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Yukon Utilities Board

Yukon Electrical Company Limited  
2013-2015 General Rate Application

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P R O C E E D I N G S

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Volume 4  
November 7, 2013  
Whitehorse, Yukon

1 Proceedings taken at the High Country Inn, 4051-4th Avenue,  
2 Whitehorse, Yukon.

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4 Volume 4

5 November 7, 2013

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Mr. N. Prasad	Board Member
Mr. A. Fortin	Board Member
Mr. R. (Les) Boisvert	Board Member

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Mr. P.J. Landry	Yukon Energy Corporation
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Mr. J. Maissan	Leading Edge Projects Inc.
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Ms. K. Kellgren	City of Whitehorse
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Adele Jones, CSR(A)	Official Court Reporter
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S.J. Lea Dormer, CSR(A)	Official Court Reporter
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22 (Proceedings reconvened at 8:00 a.m.)

23 THE CHAIR:

Please be seated. Good

24 morning, everybody. It's still dark out there, but that's

25 great.

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1                   So are there any preliminary matters before we  
2 turn it back to YUB's staff for questioning?

3 MS. SEARS:                   No, sir.

4 THE CHAIR:                   Thank you.

5                   To Ms. Bentivegna, I'll let you resume where  
6 you left off yesterday evening.

7 MS. BENTIVEGNA:           All right. Thank you  
8 Mr. Chair.

9

10 J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG (For YECL),  
11 previously sworn

08:00

12 MS. BENTIVEGNA QUESTIONS THE PANEL:

13 Q. Now, Mr. Grattan, I want to go back on one thing from  
14 yesterday's questions, and it was about the differences  
15 between depreciation in Schedules 8.10 and 7.1, if you  
16 remember that. And you responded that in Schedule 8.10, the  
17 number was net depreciation whereas in Schedule 7.1 it was  
18 total depreciation.

19                   Am I to understand that the net depreciation  
20 in Schedule 8.10 expense was the total depreciation from  
21 Schedule 7.7 as its starting point?

08:01

22 A. MR. GRATTAN:           Can you -- what I'm going to  
23 ask is that we pull up my response on the transcript, and  
24 then we'll go from there. How does that sound, please?

25 Q. Sounds good, but I don't have the reference. It was

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 early in my -- I think it was one of the first questions, or  
2 so.

3 A. MR. GRATTAN: Right, but I think I --

4 Q. Yeah --

5 A. MR. GRATTAN: -- responded to that late in  
6 the day. I was making reference to a couple of schedules.

7 Q. Yes, and it was Schedules 8.10 and 7.1, and you said the  
8 difference was --

9 A. MR. GRATTAN: Amortization of contributions?

10 Q. Yes. It was the net that -- I wanted to follow up as to 08:02  
11 what the starting point was of the two schedules. So I'm  
12 looking at 7.1 and 8.10.

13 A. MR. GRATTAN: Just one moment, please.

14 Q. Sure. It had to do with the working capital.

15 A. MR. GRATTAN: Okay. So I think the easiest  
16 way is to go all the way back to Schedule 1.1.

17 Q. All right.

18 A. MR. GRATTAN: And Yukon Electrical's revenue  
19 requirement for -- let's use 2013 as an example -- includes  
20 both depreciation, which is on line 12, and that number for 08:03  
21 2013 is \$6,570,000 -- forecast to be \$6,570,000. And going  
22 in the opposite direction, which is the amortization of  
23 contributions, is \$1,444,000.

24 So the gross depreciation is the first number  
25 that I mentioned, the 6.57 million. But for the purposes of

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 determining working capital, we do it on a net basis because  
2 we're factoring in the amortization of contributions, and  
3 that number being the 1.444 million that I just mentioned.

4 So if you need me to explain more than that,  
5 I'm probably going to need to take another undertaking and  
6 then understand exactly what the issue is.

7 Q. Okay. Well, if, as you've just explained it, it's the  
8 working capital or the net amortization --

9 A. MR. GRATTAN: Of contributions.

10 Q. Yes, of contributions. Why would there be a working  
11 capital calculation for FRSR which is included in  
12 depreciation expense when the amount has not been actually  
13 spent? That was the question that arises. That's why I'm  
14 following up, and I'll take an undertaking, Mr. Grattan.

08:05

15 A. MR. GRATTAN: Yeah, I think we better take an  
16 undertaking on that. What I'll say right now is that the  
17 approach for determination of working capital and the  
18 inclusion of depreciation in working capital is consistent  
19 with what we've done in the past. It is consistent with what  
20 our parent company does, but there is a technical reason as  
21 to why that occurs, and I will I take it -- I'm not prepared  
22 to talk about that right now, but I can undertake to do that.

08:06

23 Q. All right. Thank you.

24 A. MR. GRATTAN: Sorry just to make sure I've  
25 got this undertaking -- well, no, we'll leave it at that.

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 Q. All right. I mean I can restate the question if you  
2 like, but...

3 A. MR. GRATTAN: Thank you.

4 Q. All right.

5 UNDERTAKING - WITH RESPECT SCHEDULES  
6 8.10 AND 7.1, TO ADVISE WHY THERE WOULD  
7 BE A WORKING CAPITAL CALCULATION FOR  
8 FRSR WHICH IS INCLUDED IN DEPRECIATION  
9 EXPENSE WHEN THE AMOUNT HAS NOT BEEN  
10 ACTUALLY SPENT

08:05

11 Q. MS. BENTIVEGNA: I'm sorry. Now I'm moving on  
12 to the sales and -- excuse me, sales and revenue forecast  
13 account. Now, this is for new customers, and if I can point  
14 you to the application page 8-9, line 11.

15 A. MR. GRATTAN: Can you repeat that reference,  
16 please?

17 Q. Sure, it's the application page 8-9, and I believe it's  
18 on line 11, and it relates to the 2010 distribution, new  
19 expenditures. It's contributions in aid of construction.  
20 Sorry, are you there, or...?

08:09

21 A. MR. MASSIE: Yes, yes.

22 Q. All right. Now, it appears that the 2010 distribution  
23 new expenditures equals to \$3,397,000, and that's on page  
24 9-19, while the customer contributions in aid of construction  
25 for the same year are 3,771,000, and that's on page 8-9, line

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 11.

2 So if you've got those two numbers, my  
3 question is: Is it possible that customer contributions in  
4 aid of construction in any one year, as shown on page 8-9 of  
5 the application, are greater than the annual totals of  
6 distribution new expenditures that are shown on either the  
7 other pages, such as 9-9, 9-13, 9-19, 9-27, 9-35, 9-46, 9-55  
8 and 9-62? Sorry, I gave you a lot of page numbers but I'm  
9 happy to repeat them.

10 A. MR. MASSIE: That's okay.

08:10

11 Q. We can start with those first two numbers --

12 A. MR. MASSIE: So on the, I guess, the overall  
13 global scale of contributions. There is ability for the  
14 contributions to exceed any given year, and really, that's  
15 based on timing of projects -- for the new extension  
16 projects.

17 So a great example is the Whistle Bend  
18 subdivision where the developer -- for the subdivision, the  
19 new extensions in the subdivision, the developer gives us a  
20 large contribution to order all the materials because it was  
21 very -- well, it's a whole subdivision, so it's a very  
22 significant dollar value. And by the time the materials are  
23 in and they schedule and they finish their developing the  
24 subdivision and it's time for us to install those, it could  
25 have been the next year.

08:11

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1                   **So absolutely, I guess they could exceed any**  
2 **given one year just for timing of projects.**

3 Q. Thank you. Now, if I can refer you to the application  
4 Section 3. It's page 3-1, and I'll read you the quote. I  
5 can wait for you to get from.

6 **A. MR. GRATTAN:                   We're there.**

7 Q. (As read)

8                   "Since the catastrophic failure of Fish  
9 Lake Unit No. 1 in March, 2010, Yukon  
10 Electrical has purchased approximately  
11 92 to 93 percent of the required power  
12 supply from Yukon Energy. The  
13 remainder of Yukon Electrical's  
14 required power supply has been provided  
15 by diesel generation and by hydro  
16 generation from Fish Lake Unit 2.

