portion of this  
14 project?

15 MR. DOWNTON:

16 A. In the order of about fifteen thousand.

17 Q. There's reference there to what would appear  
18 to be perhaps a standard, that it does not  
19 meet the requirements of an indoor air quality  
20 assessment. Can you tell us what an air  
21 quality assessment is?

22 MR. DOWNTON:

23 A. We, I don't know all the details, but we,  
24 about four years ago we engaged an air quality  
25 assessment consultant to basically come in and

1 do an analysis. In the analysis it was  
2 identified that certain improvements needed to  
3 be made to improve the air quality for an  
4 office environment.

5 Q. Earlier in my questioning of you, Mr. Downton,  
6 there was reference made earlier in the  
7 hearing to the American Society of Heating and  
8 Refrigerations Air Conditioning Engineers  
9 Standard and this is at IC-21, I should say,  
10 with reference to project B-101. Again, do  
11 you know whether this air quality assessment  
12 was done with reference to that ASHRAE  
13 standard, the air quality assessment that was  
14 done in relation to the Deer Lake office?

15 MR. DOWNTON:

16 A. I do not know that.

17 Q. And that air quality assessment was done prior  
18 to the installation of the inadequate air  
19 conditioning unit?

20 MR. DOWNTON:

21 A. Yes, it was.

22 Q. And was that air conditioning unit the one  
23 that was proven to be an inadequate purchase  
24 pursuant to a recommendation made by that  
25 earlier air quality assessment?

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1 MR. DOWNTON:

2 A. No, it wasn't.

3 Q. It was not?

4 MR. DOWNTON:

5 A. No, it was not.

6 Q. It was purchased contrary to what was being  
7 recommended by that assessment?

8 MR. DOWNTON:

9 A. I guess the person in charge of the office put  
10 in a unit that he hoped would meet the  
11 requirements and I guess what we've shown is  
12 that it has not met the requirements.

13 (1:15 p.m.)

14 GREENE, Q.C.:

15 Q. For the record, the air quality assessment was  
16 done in conjunction with the Occupational  
17 Health and Safety Department of Newfoundland  
18 and Labrador Hydro, which in another hat I am  
19 responsible for. It was done in response to a  
20 complaint to determine whether the office  
21 environment was adequate or not. It did not  
22 get into the type of air conditioning. It was  
23 to assess whether there were problems in the  
24 office environment, which it confirmed, which  
25 is why we took the action. They did not

1 actually recommend the type of air  
2 conditioning. We have done similar air  
3 quality assessments as well when we have  
4 complaints and we've done them in Bishop's, as  
5 well, and Labrador.

6 MR. COXWORTHY:

7 Q. And I think that in part anticipates a  
8 question I have. Is the replacement for Deer  
9 Lake office primarily a human, I don't want to  
10 just say comfort, but a human occupancy issue  
11 as opposed to the fact that there happens to  
12 be also communications equipment in this  
13 office?

14 MR. DOWNTON:

15 A. It's a requirement for both.

16 Q. Was that identified by the air quality  
17 assessment of the Occupational Health & Safety  
18 process?

19 MR. DOWNTON:

20 A. Basically that equipment was put in the Deer  
21 Lake office after that assessment was done.

22 Q. Okay, so the need for that equipment to have  
23 this type of air conditioning wasn't  
24 identified by the air quality assessment?