08:12

17                   The percentage of power that Yukon  
18 Electrical purchases from Yukon Energy  
19 is forecast to decrease slightly for  
20 2013 and to decrease approximately 91  
21 percent in 2014 and 2015 test years due  
22 to the forecast increased hydro  
23 generation as Unit 1 is brought back on  
24 line near the end of 2013."

08:12

25 **A. MR. GRATTAN:                   Just to clarify what you just**

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 read.

2 Q. Yeah.

3 A. MR. GRATTAN: You said "decreased 91  
4 percent." The wording, I believe, says to "decrease to  
5 approximately 91 percent."

6 Q. Yes, that is correct.

7 Now, does YECL have any update regarding the  
8 forecast of the Fish Lake Unit No. 1 in-service date? Does  
9 it continue to be December 2013?

10 A. MR. MASSIE: Yes, it does continue to be  
11 December of 2013.

08:13

12 Q. And so those projections from that quote, they still  
13 continue to be accurate?

14 A. MR. MASSIE: And from that quote, the fact  
15 that we're still on track for the December 2013 in-service  
16 date, I would say yes, they are correct.

17 Q. All right. Thank you. Now, if I can take you to  
18 Section 2 of your application, Sales and Revenue, page 2-7.

19 A. MR. KOENIG: Yes, I have that.

20 Q. All right. And I'm referring -- I believe it's line 17  
21 to 21 which state: (as read)

08:14

22 "A new industrial customer, Whitehorse  
23 Copper Tailings, is forecast to start  
24 operations in the fall of 2013. While  
25 the customer has acknowledged

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG  
Questioned by Ms. Bentivegna

1           uncertainty in the exact timing of its  
2           startup, as well as its ultimate load,  
3           the latest available information  
4           results in a 2013 forecast of a 1,025  
5           megawatts and 4,620 megawatts for each  
6           of 2014 and 2015."

7   Now, I know you've updated and responded to questions here  
8   during the hearing, but I would still like clarification on  
9   what YECL's forecast is respecting this customer's startup  
10  time and/or volumes in any one of the -- or all of the test  
11  years. So basically updated information.

08:15

12  **A. MR. GRATTAN:**                   One moment. We're just going  
13  to confer on who's going to answer the question.

14  Q.   Sure.

15  **A. MR. GRATTAN:**                   We just want to grab a copy of  
16  the undertaking, if that's okay.

17  Q.   Certainly.

18  **A. MR. KOENIG:**                   So based on the most recent  
19  information we have regarding the industrial customer, we  
20  are -- -- they are due to be in operation in April of 2014  
21  and will continue operations until November of 2014 where  
22  they shut down for the winter season of December, January,  
23  February and will start up again in March of 2015 and, again,  
24  will run until November 2015.

08:16

25  Q.   And what about any forecast as to volumes?

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 A. MR. KOENIG: Yes, the volume of energy  
2 actually is provided in that Undertaking number 11.

3 Also, for your reference, for 2013 we have a  
4 zero kilowatt hours. We have -- for 2014, we have 4.1  
5 gigawatt hours of sales, and for 2015, we have 4.6 gigawatt  
6 hours of sales.

7 Q. Thank you.

8 A. MR. GRATTAN: So to be clear, though, even  
9 though we've updated this forecast, the request for the  
10 deferral associated with Whitehorse Copper Tailings  
11 continues. They have been later than what we originally  
12 forecast, September 2013 being the original forecast. Now  
13 we're sometime into April of 2014.

08:17

14 And based on what's happening here, there  
15 still is uncertainty as to whether they will start up at that  
16 point in time, whether they will start up with additional  
17 loads different than what we have been told at this point in  
18 time.

19 So we continue to request the deferral,  
20 regardless of the update that we have provided as part of  
21 that undertaking.

08:18

22 Q. And how likely are those projections likely to take --  
23 to change as you just mentioned, because that was going to be  
24 my next question regarding the deferral account.

25 So you say it still continues to be your

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 position that you're asking for the deferral account, but how  
2 likely or how uncertain is it that the load will change or  
3 the startup time so that you still are asking for a deferral  
4 account?

5 A. MR. REDDEN: I can provide some information  
6 there, Ms. Bentivegna.

7 The project update, from a load perspective  
8 that's still the best information that's available, though  
9 the industrial customer has to finalize the design of their  
10 specific equipment that will be on site that will dictate  
11 what the electrical load requirements are. They're working  
12 on their issues with respect to the startup of the project  
13 and delivery of ore out through Skagway. And they're making  
14 progress, so we've just been staying in touch with them. Got  
15 that latest information.

08:19

16 They're still very confident in the project  
17 and then we'll be ready to provide them first with some  
18 construction power prior to the startup dates that we've  
19 talked about.

20 A. MR. GRATTAN: But just going back to Decision  
21 2009-02 where the Board noted the typical criterion using to  
22 determine whether to approve the use of a deferral account is  
23 the level of uncertainty regarding the accuracy of the  
24 forecast and the utility's ability to control the factors  
25 influencing the forecast. Those two factors ring true today

08:19

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 in November of 2013, just like they rang true when we filed  
2 the application earlier this year. That -- those facts  
3 remain.

4 Q. However, you do have more up-to-date information now  
5 than when you filed the application. Isn't that correct?

6 A. MR. GRATTAN: That the project has been  
7 delayed, but we still have a significant period in 2014 and  
8 2015 where a difference in either the startup date or the  
9 quantum of load requested and required by the customer remain  
10 highly uncertain at this point in time.

08:20

11 Q. All right. Thank you.

12 Now, have there been any contributions paid by  
13 Whitehorse Copper to YECL?

14 A. MR. REDDEN: No, there's just been the  
15 discussions on their plans. So there has not been any  
16 contributions from the customer to Yukon Electrical.

17 Q. And is there any contract in place between YECL and  
18 Whitehorse Copper?

19 A. MR. REDDEN: Not at this time.

20 Q. And, well, just to follow up, are you anticipating that  
21 there will be contributions and a contract in place?

08:21

22 A. MR. REDDEN: Yes, so we've discussed what's  
23 required to get the project going. It will be a contribution  
24 that will trigger the engineering work on our behalf with  
25 respect to the project and then putting an agreement in place

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 for the sale of power to Whitehorse Copper Tailings.

2 Q. And --

3 A. MR. GRATTAN: But I think what's in addition  
4 to that, though, the reality right now, is that we don't have  
5 sufficient information from the customer upon which to begin  
6 that contract -- the development of that contract.

7 Q. But if the load is as anticipated, what would be -- do  
8 you have any idea of what the total amount of the contract or  
9 the contribution -- not the contract but the contribution  
10 would be?

08:22

11 A. MR. REDDEN: That will be dependent on the  
12 level of effort to get the site interconnected to our  
13 existing infrastructure, and the sizings of the equipment  
14 related to that will be dictated by their load requirements.  
15 So they've given us indicative insight into that, and we're  
16 still awaiting then so more particular details that would  
17 allow us to get where refinement on what those costs are  
18 going to be.

19 Q. So you don't have an idea of what the contribution might  
20 be at this point? Is that what I'm understanding? I'm just  
21 asking.

08:23

22 A. MR. REDDEN: That's correct.

23 Q. Thank you. Now, I want to move to the request for the  
24 Carcross to MVA standby generation unit. Now, is there a  
25 minimum threshold level in the current N minus 1 planning

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 policy?

2 A. MR. REDDEN: That's what we're trying to  
3 establish is a setting of a 1 megawatt threshold from a load  
4 requirement for consideration for standby generation and a  
5 requirement of a minimum of 300 customers then to trigger a  
6 review with respect to N minus 1.

7 Q. And how is that 300 customers and one megawatt arrived  
8 at?

9 A. MR. REDDEN: That was considered as a  
10 reasonable point where we're ensuring that it's not just a  
11 number of few customers that have a relatively high load to  
12 trigger it, that it is based on a minimum threshold that has  
13 a material number of customers and load then to be eligible  
14 for a standby generator.