<p style="text-align: right;">Page 169</p> <p>1 MR. DOWNTON:</p> <p>2 A. That is correct.</p> <p>3 Q. Thank you, Mr. Downton. I have no further</p> <p>4 questions. Thank you, Mr. Chair. That</p> <p>5 concludes my portion of the questioning.</p> <p>6 CHAIRMAN:</p> <p>7 Q. Thank you, Mr. Coxworthy. Mr. Hutchings?</p> <p>8 HUTCHINGS, Q.C.:</p> <p>9 Q. Thank you, Mr. Chair. Good afternoon</p> <p>10 gentlemen. I'd like to start with the</p> <p>11 application's enhancements at page B-120.</p> <p>12 MR. DOWNTON:</p> <p>13 A. Before we start, could I have some more water</p> <p>14 please?</p> <p>15 Q. Always a legitimate request. I suspect that</p> <p>16 it will be Mr. Nichols who will be able to</p> <p>17 answer these questions, but I'll leave it to</p> <p>18 the panel to determine that. In respect of</p> <p>19 this project, we put a question to you and the</p> <p>20 answer is at IC-31, which breaks down the</p> <p>21 different headings by amount in order to give</p> <p>22 us some more detail with respect to this</p> <p>23 project. Am I correct in saying that items A</p> <p>24 &amp; B, the various minor enhancements and the</p> <p>25 Intranet are recurring features of this</p>	<p style="text-align: right;">Page 170</p> <p>1 particular project, that basically there is</p> <p>2 some allowance for, under those headings, each</p> <p>3 year in your capital budget?</p> <p>4 MR. DOWNTON:</p> <p>5 A. Yes, that is correct.</p> <p>6 Q. Okay. The KPI project is different in that</p> <p>7 that's potentially a one time enhancement of</p> <p>8 your capability in that regard in response to</p> <p>9 the Board Order, is that correct?</p> <p>10 MR. NICHOLS:</p> <p>11 A. That's not correct. KPI is also an initiative</p> <p>12 which Hydro has which we continue on a yearly</p> <p>13 basis to enhance and create more to help Hydro</p> <p>14 run its business.</p> <p>15 Q. So when was the first time that this KPI</p> <p>16 heading occurred in the applications</p> <p>17 enhancements project?</p> <p>18 MR. DOWNTON:</p> <p>19 A. It didn't come up under KPI. When the KPI--</p> <p>20 the KPI site is really an Intranet site and</p> <p>21 that was done about two years ago as part of</p> <p>22 the Intranet roll out project.</p> <p>23 Q. So what we've seen in Intranet in previous</p> <p>24 years has included some aspect of KPI?</p> <p>25 MR. DOWNTON:</p>
<p style="text-align: right;">Page 171</p> <p>1 A. Yes, that is correct.</p> <p>2 Q. Okay, all right. Moving then to the</p> <p>3 facilities failure model, is that, in fact, a</p> <p>4 one time item, as opposed to a recurring</p> <p>5 thing?</p> <p>6 MR. HAYNES:</p> <p>7 A. Yes, it is. That is a one-time acquisition.</p> <p>8 Q. Okay, so there is, I guess, a difference in</p> <p>9 time between item D and item A, B &amp; C. A, B &amp;</p> <p>10 C are almost like annual allotments, would you</p> <p>11 agree, not unlike surge arrestors or</p> <p>12 transformers, that these are things that are</p> <p>13 going to recur over time and there'll have to</p> <p>14 be an annual allowance for?</p> <p>15 MR. HAYNES:</p> <p>16 A. I would say, yes.</p> <p>17 MR. DOWNTON:</p> <p>18 A. The answer is yes, just so I can concur with</p> <p>19 Mr. Haynes.</p> <p>20 Q. You can debate amongst yourselves to the</p> <p>21 extent you find necessary.</p> <p>22 MR. DOWNTON:</p> <p>23 A. I guess from our perspective, I mean, all four</p> <p>24 categories fall into what we consider to be</p> <p>25 applications enhancements.</p>	<p style="text-align: right;">Page 172</p> <p>1 Q. Yes. And I'm thinking back to last year's</p> <p>2 proposal which had a minor enhancements</p> <p>3 heading and intranet heading and also an</p> <p>4 enterprise project management. The enterprise</p> <p>5 project management was sort of a one time</p> <p>6 thing as well, wasn't it?</p> <p>7 MR. DOWNTON:</p> <p>8 A. That's correct.</p> <p>9 Q. We did, last year as well, ask for some detail</p> <p>10 on the project that was applications</p> <p>11 enhancements last year, last years was B-60.</p> <p>12 I don't think we need to look at that, but</p> <p>13 quite coincidentally, the answer last year in</p> <p>14 the 2004 capital budget was also IC-31. And I</p> <p>15 think perhaps that may be available, Mr.</p> <p>16 O'Rielly, from last year's hearing. That's</p> <p>17 the 2004 IC-31 and it shows the breakdowns for</p> <p>18 the minor enhancements, the intranet project</p> <p>19 and the enterprise project management. I</p> <p>20 notice that in the description of the minor</p> <p>21 enhancements from your--and I'll get back to</p> <p>22 this particular page in a moment--but from</p> <p>23 your project description, you talk about the</p> <p>24 minor enhancements as being things such as</p> <p>25 changes initiated by Canada Post, changes to</p>