08:24

15 Q. In the past or in YECL's testimony you mentioned earlier  
16 this week that there were six communities that had standby  
17 generation. Now, was this type of threshold used at that  
18 time, or how -- I'm just trying to understand how you arrived  
19 at it and in comparison to what other communities have them  
20 as of now.

08:25

21 A. MR. REDDEN: I think we could refer to IR  
22 response YUB-YECL 46, page 4 of 7, and that outlines the six  
23 communities that Yukon Electrical serves and the in-service  
24 dates as well as how they evolved from being standby  
25 communities and then were subsequently connected to the Yukon

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Questioned by Ms. Bentivegna

1 Interconnected System.

2                   There's an asterisk behind Haines Junction  
3 which was connected and then was out of service for a period  
4 of time but then deemed important enough for meeting the  
5 standby requirements of the community to reinstitute the  
6 plant and make sure that it's available to provide standby  
7 capacity. So the way the system has matured and the  
8 interconnected system has grown, that has consumed those  
9 standby or isolated communities.

10                   Now the situation with Carcross-Tagish is that  
11 they're on the end of the interconnected system, one  
12 single-feed radial line with significant load and requirement  
13 for services and emergency requirements within the  
14 communities that we're recommending that this N minus 1  
15 policy be implemented for this particular situation.

08:27

16 Q. Now, with respect to the forced outages in the Carcross  
17 area, can YECL confirm that the frequency of outages in the  
18 Carcross-Tagish area has improved since the last general rate  
19 application 2008-2009?

20 A. MR. REDDEN:                   Yes. If we refer to YUB-YECL  
21 46(d)(i), page 1 of 5, that graph at the top provides the  
22 system average interruption frequency index, and looking at  
23 data from 2013 through to 2012, there is a trend from 2003,  
24 peaking up in 2009 and 2010, for Tagish and Carcross, that  
25 then had a sharp drop in 2010. Both of them then had an

08:28

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Questioned by Ms. Bentivegna

1 increase in 2011 and then a subsequent decrease in 2012.

2 So the overall trend has been down. It's  
3 bumpy and it's variable. There's lots of uncertainty in it  
4 or unknowns that come into play, but it generally has gone  
5 down, but it did come up again in 2011.

6 And maybe, Ms. Bentivegna if I could just  
7 refer back on a previous question regarding the N minus 1  
8 criteria, we did provide information in YUB-YECL 46, response  
9 (a), and the minimum load to enact a 1-megawatt N minus 1  
10 planning criteria being based on a January 2006 Yukon Energy  
11 20-year resource plan.

08:29

12 And within that, it outlined some of the  
13 emergency planning criteria to be used for N minus 1, and  
14 includes the -- at that time the Whitehorse, Aishihik, Faro  
15 and Mayo-Dawson systems, which are now interconnected, and  
16 says that for the communities that are on WAF or MD grids,  
17 any location with a load large enough to justify a diesel  
18 unit at about 1 megawatt or more will be considered as a  
19 preferred location for new diesel units if that community  
20 does not already have back up from another source.

08:30

21 It goes on to say: (as read)

22 "These new diesel units would provide  
23 good support and in times of line  
24 failures would provide local generation  
25 for the communities where they are

1           located."

2   And just to finish that it up, it follows: (as read)

3           "This selection of 300 customers is  
4           recommended as a minimum community size  
5           for locations with sufficient load and  
6           benefits a reasonably high number of  
7           customers."

8   Q.   Just to confirm, the 300 -- it wasn't -- or did it come  
9   out of the resource plan, or that's YECL's proposal or its  
10  policy? I just wasn't clear because you had been reading  
11  from the resource plan or Yukon Energy Corporation's...

08:31

12  A.   MR. REDDEN:                   That's YECL's recommended or  
13  Yukon Electrical's recommended number.

14  Q.   Thank you. Now, my next question is: Has YECL looked  
15  at, for the Carcross-Tagish, installing an older refurbished  
16  unit instead of the 2-megawatt unit it's proposed?

17  A.   MR. REDDEN:                   Yes, we contemplated that, and  
18  depending when one goes out to secure equipment, it's highly  
19  variable what's in the market at the time, whether or not it  
20  would be appropriate and meet all of the service operational  
21  and technical requirements and if it's worth investing in.

08:32

22           Many times when we've sourced equipment, it's  
23  typically as is/where is, and we've found that there is a  
24  high probability of a lot of changes or updates to equipment,  
25  depending on the particulars. So at times it initially looks

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 like it's a better value from a lifecycle-cost perspective,  
2 but when we get into the details, it can likely turn out to  
3 be otherwise. So our recommendation is to go with the new --  
4 with a new unit.

5 Q. All right. Thank you. It's just a follow-up on that.

6 Has YECL looked for a unit that might be  
7 useful in this area, or is this just on your previous  
8 experience, your answer, your previous answer?

9 A. MR. REDDEN: Ms. Bentivegna, we've  
10 previously investigated used units, but we haven't done a  
11 refresh of that with respect to Carcross-Tagish equipment. 08:34  
12 And, you know, from a standby perspective, that the -- it's  
13 anticipated that the unit's hopefully not going to run at all  
14 other than when we're testing it to make sure it's ready to  
15 run, but it would be expected to be a low service hour  
16 requirement that used equipment could be -- could be  
17 investigated.

18 Q. All right. And can you just give me an idea, when was  
19 the last time that YECL looked into this issue or this  
20 question? Approximately. I don't need a precise date. 08:35

21 A. MR. REDDEN: Yeah, it would have been last  
22 year, as we were doing our updates on the information with  
23 respect to this filing.

24 Q. All right. Thank you. Now, with respect to the SAIFI  
25 and SAIDI statistics presented in YUB-YECL 46(d). Now, can

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 those statistics be interpreted as improving year on year due  
2 to YECL initiatives?

3 A. MR. REDDEN: It's probably worth looking at  
4 that -- those two graphs, then, on that page I was referring  
5 to in YUB-YECL 46(d), page 1 of 5. That contains the two  
6 metrics referred to as SAIFI and SAIDI. So, first, the  
7 frequency of interruptions and then the duration of  
8 interruptions.

9 So we've talked about the first graph, SAIFI.  
10 If we looked at the system average interruption duration  
11 index, that graph shows by year how many hours, then, the  
12 various feeders or communities would have been off line.

08:36

13 There's one particular plot, then, from a  
14 company total perspective. If you've got it in colour, it's  
15 a gray line, and it shows it varying, you know, from 2003  
16 approximately two and a half hours to 7.4 hours in 2004; 3.1  
17 hours at 2005; close to nine hours in 2006; four hours in  
18 2007; and then up in 2008 to 10 hours; back down in 2009 to 5  
19 hours; in 2010 close to 3 hours; 2011 close to 7 hours; and  
20 then 2012, 3.4 hours.

08:37

21 So within that are system interruptions and  
22 losses of supply through generation or transmission. So it's  
23 showing variability in there and some major events that take  
24 those duration numbers up.

25 Certainly our efforts are to improve

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Questioned by Ms. Bentivegna

1 operational reliability through brushing programs, system  
2 settings, our operations and maintenance practices.

3 So from that perspective, there's been  
4 improvements; however, the other factors that are coming into  
5 play that -- to give some visibility in those, if we look at  
6 page 5 of 5, then the areas that we're also dealing with with  
7 respect to outage, including adverse environment and whether  
8 equipment -- if equipment becomes defective or foreign  
9 interference from something running into a line, human  
10 elements, if there's operational errors or lightning strikes 08:39  
11 or the loss of supply or trees on the lines, then those are  
12 all into the collective outage performance.

13 So I can say, in general terms, it was  
14 increasing from 2003 up to 2009, and a general improvement  
15 from 2009 through 2012.

16 Q. Thank you. Now, if the Board were to approve the  
17 standby unit in Carcross, looking at those outage statistics  
18 for the period of 2009 to 2012, again, shown in that same  
19 information response, approximately how many hours per year  
20 would the standby unit have to run because of forced outages? 08:40  
21 I mean, what's your estimate?

22 A. MR. REDDEN: The -- so for those particular  
23 cases when the standby unit would be in service would be from  
24 a loss of supply.