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1 MR. DOWNTON:

2 income tax calculations and so on. Are these  
3 basically updates to your existing programs to  
4 take into account external changes?

5 MR. DOWNTON:

6 A. In some cases the changes are driven  
7 externally and in some cases, going through  
8 the year, we identify areas which we need to  
9 make improvements and we'll basically do an  
10 application for that particular area.

11 Q. Okay. I mean, at a very different level, I  
12 mean, I see this as being a release from  
13 Quickbooks to update your payroll deductions  
14 for next year. I mean, on a very different  
15 level, what you refer to as changes to income  
16 tax calculations, is that what you're talking  
17 about?

18 MR. DOWNTON:

19 A. What we've traditionally seen, some of the  
20 projects, projects like equalized billing  
21 which basically is a project which the Board  
22 directed Hydro to do, also an application to  
23 help us do FTE reporting. And I guess one  
24 other project we're doing this year is a  
25 project related to audit management so we can

1 better manage the various aspects of our  
2 auditing processes. And that was identified  
3 earlier in the year as a result of an audit  
4 that was done in our environmental management  
5 area.

6 Q. Okay. But I mean, the Canada Post reference  
7 that you make and the income tax  
8 calculations, what do they relate to? Is that  
9 a change in the price of sending a letter that  
10 requires you to update your program?

11 MR. DOWNTON:

12 A. The incentive letter mail out, what it was,  
13 was the way that the mailing that was put out  
14 which resulted in an improved operational--  
15 basically we took \$20,000.00 out of our  
16 operational budget because of the way that our  
17 bulk mailing was done. And that project  
18 justified itself in about 11 months.

19 Q. So, this was a change in the way that you  
20 processed bulk mail and you changed your  
21 program in order to accommodate that?

22 MR. DOWNTON:

23 A. That's right. It was a piece of software we  
24 put in to improve the way the bulk mailing is  
25 done.

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1 Q. Okay, and the income tax?

2 MR. DOWNTON:

3 A. Basically that was put in there as an example,  
4 like, I don't remember a detail that we've  
5 done on that of late.

6 Q. I mean, I presume you did up income tax with,  
7 you know, deductions from your employees and  
8 so on. And each year that needs to be updated  
9 to make sure it's current with the existing  
10 regulations and so on.

11 MR. NICHOLS:

12 A. That type of change is actually done under  
13 J.D. Edwards as an operational issue in a  
14 Veratas, not Veratas, from another company  
15 which basically that provide that update, I  
16 believe, around November 15 which we put in  
17 then for the following year. So, actually  
18 this year we're having some problems with  
19 other stuff that we're doing to get to fit all  
20 this work in. But that's a regular update  
21 that's done on the J.D. Edwards system. It  
22 wouldn't be included in this at all.

23 Q. Just getting back to the item on the screen  
24 there, last year the amount that was assigned  
25 for minor enhancements was 85,000. This year

1 it is 99, that's not a huge change, I guess,  
2 but in terms of the extent to which you're  
3 prepared to able to plan this, this year  
4 you've got 43,000 allotted for materials  
5 supply and last year there was not allotment  
6 for material supply. To the extent that this  
7 is, as it's described to be, unforeseen things  
8 that are coming up, I mean, how do you do this  
9 breakdown?