25 So we can, again, look at page 5 of 5 for the

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1 SAIDI -- those duration indices numbers for starting, say, at  
2 2008, we would have experienced 10.07 hours of run times;  
3 2009, 3.71 hours; in 2010, we would have had 1.48 hours; 2011  
4 would have been 5.16 hours; and 0 in 2012.

5 So it's quite a variation in requirements by  
6 year.

7 Q. And just to make -- just to be clear that I understand.  
8 So those -- the unit would run when it was a lack of  
9 generation; correct?

10 A. MR. REDDEN: Generation or transmission. So 08:41  
11 there could still be adequate generation on the system but an  
12 interruption in the supply or the distribution line to the  
13 communities.

14 Q. So then of -- are there forced outages underlying those  
15 outage statics for which the standby unit would not have  
16 helped? For example, if it's a transmission line problem,  
17 would the standby unit have helped?

18 A. MR. REDDEN: So the standby unit would be  
19 helpful in all loss-of-supply issues related to the feed into  
20 Carcross and Tagish. If there was a localized issue on the 08:42  
21 system, then there could be some clearing required first  
22 prior to the unit being able to provide standby generation.

23 Q. Would you have any statistics where the outages were  
24 localized? I mean we've gone through when it was a supply  
25 problem, those two hours, one hour -- the different years,

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1 but would you have statistics for when it was a localized  
2 outage, and would that be included in those statistics we  
3 just went through?

4 A. MR. REDDEN: Well, for example, there would  
5 be trees. And, again, I'm referring to the Carcross numbers.  
6 There's data with respect to those that -- those can be  
7 trees, though, that are also on the distribution line out to  
8 Carcross. So those would still be benefitting from having  
9 the standby generating unit. A number of those can be within  
10 the community system, then, that would have to be cleared  
11 first. 08:44

12 So that's a mix within -- within some of these  
13 categories that are not as easy to discern if it's within the  
14 community or on the supply line to the communities.

15 Q. All right. Thank you.

16 Now, does YECL have a person stationed and  
17 living in the Carcross area?

18 A. MR. REDDEN: No, we provide service from the  
19 Whitehorse area.

20 Q. All right. Thank you. 08:44

21 Now, in the areas that have a standby unit, so  
22 where in a community on or off the grid similar to Carcross,  
23 say Haines Junction, can YECL describe the annual operation  
24 and maintenance expenditures 2010 to 2012, for example, and  
25 monthly maintenance hours? Do you have those statistics?

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1 A. MR. REDDEN: Would that be with respect to  
2 the generating facility in Haines?

3 Q. Yes, the standby unit or if you have it just for any  
4 standby unit on average in those six communities that now  
5 have them.

6 A. MR. REDDEN: I think Mr. Massie's got some  
7 information with respect to the O&M requirements for standby.

8 Q. All right.

9 A. MR. MASSIE: Yeah, absolutely. The diesel  
10 generation for each of the communities, standbys and  
11 operating plants, we're able to break out the operating and  
12 maintenance costs by community.

08:46

13 Q. All right. So if you can give me an example, as I said,  
14 either Haines Junction or any other community, that would be  
15 fine.

16 THE CHAIR: So I assume that's an  
17 undertaking?

18 A. MR. MASSIE: That's my assumption.

19 Q. MS. BENTIVEGNA: Oh, all right.

20 A. MR. MASSIE: Oh, sorry.

08:46

21 MS. BENTIVEGNA: I thought you were looking that  
22 you had them.

23 A. MR. MASSIE: I apologize. No, they're  
24 rolled up into the Schedule 5.1.

25 Q. All right. All right. So it's annual operation and

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Questioned by Ms. Bentivegna

1 maintenance expenditures and monthly maintenance hours for  
2 2010, '11 and '12, please. Thank you.

3 **UNDERTAKING - TO PRODUCE THE ANNUAL**  
4 **OPERATION AND MAINTENANCE EXPENDITURES**  
5 **AND MONTHLY MAINTENANCE HOURS FOR 2010,**  
6 **2011 AND 2012**

7 Q. MS. BENTIVEGNA: Now, we were looking or you  
8 referred me to that table in YUB-YECL 46(d)(i). If I could  
9 take you back to that, for customers along the north Klondike  
10 Highway, radial feed from the Mayo cutoff to the end of the 08:47  
11 line -- sorry, the north Alaska radial feed from the Mayo  
12 cutoff to the end of the line, the south Alaska Highway  
13 radial feed from Carcross corner to Teslin and the south  
14 Klondike Highway radial feed from the Carcross corner to the  
15 end of the line, could you provide graphs and tables similar  
16 to page 1 of 5 in that YECL-YUB (d)(i), as well as tables  
17 showing numbers of interruptions and number of customers as  
18 well as the average length of the outages per annum for the  
19 period 2008 to 2012?

20 I believe, unless you have those at hand, that 08:48  
21 that would be an undertaking. And I can repeat the different  
22 parameters, if you --

23 A. MR. REDDEN: Yeah, we would appreciate,  
24 Ms. Bentivegna if you could state that again, and we can  
25 certainly do the data mining to put that together for.

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1 Q. The first one, the (a), is the customers along the north  
2 Klondike Highway radial feed, and that would be from the Mayo  
3 cutoff to the end of the line. Then (b) would be north  
4 Alaska Highway radial feed from the Mayo cutoff to the end of  
5 the line. Then it would be -- (c) would be the south Alaska  
6 Highway radial feed from Carcross corner to Teslin, and (d)  
7 would be the radial -- sorry, the south Klondike Highway  
8 radial feed from Carcross corner to the end of the line.

9 And so it would be for those, and it would be  
10 a table and graphs similar to page 1 of 5 in YUB 46(d)(i) and  
11 tables showing the numbers of interruptions and number of  
12 customers as well as the average length of outages for the  
13 years 2008 to 2012.

08:49

14 A. MR. REDDEN: Did you take the number of  
15 length of outages on average, or was that the total of  
16 outages.

17 Q. The average length of outages --

18 A. MR. REDDEN: Thank you.

19 Q. -- for each year.

20 A. MR. REDDEN: Thank you.

08:50

21 UNDERTAKING - TO PROVIDE A TABLE AND  
22 GRAPHS SIMILAR TO PAGE 1 OF 5 IN YUB  
23 46(D)(I) WITH THE TABLES SHOWING THE  
24 NUMBER OF INTERRUPTIONS AND NUMBER OF  
25 CUSTOMERS AS WELL AS THE AVERAGE LENGTH

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1           OF OUTAGES FOR THE YEARS 2008 TO 2012  
2           WITH RESPECT TO THE CUSTOMERS, (A),  
3           ALONG THE NORTH KLONDIKE HIGHWAY RADIAL  
4           FEED, FROM THE MAYO CUTOFF TO THE END  
5           OF THE LINE; (B) NORTH ALASKA HIGHWAY  
6           RADIAL FEED FROM THE MAYO CUTOFF TO THE  
7           END OF THE LINE; (C) THE SOUTH ALASKA  
8           HIGHWAY RADIAL FEED FROM CARCROSS  
9           CORNER TO TESLIN; AND (D) THE SOUTH  
10          KLONDIKE HIGHWAY RADIAL FEED FROM  
11          CARCROSS CORNER TO THE END OF THE LINE

08:49

12    Q.    MS. BENTIVEGNA:                    Now does YECL have a written  
13    policy in place regarding the installation of standby  
14    generation units for communities that are or are not  
15    connected? I mean, we've talked about the policy you're  
16    putting in place regarding the one megawatt and the 300  
17    customers, but is there any other policy in place right now  
18    regarding the installation of standby generation units?

19    A.    MR. REDDEN:                        Were you talking of isolated  
20    communities or --

08:50

21    Q.    Whether they're on the -- on the system or not. So if  
22    they're on the system, I guess, technically they wouldn't be  
23    isolated, but I leave that up to you. You know your policies  
24    best.

25    A.    MR. REDDEN:                        I mean, certainly when we're

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1 talking about off-grid communities, we will certainly provide  
2 the power requirements, and for example in Watson Lake, the  
3 N minus 1 is a design requirement then so that when we take  
4 the largest generating unit offline, we can still meet 110  
5 percent of the peak-load requirement.

6 When we're on grid, then that's what we're  
7 looking for approval from the Board to say: Here is a  
8 proposed policy, then, that as areas and communities have  
9 grown to a certain size -- in this case one megawatt and 300  
10 customers -- that we look at providing standby generation for 08:52  
11 that. And the only areas that we're looking at at this time  
12 in doing that are with respect to the Carcross and Tagish  
13 area.

14 Q. Thank you. Now, has YECL undertaken any discussions  
15 with YEC in terms of operational requirements of such a unit,  
16 the standby unit in Carcross if it's approved by the Board?

17 A. MR. REDDEN: Yes, we have discussed with  
18 Yukon Energy our advancement of this plan to reapply through  
19 this general rate application to the Yukon Utilities Board  
20 for that unit and indicated our plans, the sizing and what 08:53  
21 the intention is with respect to the unit.

22 And I think it was talked about yesterday  
23 that, you know, can the unit not just provide standby  
24 generation? Could it also put megawatts into the system if  
25 required for system requirements? And we said that, yes,

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1 that capability will be there. So we've had those  
2 discussions, so Yukon Energy has visibility into what our  
3 plans are with respect to this unit.

4 Q. Is there any type of agreement so if there was an outage  
5 for -- and if there was YEC personnel that they would start  
6 up the unit -- is there any type of agreement between YECL  
7 and YEC regarding assistance in that -- in that way?

8 A. MR. REDDEN: Certainly with respect to all  
9 of our existing units, then, we work with Yukon Energy to  
10 make sure that for system requirements, be it related to  
11 outages or shortages of supply or planned outage construction  
12 work, that we make ourselves available and our people and our  
13 units then to provide that support. So this would be part of  
14 that global working arrangement that we have.

08:54

15 Q. And does it work the other way as well? So if you need  
16 assistance or aid from YEC for your unit, does YEC then --  
17 does the agreement go both ways is my question?

18 A. MR. REDDEN: Absolutely. So we basically  
19 call it a mutual aid agreement to work with one another, and  
20 that goes beyond just our units. It comes down to our people  
21 as well. If Yukon Energy or Yukon Electrical needs support  
22 and it's more efficient to have their folks that are in the  
23 area, they'll help us out and vice versa. So it's very  
24 collaborative on making sure we're responding most  
25 efficiently as we can.

08:54

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Questioned by Ms. Bentivegna

1 Q. All right. Thank you. Now, if I can take you to  
2 capital addition expenditures on pages 5-6 of the  
3 application. It would be -- the capital addition  
4 expenditures would start or go from pages 9-5 to 9-67.

5 Now, can you confirm that the miscellaneous  
6 overhead service expenditures, a subcategory of distribution,  
7 new extension expenditures, are related to new individual  
8 service connections driven by a customer that is under  
9 25,000?

10 A. MR. MASSIE: Yes, I can confirm that.

08:56

11 Q. All right. Thank you. Now, with respect to  
12 distribution, new extension expenditures, does the same type  
13 of definition apply to new underground extensions 2011 to  
14 2015 or miscellaneous new underground services 2008 to 2010?

15 A. MR. MASSIE: I'm sorry, with regard to the  
16 \$25,000 limit? Is that where we're speaking to there?

17 Q. It would be in -- we're trying to understand whether,  
18 not just the \$25,000 limit, but do both apply to new  
19 customers? So would it be the same application when talking  
20 about new underground extensions and miscellaneous new  
21 underground services? Is it in relation to new customers,  
22 whether it's \$25,000 or not?

08:57

23 A. MR. MASSIE: Yes, everything under the new  
24 extensions, including miscellaneous overhead services and the  
25 underground services, are all new customers and the costs to

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1 getting new customers hooked up to the distribution system.

2 Q. And would that be -- when it's being referred to, is it  
3 one customer, one individual customer, or is it a group of  
4 customers?

5 A. MR. MASSIE: Well, it could be both. To  
6 hook up one individual customer is rolled up under the  
7 miscellaneous, and then a group of customers, depending on  
8 the size of it, will be under the miscellaneous overhead or  
9 underground. And, really, that's just a rollup of all the  
10 smaller projects to hook up one to a few customers at a time.

08:58

11 And what we try to do is break out the other  
12 larger projects that are new customers hooking up that were  
13 over the -- over that limit of \$25,000.

14 Q. All right. Now, correct me if I'm mistaken. There was  
15 an undertaking given to the City of Whitehorse, but I don't  
16 believe it has been responded to in relation to new customers  
17 and this area of miscellaneous overhead services,  
18 underground. Am I correct that we haven't seen it?

19 A. MR. MASSIE: That's correct. We have the  
20 undertaking to identify those customers or roll them up, and  
21 it's not done yet.

08:59

22 Q. All right.

23 A. MR. MASSIE: So we haven't submitted it, no.

24 Q. Well, can I ask you to add to it please?

25 A. MR. MASSIE: Certainly.

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1 Q. And it would be if you can provide a table with the  
2 years 2010, 2011, 2012, 2013, 14 and 15, and the -- and then  
3 the number of customers, new services, miscellaneous overhead  
4 new services, miscellaneous underground new services,  
5 customer contributions in aid of construction. So the  
6 actuals and, of course, the forecast for the test years. And  
7 if you could provide it in a spreadsheet, as well, that show  
8 the calculations and provide any explanation.

9 A. MR. MASSIE: So to be clear, under the  
10 miscellaneous, the number of customers, individual customers  
11 hooked up -- and then I kind of lost it after there. 09:00

12 Q. Okay. So number of customers for new services, then the  
13 miscellaneous overhead new services, then miscellaneous  
14 underground new services, and then, lastly, the customer  
15 contribution in aid of construction for the new services.

16 A. MR. MASSIE: Okay. I think I have that.  
17 Thank you. Yes, I'll do that.

18 Q. Thank you.

19 **UNDERTAKING - TO PROVIDE A SPREADSHEET**  
20 **FOR THE YEARS 2010, 2011, 2012, 2013,**  
21 **2014 AND 2015, SETTING OUT THE**  
22 **CALCULATIONS OF THE ACTUALS FOR THE**  
23 **FOLLOWING: NUMBER OF CUSTOMERS, NEW**  
24 **SERVICES, MISCELLANEOUS OVERHEAD NEW**  
25 **SERVICES, MISCELLANEOUS UNDERGROUND NEW** 09:00

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Questioned by Ms. Bentivegna

1           **SERVICES, CUSTOMER CONTRIBUTIONS IN AID**  
2           **OF CONSTRUCTION, AS WELL AS THE**  
3           **FORECAST FOR THE TEST YEARS, AND**  
4           **PROVIDE ANY EXPLANATION THAT IS**  
5           **NECESSARY**

6    Q.    MS. BENTIVEGNA:                    Now, still continuing with  
7    sales and revenue load forecast.

8                    If I can take you to the -- all right. If I  
9    can take you to the YECL update, pages 3 of 9 to start and  
10   then the application, pages 2-3. So -- because I'm just  
11   trying to understand the numbers.

09:02

12                   So can you explain how the 2013 forecast based  
13   on the aggregate three-year 2010 to 2012 average normalized  
14   UPC, which is on the update page at 3 of 9 on the YECL update  
15   of October 31st, reasonably accounts for a move to use  
16   electricity for space heating in more recent housing  
17   developments which YECL submitted results in strong  
18   electricity sales in 2011-2012. And that's on your  
19   application page 2-3.

20   A.    MR. KOENIG:                    **Can I have you summarize the**  
21   **question?**

09:03

22   Q.    Sure. Maybe I can give you a bit of where it's coming  
23   from.

24                    YECL, in its application, submitted that  
25   there's been a move to use electricity for space heating in

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Questioned by Ms. Bentivegna

1 newer more recent housing developments and, as a result, has  
2 raised its UPC forecast.

3 Now, in the update, YECL modified its forecast  
4 stating that its newly incorporated forecasting methodology  
5 produced a residential sales forecast, that it's clearly too  
6 high. And that's YECL's statement.