10 MR. NICHOLS:

11 A. The breakdown basically on material supply is  
12 basically under the various minor  
13 enhancements, that would really be for, like,  
14 services for programming services to basically  
15 make those changes to our system and whatnot.  
16 And under the KPI site would be very much the  
17 same and under the facilities failure model,  
18 that 51,000 is really to purchase a software  
19 application for that purpose.

20 Q. Sure, I understand that. I'm focusing on the  
21 minor enhancements and I mean, last year there  
22 was no item for material supply and this year  
23 there's 43,000. I'm wondering how you can  
24 reach that type of conclusion if what you're  
25 dealing with are unforeseen items?

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1 MR. DOWNTON:

2 A. I guess what we've seen in the last couple of  
3 years is that we have an average spend on the  
4 minor enhancements of, in the order of about  
5 \$80,000.00, \$82,000.00, \$84,000.00. And I  
6 guess we make our best guess then, is this  
7 going to be--is there a possibility we're  
8 going to buy a piece of software or are we  
9 going to end up going outside to get someone  
10 to write an application. So, really it is  
11 just an estimate based on our experience.

12 Q. Is there anything that you can point me to  
13 which would explain the notion that last year  
14 there was nothing for material supply and  
15 45,000 for engineering. And this year there's  
16 43,000 for material supply and nothing for  
17 engineering?

18 MR. NICHOLS:

19 A. One of the examples that we did last year was  
20 we built an asset tracking module work flow  
21 situation which worked with our J.D. Edwards  
22 system and that basically was contracted out  
23 to an outside. So, that would give you an  
24 example of how we've come to this conclusion.

25 Q. So, that was something that was, in fact,

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1 expended.

2 MR. DOWNTON:

3 A. That's correct.

4 Q. Is there any reason why an expenditure of that  
5 type would be so strongly concentrated toward  
6 the end of the year?

7 MR. DOWNTON:

8 A. It's not much different than a lot of other  
9 projects in the sense that what we find is  
10 during the first half of the year, we do a lot  
11 of planning for what we're doing. And the  
12 last half of the year if really the delivery.  
13 And a lot of these projects we do not make  
14 progress payments on. Basically the payments  
15 are not made until the product is delivered.  
16 So, for this type of project, no different  
17 than a lot of other projects, a lot of the  
18 billing and actually the costing to this would  
19 not be done until later in the year.

20 Q. It just seems to me that a project such as  
21 this which is intended to respond to  
22 unforeseen requirements should typically be a  
23 more evenly distributed type of project. And  
24 the danger remains, I guess, where there's  
25 nothing specified as to exactly what you're

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1 planned. This wasn't an unforeseen item. You  
2 knew at the time you budgeted -

3 MR. NICHOLS:

4 A. It was an unforeseen item that came up and  
5 basically we purchased services to provide  
6 that system, that functionality.

7 Q. Okay, but how did that allow you to project,  
8 last year, that you would, in fact, need  
9 \$45,000.00 in engineering services under the  
10 minor enhancements?

11 MR. NICHOLS:

12 A. Again, going back to what Mr. Downton said, we  
13 look at this as these are annual changes that,  
14 like, say, come up and changes of, changes  
15 that the Board requests or request that the  
16 business give to us that we need to go out and  
17 do for the business.

18 Q. I'm not sure your answer is helping me  
19 understand this, but let's move on. If we  
20 could look for a moment at IC-49 from this  
21 year's hearing. This is the updated Section F  
22 and if we went to page F-6 of this item, you  
23 see that the applications enhancements  
24 approved last year was \$463,000.00 and to the  
25 end of August, only \$51,000.00 has been

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1 going to purchase under this heading that come  
2 the end of the year and the money is not  
3 spent, you may feel inclined to spend it on  
4 things that you wouldn't necessarily think you  
5 should be spending it on in the beginning of  
6 the year.

7 MR. DOWNTON:

8 A. I take exception to that. We basically spend  
9 the money in prudent fashion.

10 Q. So, from the basis of F-6, you fully intend to  
11 spend another \$412,000.00 between September  
12 and December 31 under this heading?

13 MR. DOWNTON:

14 A. All of the work is in progress. And I guess I  
15 come back to the fact that until the products  
16 are delivered and we make payment, it really  
17 doesn't show up here.

18 Q. Okay. The item dealing with the intranet  
19 talks about improvement to information flow,  
20 elimination of redundant processes and the  
21 reduction of manual effort associated with  
22 distributing information. So, that initially  
23 sounded to me like a project that might result  
24 in some cost savings, but in answer to IC- 78  
25 you indicated that there are no staff

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1 HUTCHINGS, Q.C.:  
 2 reductions as a result of this. Are there any  
 3 savings associated with that project?  
 4 (1:30 p.m.)  
 5 MR. DOWNTON:  
 6 A. We feel there are efficiencies to be gained  
 7 and savings, but we don't basically feel that  
 8 they are necessarily identifiable. The  
 9 intranet is primarily a communications  
 10 collaboration tool. And I guess what we are  
 11 trying to do is to leverage that, to better  
 12 communicate throughout the organization. I  
 13 guess some of the various aspects of what  
 14 we're doing this year. We're focusing on the  
 15 remote areas, in particular the diesel plants.  
 16 They have a requirement to have access to  
 17 documents as it relates to customer  
 18 information, also what we call MSDS sheets  
 19 which is related to handling hazardous  
 20 materials, also access to, I guess, I'm just  
 21 trying to think what the other pieces were.  
 22 Yeah, basically safety and health standards  
 23 and also environmental standards. And I guess  
 24 what we're doing this year is, an  
 25 environmental properties group, that is one of

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1 basically look at sequence of events data that  
 2 is current and also look at alarm and events  
 3 information that's current so to help him to  
 4 troubleshoot equipment at any particular site.  
 5 Q. So, is there any established standard for  
 6 customer service that is not being met now  
 7 that will be met as a result of this project?  
 8 MR. DOWNTON:  
 9 A. Not that I'm aware. I guess all we're trying  
 10 to do is enhance what we have.  
 11 Q. I just have a couple of other questions on  
 12 this project. The description talks about the  
 13 KPI application reflecting business  
 14 initiatives, I understood this to be a  
 15 response largely to the Board Order as opposed  
 16 to a business initiatives. What specifically  
 17 in terms of business initiatives are you  
 18 referring to?  
 19 MR. DOWNTON:  
 20 A. I guess, for us, part of it is for the Board  
 21 order, but we basically, on a regular basis,  
 22 we look at how we can further enhance our  
 23 performance through the use of KPIs. One of  
 24 the aspects we're looking at here is to roll  
 25 out what we consider our KPI site to our

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1 the internet sites that's being developed.  
 2 So, that would allow these people to access  
 3 the latest versions of documentation of when  
 4 they need it, rather than had documents faxed  
 5 back and forth. So, we basically feel that  
 6 there are efficiencies gained just in the  
 7 communications of information.  
 8 Q. Okay. The project description also refers to  
 9 providing an enhanced level of customer  
 10 service. What specifically is the enhancement  
 11 to customer service associated with this?  
 12 MR. NICHOLS:  
 13 A. One of the examples that's also provided by  
 14 the internet site is what we would call access  
 15 to our EMS system and also they can access the  
 16 reports that are produced by the EMS system  
 17 through the internet which they can get the  
 18 things such as things as they're actually  
 19 happening on the system. So, those things are  
 20 provided also through the internet site.  
 21 MR. DOWNTON:  
 22 A. Yes. Some of the examples is that when a  
 23 technician goes to a site, he can take his  
 24 laptop, dial into our corporate internet site  
 25 which is what we call the EMS view, he can