7 And then in the updated forecast on an annual  
8 basis, YECL increased slightly the number of customers and  
9 softened the results of the recent move to electric space  
10 heating in new housing developments.

09:04

11 Now, the test -- for the test period, the  
12 distribution, new extension expenditures show a significant  
13 increase over prior years. And for the latter two years of  
14 the test period, YECL is not accounting for UPC related to  
15 electric space heating as it's expected to be offset by a  
16 reduction in consumption due to the demand side management  
17 program.

18 So that's the background for my question. I'm  
19 trying to understand these difference in the -- basically the  
20 average normalized UPC and the -- how it's accounting for the  
21 move to space heating?

09:05

22 **A. MR. KOENIG:** Our update was very simply  
23 done. The update was based on looking at actuals for the  
24 first nine months of 2013 and comparing that to what our  
25 forecast was, and we were finding that we were -- actuals

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Questioned by Ms. Bentivegna

1 were coming in lower than what we had forecast on a  
2 normalized basis by about 3.2 percent.

3 We don't quite have a good understanding  
4 exactly why that has happened, but the fact is that the sales  
5 are coming in lower than what we had originally forecast on a  
6 normalized basis.

7 In addition, on an actuals basis, on a  
8 non-normalized basis, the sales forecast is even coming in  
9 lower because of the warmer than normal weather that Yukon --  
10 our service area is experiencing. The actual sales are  
11 coming in about 5.2 percent lower.

09:06

12 So exact cause as to whether it's related to  
13 space heating, it could be because of the warmer weather,  
14 but, however, when we take out the weather component, we're  
15 still experiencing lower than sales -- lower than forecast  
16 sales.

17 Q. Is YECL expecting that in the test years, as it goes  
18 forward, '14 and '15, this move to space heating will  
19 continue?

20 A. MR. KOENIG: Yes. Based on information that  
21 we have from customers -- we don't have exact detailed  
22 information, but we do know that there is a -- a large number  
23 of our customers are using space -- electric space heating.

09:07

24 A lot of the growth is related to attached  
25 dwellings, meaning like the condo complexes like Mah's Point,

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1 for instance.

2 So use per customer for attached dwellings are  
3 less than for single-family division. So that would help  
4 drive the UPC to a more constant level than we were  
5 proposing. We were proposing that the use per customer would  
6 be equal to 2013 -- that the use per customer for 2014 and  
7 2015 would be equal to the use per customer that we were  
8 forecasting for 2013 due to that reason, and then in addition  
9 to demand side management.

10 MR. GRATTAN: Just to add to that, what  
11 Mr. Koenig said, so when you have an average use per  
12 customer, we're in agreement that there is electrical heating  
13 going on with regards to condo developments, such as Mah's  
14 Point. But even though the condo is electrically heated, the  
15 average use per customer for that particular condo is lower  
16 than use per customer on average for all of our other  
17 customers. So it's not resulting in an overall increase in  
18 the use per customer for Yukon Electrical service territory.  
19 I think Mr. Koenig -- that's the gist of the matter.

09:09

20 Q. When one looks at the UPC for 2012, there was an  
21 increase there. So how do you account for then decreasing  
22 the 2013?

09:09

23 A. MR. KOENIG: Primarily driven by our -- the  
24 first nine months of actual sales that we've experienced.  
25 2013 is coming in lower than 2012, and it's also coming in

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Questioned by Ms. Bentivegna

1 lower than what we had forecast.

2 Q. All right. Now, has YECL -- or does YECL use weighting  
3 factors to account for the electric space heating?

4 A. MR. KOENIG: I'm not too sure what you mean  
5 by "weighting factors," but UPC is basically the average use  
6 per customer for all customers, whether they're electric  
7 space heating or not.

8 A. MR. GRATTAN: And I think, as has been  
9 discussed earlier in this proceeding by Mr. Massie, we do not  
10 have visibility as to what's going on behind the downstream  
11 of the meter with regards to electric space heating, as to  
12 whether somebody's plugged in a space heater in their home or  
13 installed electric baseboard heat.

09:11

14 Q. All right. Thank you. Now, considering this move to  
15 space heating in more recent housing developments, could  
16 you -- or would you have the calculations and related  
17 explanations as to how YECL determined the gigawatt hours  
18 related to space heating that underpin the decision to use  
19 the 2012 UPC only in the original application -- using that  
20 in the original application?

09:12

21 A. MR. GRATTAN: I'll take a shot at that. So  
22 to answer the question, no, we don't have underlying  
23 statistics. All that we had was the best information that we  
24 had available to us at that point in time that was showing an  
25 increase in use per customer on a normalized for 2010, '11

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1 and '12. And if you don't have the detailed data behind the  
2 understanding what would a logical person -- what would a  
3 reasonable person come to a conclusion? Well, you would say:  
4 There seems to be a recent upward swing.

5 We didn't think we had evidence to suggest a  
6 use of a three-year average at that point in time as being  
7 fair and reasonable. We did, however, at that point in time,  
8 increase use per customer slightly between 2012 and 2013 to  
9 reflect the recent trend and then flatten it out thereafter.

10 So up we go, we flatten out, and is there a  
11 probability of us being slightly higher or slightly lower  
12 than that forecast? Of course there is.

09:13

13 2009 September year-to-date actuals come  
14 along, and as we've pointed out in our update, we were  
15 incorrect with regards to our assumption of using 2012 as the  
16 baseline for the purposes of forecasting '13, '14 and '15.  
17 That's the data. That's the best information that we've got  
18 available at this time upon which to predicate or use our  
19 updated forecast that we filed.

20 MS. SEARS: Just for the purposes of  
21 clarity on the record regard, I think Mr. Grattan may be  
22 living in the past a little bit but it was actuals from 2013  
23 I think he meant to reference, not 2009.

09:14

24 A. MR. GRATTAN: Thank you.

25 MS. SEARS: As his fashion sense will

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1 indicate.

2 A. MR. GRATTAN: Thank you again.

3 THE CHAIR: And thank you for that levity.

4 A. MR. GRATTAN: Not.

5 Q. MS. BENTIVEGNA: Now, just when YECL is  
6 referring to recent developments with regard to space heating  
7 and housing developments, would that reference be to housing  
8 developments constructed since 2009 and onward, or are we  
9 talking farther back? I'm just trying to understand what you  
10 meant by recent housing developments.

09:15

11 A. MR. MASSIE: So when we were talking about  
12 the recent development, we really focused on the '9 -- or the  
13 2010, '11 and '12, and that's really where you see the spike  
14 in UPC that was tied -- well, we thought that looking at the  
15 developments, the new extension developments that we saw  
16 going in and the condominiums where we're putting some pretty  
17 big transformers down in the downtown core, because they were  
18 all electric heat, that's what it was tied to in the recent  
19 historicals.

20 Q. Thank you. Now, when did YECL move to weather  
21 normalized load forecasts, and if you can explain the reason  
22 for it?

09:16

23 A. MR. KOENIG: Well, YECL has used a  
24 normalized forecast at least since the last GRA, which was in  
25 the year 2008 and 2009 GRA. Prior to that, the last GRA I'm

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 not familiar with what forecasting process was used. But the  
2 normalization is a standard that's used by Yukon Electrical  
3 as well as for Northland Utilities and ATCO Electric.

4 Yeah, as well as in our -- in our response to  
5 Board Direction No. 2 from Decision 2009-2, we summarized  
6 which utilities in North America are using weather  
7 normalization, and it can be found that a majority of  
8 utilities use weather normalization. So that basically takes  
9 out the effects of temperature on usage of a customer

10 A. MR. GRATTAN: And as Mr. Koenig has pointed  
11 out, the forecast that we've included in our update for 2013  
12 is based on a three-year weather normalized average use per  
13 customer. So sometimes you win, sometimes you lose with  
14 regards to weather being warmer or colder than normal.

09:18

15 In this particular year, because it has been,  
16 I'm told, such a beautiful year in the Yukon, it will be one  
17 of those situations where our actual sales will come in lower  
18 than what we're forecasting as part of this application.