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1 managers and supervisor and provide additional  
 2 information for them, what we call a drill  
 3 down which is taking some of the information  
 4 down to a lower level of, depending on which  
 5 way you look at it, lower level of detail for  
 6 them to make decisions with.  
 7 Q. So, what you mean by business initiatives is  
 8 pushing information out within your own  
 9 organization. Is that what you mean by  
 10 business initiatives?  
 11 MR. DOWNTON:  
 12 A. I guess, that's one way of putting it.  
 13 MR. NICHOLS:  
 14 A. One of the aspects also of the KPI site along  
 15 with the internet site is to provide these  
 16 types of tools in a very quick way. So  
 17 basically, they don't have to wait hours to  
 18 run a report through our AS 400 system which  
 19 we're having some performance problems with,  
 20 but basically, they can access these types of  
 21 information fairly quickly, so they can make  
 22 decisions and what not.  
 23 Q. That problem, presumably, will be solved if  
 24 you are, in fact, given approval to replace  
 25 the AS 400?

<p style="text-align: right;">Page 185</p> <p>1 MR. NICHOLS:</p> <p>2 A. No, it won't solve the problem, but I guess,</p> <p>3 the thing is this site basically creates a</p> <p>4 user interface for the users to use on a day-</p> <p>5 to-day basis which is fairly user friendly</p> <p>6 which makes them easier to use, get the</p> <p>7 information that they need.</p> <p>8 MR. HAYNES:</p> <p>9 A. Maybe for the benefit of the Board, just to go</p> <p>10 back to the key performance indicators. Hydro</p> <p>11 had started looking at key performance</p> <p>12 indicators before it became an issue at the</p> <p>13 Public Utilities Board. And one of the</p> <p>14 deficiencies that we had was getting timely</p> <p>15 pertinent information to managers and</p> <p>16 supervisors and vice-presidents included. And</p> <p>17 rather than going down and making a phone call</p> <p>18 or looking for someone to come up and go back</p> <p>19 and calculate our answer to a question or a</p> <p>20 performance indices for some particular thing.</p> <p>21 With the technology that we had, it was, you</p> <p>22 know, accomplishable that we could actually</p> <p>23 mine this information out of the J.D. Edwards</p> <p>24 system, out of EMS system and when I go in, in</p> <p>25 the morning, if I want to go into the KPI</p>	<p style="text-align: right;">Page 186</p> <p>1 screen, we do report KPIs to the Board, but</p> <p>2 they are high level KPIs, but I can drill down</p> <p>3 through production divisions. The manager in</p> <p>4 hydro generation plant can drill down and look</p> <p>5 at the performance of Bay D'Espoir plant</p> <p>6 versus Upper Salmon plant. That would</p> <p>7 obviously not be of interest to my boss or to</p> <p>8 the Board, but certainly of interest to him.</p> <p>9 So, this KPI system is not just a 7 KPIs, it's</p> <p>10 a drilled down, very capable system and a</p> <p>11 very, very useful information tool. And if we</p> <p>12 had an event on the system or if I wanted to</p> <p>13 go in and look at something, I don't have to</p> <p>14 trouble somebody, take them away from their</p> <p>15 work. I can go in and I can, in a matter of</p> <p>16 minutes, go down and see what's happening. If</p> <p>17 we had an event on the system, I can go into</p> <p>18 the EMS side and I can actually look at</p> <p>19 specifics in the terminal stations or the</p> <p>20 generation plant. And it will be enhanced on</p> <p>21 an ongoing basis, I would suspect, for years.</p> <p>22 It's a very good, you know, information tool,</p> <p>23 not only for the high level KPIs, but for</p> <p>24 specifics to each areas of the operations.</p> <p>25 Q. Just one quick question relative to the</p>
<p style="text-align: right;">Page 187</p> <p>1 facilities failure model. Has this been</p> <p>2 identified as an item which will result in</p> <p>3 cost savings in itself.</p> <p>4 MR. HAYNES:</p> <p>5 A. The facilities failure model is a risk</p> <p>6 assessment tool specifically for hydro plants</p> <p>7 and it's in use at about 30 hydro--in July of</p> <p>8 2003, it's in use at about 30 different</p> <p>9 installations. And it's going to allow us to</p> <p>10 better quantify risk when we come in and</p> <p>11 propose an exciter, a governor or whatever for</p> <p>12 a hydro plant. And it is anticipated, based</p> <p>13 on the experience in the industry, Acres, who</p> <p>14 have designed this particular tool, have</p> <p>15 indicated it's been between 10 and 30 percent</p> <p>16 savings. But it's going to be specific as to,</p> <p>17 you know, trying to assess the risk of</p> <p>18 delaying investment decisions or capital</p> <p>19 replacement decisions. So, it's anticipated</p> <p>20 that we will, over the long term, save some</p> <p>21 money by making more prudent decisions on the</p> <p>22 hydro plant equipment, capital replacement</p> <p>23 programs.</p> <p>24 Q. So, there's a long terms expectation of</p> <p>25 savings which is not quantifiable at this</p>	<p style="text-align: right;">Page 188</p> <p>1 stage.</p> <p>2 MR. NICHOLS:</p> <p>3 A. No, it would be impossible to quantify at this</p> <p>4 point in time, but it is a good tool, it's a</p> <p>5 very common tool, popular among many utilities</p> <p>6 now and a growing database.</p> <p>7 Q. Okay, thank you. We've gone a little over the</p> <p>8 time, I think, which we planned to break, Mr.</p> <p>9 Chair. I have some other questions for this</p> <p>10 Panel, so, I think we need to -</p> <p>11 GREENE, Q.C.:</p> <p>12 Q. Mr. Chair, I wonder if it would be helpful, I</p> <p>13 still have a faint hope of getting the Panel</p> <p>14 done today. I wonder is the Industrials could</p> <p>15 indicate how much longer they--right now we</p> <p>16 have no idea how much longer this Panel will</p> <p>17 be. We don't know if it will five minutes or</p> <p>18 five hours. Would it be helpful if the</p> <p>19 Industrials indicated the length of time and</p> <p>20 then Board counsel. It would give us some</p> <p>21 idea of what we're looking at.</p> <p>22 CHAIRMAN:</p> <p>23 Q. Can you give use some indication there, Mr.</p> <p>24 Hutchings, that would be helpful.</p>