19 Q. Is the three-year standard for other utilities, as far  
20 as you know, or is it a longer period? Is it a five-year  
21 average?

09:19

22 A. MR. KOENIG: Repeat the question? I'm  
23 sorry.

24 Q. Sorry?

25 A. MR. KOENIG: Repeat the question, please.

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 Q. Oh, yes. Is the three-year normalized average, is that  
2 a standard for other utilities, or are they using a  
3 five-year -- I'm just trying to understand why the three-year  
4 was chosen average to weather normalized.

5 A. MR. KOENIG: Just to be clear, the three  
6 years refers to the three-year average use per customer.

7 Q. All right.

8 A. MR. KOENIG: Normalization is done over a  
9 longer period of time. We developed a regression formula  
10 based on a 15-year regression, and of -- it's a regression of 09:20  
11 use per customer to heating degree days, HDD, over 15 years  
12 and developed a coefficient that's applied to the difference  
13 in the average 20-year HDD to the actual HD that's  
14 experienced to derive the normalized use per customer.

15 Q. All right.

16 A. MR. GRATTAN: And just to add to what  
17 Mr. Koenig said there. For purposes of Yukon Electrical's  
18 most recent general rate application in 2008-2009, we used a  
19 three-year normalized use per customer, average of a  
20 three-year normalized average use per customer as part of 09:21  
21 that application. And for purposes of our original  
22 application for the '13, '14, '15 period, we used a  
23 three-year average normalized use per customer for all  
24 communities other than the Whitehorse and area, the update,  
25 except for the Whitehorse area which we went with the single

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 year average use per customer, as the benchmark. Now we  
2 have, based on the latest available information, gone back to  
3 the forecasting methodology that was used as part of the last  
4 general rate application which, as I mentioned, is a  
5 three-year average normalized use per customer.

6 Mr. Koenig, have I got that right?

7 A. MR. KOENIG: Yes, you do.

8 Q. Thank you. Now, if we can move on to the Watson Lake  
9 bi-fuel project, and I realize there's been a number of  
10 questions already during the hearing, but I have a few more.

09:22

11 So in YUB-YECL 42(e), YECL stated that:  
12 (as read)

13 "A detailed list of installation  
14 locations and end user classification  
15 has not been supplied by the  
16 manufacturer as of the date of this  
17 submission."

18 And my question to you is: Is there now available the  
19 following of a standby unit -- a standby -- or is the unit  
20 standby or prime, if you can confirm, and I believe it's  
21 standby? The unit that you're considering -- or the unit  
22 that's at the Watson Lake that's being considered for the  
23 bi-fuel project.

09:23

24 A. MR. REDDEN: Sorry, just to clarify that,  
25 Ms. Bentivegna. Are you asking if the first unit we're

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 looking at for bi-fuel operation is considered standby?

2 Q. Yes. Or prime.

3 A. MR. REDDEN: The number of units, six units  
4 at Watson Lake have various dispatch regimes, but the unit  
5 that we're selecting is one that would be utilized on a more  
6 regular basis for purposes of the first phase of the project  
7 so we get a good range of operating conditions and operating  
8 hours to understand its behaviour.

9 Q. All right.

10 A. MR. MASSIE: Sorry. And just to add,  
11 there's no standby units in Watson. It's an operating plant.  
12 They're all -- they're all prime units.

09:24

13 Q. All right. Thank you.

14 Now, what is the forecast data, if it were  
15 approved, for the unit conversion?

16 A. MR. REDDEN: So with the initial application  
17 that we had at the time we prepared the filing, it was  
18 expected to be in operation later this -- the fall of 2013.  
19 So we have since revised that scheduling so that we're not  
20 going into construction during winter conditions. There's  
21 still some work to complete over the next few weeks on  
22 permitting, and we will then start construction next spring.

09:25

23 So typically those timeframes, end of May,  
24 beginning of June, subject to the frost out of the ground and  
25 able to start the site civil works with an anticipated

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 in-service date September 1 of 2014.

2 Q. Now, if I can just go back. Can -- I'm relating it back  
3 to the response in 42(e), YUB 42(e). Can YECL provide a  
4 detailed list of installation locations and end user  
5 classification for the proposed LNG project? I'm relating it  
6 back to the -- in response to the question from YUB. It said  
7 that a detailed list of installation locations and end user  
8 classifications has not been supplied by the manufacturer as  
9 of the date of this submission.

10 So now -- sorry to have confused you. Does  
11 YEC have such a list? 09:27

12 A. MR. REDDEN: Yes, and that list is referring  
13 to the bi-fuel modification kit, then, that's used to  
14 retrofit the existing equipment. So we have since received a  
15 list of their international projects including what they've  
16 done in North America, so we can provide you with that list.

17 Q. That would be very useful.

18 And does that list detail -- this is what I  
19 had started to go through -- the type of unit, the date it  
20 was converted, the make and model number, like, basically  
21 information about, where, you know, the unit that the kit has  
22 been used on and the number of hours and those type of  
23 things, or did you just get a list? 09:27

24 A. MR. REDDEN: It's got a certain level of  
25 granularity to show what countries they're in, the numbers of

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 units, if they're on prime movers, which is what would  
2 consider applicable, then. For their category, they would  
3 say prime movers are operating at least 12 hours a day. So  
4 many of those are in.

5 Power generation, installations. Some of the  
6 other ones are on, you know, oil and gas-type of  
7 installations. So it provides some of that, but it doesn't  
8 give necessarily the specifics on the particular unit  
9 manufacture and models that they went on to, but it does give  
10 visibility into the wide-spread use and by year of this  
11 equipment but not details on the operating hours. But it's a  
12 significant experience list.

09:28

13 Q. All right. If you can please undertake to provide the  
14 information that you have, the list and the information that  
15 goes along with that.

16 A. MR. REDDEN: I certainly will do that.

17 Q. Thank you.

18 UNDERTAKING - WITH RESPECT TO THE  
19 RESPONSE IN YUB 42(E), TO PROVIDE A  
20 DETAILED LIST OF INSTALLATION LOCATIONS  
21 AND END USER CLASSIFICATION FOR THE  
22 PROPOSED LNG PROJECT.

09:26

23 Q. MS. BENTIVEGNA: Now, if the bi-fuel project at  
24 Watson Lake is approved, what type of metrics or parameters  
25 is YECL going to use in making a decision whether it will

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 convert the other units at Watson Lake and move forward with  
2 this type of bi-fuel project for the other units?

3 A. MR. REDDEN: Some of the first parameters,  
4 of course, we'll be looking for the safe and reliable  
5 operation on the unit, that it's meeting all the operational  
6 requirements for fitting in with the Watson Lake facility as  
7 part of this unit's dispatch requirement; that we can  
8 establish a reliable supply chain of LNG to the facility,  
9 enough to meet the volume requirements for conversion of the  
10 remaining units when we would be taking on a larger volume of  
11 LNG. 09:30

12 And as we've discussed, if we don't get to the  
13 natural gas, we'll go back to diesel operation, but we wanted  
14 to get assurance that that is a stable supply for us.

15 We want to look at the operational effects on  
16 the unit. We do inspections, such as baroscopic inspections,  
17 and take a look at the condition of the equipment beforehand,  
18 then operate it in bi-fuel mode of operation, take a look at  
19 it after, see that we're not experiencing anything  
20 unexpected; that we are seamlessly able to operate from  
21 diesel to bi-fuel mode, back and forth; that the power  
22 outputs are as anticipated and unit performance metrics  
23 related to operation of the unit. 09:30

24 And that's what we're planning on doing for  
25 that first unit over a period of one year.

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 Q. Thank you. Now, is YECL anticipating additional O&M  
2 costs regarding the bi-fuel unit capabilities?

3 A. MR. REDDEN: We're not anticipating  
4 additional cost with respect to overhauling of the unit, for  
5 example. There is additional equipment on site with respect  
6 to storage and vapourization, and those costs are contained  
7 within the LNG facility pricing.