<p style="text-align: right;">Page 189</p> <p>1 HUTCHINGS, Q.C.:</p> <p>2 Q. I took a little longer with that project than</p> <p>3 I had anticipated taking. I had in mind about</p> <p>4 an hour.</p> <p>5 CHAIRMAN:</p> <p>6 Q. An hour more?</p> <p>7 HUTCHINGS, Q.C.:</p> <p>8 Q. It would probably be an hour more, I would</p> <p>9 suspect.</p> <p>10 GREENE, Q.C.:</p> <p>11 Q. And then, of course, we have Board counsel.</p> <p>12 Right now, I have no redirect, so far.</p> <p>13 MR. KENNEDY:</p> <p>14 Q. Board counsel will have no questions. The</p> <p>15 material has been covered already, singular</p> <p>16 aspect of my cross.</p> <p>17 GREENE, Q.C.:</p> <p>18 Q. So, there is a possibility we could finish by</p> <p>19 2:30 and the Panel would be relieved and Mr.</p> <p>20 Haynes and Mr. Downton and Mr. Nichols could</p> <p>21 go, and would not have to re-appear on the</p> <p>22 18th.</p> <p>23 CHAIRMAN:</p> <p>24 Q. I think we'll just take a five minute</p> <p>25 adjournment here now and we'll come back and</p>	<p style="text-align: right;">Page 190</p> <p>1 see where we can go from there.</p> <p>2 (BREAK - 1:40 p.m. )</p> <p>3 (RESUME - 1:52 p.m. )</p> <p>4 CHAIRMAN:</p> <p>5 Q. I guess, Mr. Hutchings, I don't know how much</p> <p>6 faith we had that this is only going to take</p> <p>7 an hour. It's been a long day already since</p> <p>8 9:30 this morning. So, I think it's our</p> <p>9 inclination that we set this matter over now,</p> <p>10 adjourn today, and reconvene on the 18th as</p> <p>11 scheduled at 11:00. And I think the parties</p> <p>12 have had some discussion with regard to the</p> <p>13 written statement aspect.</p> <p>14 MR. KENNEDY:</p> <p>15 Q. I didn't with counsel with Hydro, Chair,</p> <p>16 simply because it would verify that the other</p> <p>17 parties were okay with Hydro's proposal and I</p> <p>18 can confirm that they are.</p> <p>19 CHAIRMAN:</p> <p>20 Q. Okay, so, with regard to the written</p> <p>21 submissions, the submission of Hydro would be</p> <p>22 a reply to the written argument of the</p> <p>23 Industrial Customers.</p> <p>24 MR. KENNEDY:</p> <p>25 Q. Correct. And Newfoundland Power.</p>
<p style="text-align: right;">Page 191</p> <p>1 CHAIRMAN:</p> <p>2 Q. Excuse me, and Newfoundland Power. So, with</p> <p>3 that then, we'll adjourn until 11:00 on the</p> <p>4 18th.</p> <p>5 GREENE, Q.C.:</p> <p>6 Q. Now, on the 18th we have this Panel to finish</p> <p>7 and Mr. Roberts, we have no indication that we</p> <p>8 will finish in that day.</p> <p>9 CHAIRMAN:</p> <p>10 Q. It's our expectation from what's been said,</p> <p>11 Mr. Hutchings, that we would finish on the</p> <p>12 18th and it would be our inclination to clue</p> <p>13 up the evidentiary portion, the cross-</p> <p>14 examination on the 18th.</p> <p>15 HUTCHINGS, Q.C.:</p> <p>16 Q. That's definitely my expectation, Mr. Chair.</p> <p>17 GREENE, Q.C.:</p> <p>18 Q. So, sit from 11--what is the schedule for the</p> <p>19 18th. We start at 11 and we go to 4:30 or as</p> <p>20 necessary.</p> <p>21 CHAIRMAN:</p> <p>22 Q. I would think probably something along the</p> <p>23 lines of from 11:00 until 1:00 with a short</p> <p>24 break, maybe half an hour or so, if need be</p> <p>25 and come back and finish off, something to</p>	<p style="text-align: right;">Page 192</p> <p>1 that nature.</p> <p>2 MR. ALTEEN:</p> <p>3 Q. Eat before we come, Mr. Chairman.</p> <p>4 CHAIRMAN:</p> <p>5 Q. Pardon me?</p> <p>6 MR. ALTEEN:</p> <p>7 Q. We should eat before we come.</p> <p>8 CHAIRMAN:</p> <p>9 Q. No, I won't even object if you have a sandwich</p> <p>10 at the table. Okay, thank you.</p> <p>11 Adjourned 1:54 p.m.</p>



## 1 CERTIFICATE

2 I, Judy Moss Lauzon, hereby certify that the foregoing is  
3 a true and correct transcript in the matter of  
4 Newfoundland and Labrador Hydro's 2005 Capital Budget  
5 Application, heard on the 8th day of October, A.D., 2004  
6 before the Board of Commissioners of Public Utilities,  
7 Prince Charles Building, St. John's, Newfoundland and  
8 Labrador and was transcribed by me to the best of my  
9 ability by means of a sound apparatus.  
10 Dated at St. John's, Newfoundland and Labrador  
11 this 8th day of October, A.D., 2004  
12 Judy Moss Lauzon