8 Q. All right. Thank you.

9 Now, earlier this week, when speaking about  
10 the contract, and it was in relation to UCG-YECL 21(g)  
11 Attachment 15, the contract between YECL and ATCO Gas, it  
12 spoke to the termination of the agreement, that either party  
13 can terminate the agreement by providing written notice of at  
14 least 12 months in advance of the termination date. And the  
15 cost to remove the ATCO Gas-owned equipment from Yukon  
16 Electrical's sight at Watson Lake and restore the site to an  
17 unencumbered state will be borne by the terminating party.

09:32

18 Now, if ATCO Gas terminated the agreement,  
19 would ATCO Gas be -- sorry, would YECL be responsible for the  
20 12 months of costs under the lease following the notification  
21 received from ATCO Gas? Am I reading the contract correctly?

09:33

22 So if ATCO Gas were to terminate the  
23 agreement, then it would have to provide 12 months' notice to  
24 YECL and would have to bear the costs of removing the  
25 equipment?

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 A. MR. REDDEN: That's correct. ATCO Gas is  
2 providing the equipment, including the civil work including  
3 foundations and containment for the LNG particular equipment.  
4 So they would be removing all of that.

5 The 12 months' notice would allow Yukon  
6 Electrical to make other arrangements then for securing  
7 natural gas, and depending on your scenario, if there's still  
8 flowing gas through the equipment, then we would still be  
9 under the lease arrangement for that time period until we  
10 make other arrangements.

09:34

11 Q. All right. Thank you. Now I'm moving on to the  
12 automatic meter, the AMR meters. Now, in business case --  
13 this is Business Case 27 on page 3 of 7, it states that:  
14 (as read)

15 "In recent discussions with the City of  
16 Whitehorse, Yukon Electrical has been  
17 advised that the City's investigating  
18 the utilization of AMR technology to  
19 obtain water meter readings. The City  
20 has commissioned a study to be  
21 completed regarding the feasibility of  
22 AMR for water meters. This study is  
23 forecast to be completed in late fall  
24 of 2013 at which time it will be  
25 presented to The City Council for

09:35

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 consideration.

2 While Yukon Electrical considers the  
3 conversion to AMR to be viable as a  
4 beneficial stand-alone project, there  
5 may be potential benefit to the project  
6 in terms of costs if the City chooses  
7 to partner with Yukon Electrical on the  
8 project."

9 Now, with respect to this project, if the decision is made to  
10 partner with the City of Whitehorse, are there savings to  
11 electric utility customers?

09:35

12 **A. MR. MASSIE:** So if the -- if the City  
13 chooses to partner in for the water meters, there would be an  
14 incremental saving on labour installation. So they would  
15 be -- there's a second port that is needed to communicate  
16 with water meters on a meter, so that incremental cost would  
17 be theirs to hook into the their water metre. That would be  
18 fully theirs, but the labour to install that meter, yeah,  
19 there would be a savings in there as both of us would need to  
20 have that meter installed.

09:36

21 Q. So am I understanding you correctly, Mr. Massie, that  
22 basically there would be some type of arrangement where they  
23 would pay for part of the cost for installing the meter, or  
24 is it just for their port to read water meters?

25 **A. MR. MASSIE:** Sorry, yes. The capital cost

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 for the port would be theirs. That would be wholly theirs  
2 and of no use to ratepayers. The labour to install it, even  
3 though we've been in discussions with them, there's no  
4 agreement, but that would be -- our standpoint on it is that  
5 to install this meter we both need, it so there would be some  
6 sharing of costs on some -- on any of the meters that would  
7 be water meter compatible.

8 Q. All right. Thank you.

9 A. MR. GRATTAN: Just to add to what Mr. Massie  
10 said there, if you go to the detailed model that was included  
11 in the business case, so that would be Attachment 1, page 2  
12 of 11.

09:37

13 Q. Mm-hm.

14 A. MR. GRATTAN: And I'll let you dial that up.

15 Q. All right. Please go ahead.

16 A. MR. GRATTAN: And in the modelling, what  
17 we've done is installation of commercial meters we've  
18 forecasted a cost of \$205,000 -- sorry, \$205 per meter, for a  
19 total forecasted cost in -- for 2015 of \$323,695. So there  
20 would be a potential sharing, should the City of Whitehorse  
21 choose to partner a sharing of that \$300,000 that we have  
22 forecasted.

09:38

23 So it's a relatively small portion of the  
24 project, and that was the point that I'm trying to get  
25 across.

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 Q. All right. Would there be any -- so would there be --  
2 if there was a sharing, would there be meter reading costs  
3 going forward in addition? So would there be additional  
4 meter reading costs?

5 A. MR. MASSIE: So --

6 Q. Let me -- sorry, go ahead.

7 A. MR. MASSIE: So just if there -- ongoing  
8 meter reading costs for us and for the City?

9 Q. Yes.

10 A. MR. MASSIE: And further down below in that  
11 economic model, we have the cost -- and these are just our,  
12 Yukon Electrical's, cost for the ongoing meter reads. As we  
13 really haven't figured -- we haven't concluded anything on  
14 water meters, but if there would be separate reads, just for  
15 the water meters, those would be theirs for sure.

09:39

16 Q. All right. So would it be then YECL that would be  
17 reading the City water meter, or would that be going into  
18 their system?

19 A. MR. MASSIE: So from my understanding of it,  
20 the meter reads are automatically done obviously on a meter  
21 reading, and it heads down to the server in Alberta to be  
22 mated to our billing system to produce our bills. So their  
23 reads would go down there, and however they want that  
24 information compiled and sent back to them.

09:40

25 Q. All right. So then would there be a revenue offset to

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 utility customers if that were to come to pass, that you  
2 would partner with the City?

3 A. MR. MASSIE: So really, just -- I think it  
4 would only be the installation cost. The ongoing reading and  
5 ongoing operating of a separate water meter system would be  
6 the City's. So all those costs, specifically for water  
7 meters, would be theirs. It wouldn't offset ours. We would  
8 still have those same costs we have in our model to read our  
9 meters for our customers.

10 Q. All right. Thank you. So then are YECL's meter-reading  
11 costs fixed going forward once you -- if AMR is approved?

09:41

12 A. MR. MASSIE: This is the price per read and  
13 those ongoing costs? Is that what we're...?

14 Q. Yes.

15 A. MR. MASSIE: So the ongoing meter-reading  
16 costs for AMR that we've put in the model are the costs that  
17 are needed now to read meters, and being in an agreement --  
18 since there is no agreement in place now, what I can say is  
19 that it's -- we would be on for our -- to ensure that we're  
20 paying fair market value going forward. So it would be  
21 reviewed periodically, just like other inter-affiliate  
22 agreements.

09:43

23 A. MR. GRATTAN: Sorry, I may have misguided  
24 Mr. Massie on that. We would not necessarily be paying fair  
25 market value. It would be at cost. So whatever ATCO

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 Electric's costs are per meter read -- that will potentially  
2 fluctuate a cent here up, a cent down, however it turns out  
3 to be -- we will be allocated our fair share of that cost.

4 So to answer your question, I don't think it's  
5 fixed forever and ever. It will be periodically reviewed to  
6 ensure that if the costs in Alberta go up on a cent or two or  
7 go down a cent or two due to volume changes, and yes, if the  
8 City of Whitehorse -- I think the point in all of this is if  
9 it the City of Whitehorse was to come along with us and the  
10 additional volume -- if you get a bunch of fixed costs and  
11 you can divide that fixed cost by volume, you might see a  
12 decrease in meter -- read per meter.

09:44

13 But to be fair, I don't think it's going to  
14 impact the overall economics because we're talking about  
15 hundreds of thousands of meters in Alberta that are also  
16 factored into this calculation.

17 Q. And, Mr. Grattan, can you give us any insight into how  
18 the ATCO Electric cost is determined for the cost of the  
19 meter reads?

20 A. MR. GRATTAN: I would not be able to do that.

09:45

21 Q. All right. Thank you. And for the AMR technology?

22 A. MR. GRATTAN: Just one moment, please. No  
23 change from my previous answer.

24 Q. All right. Could you then, please, undertake to find  
25 out how those meter read costs are determined, and then -- so

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 that then you're allocated a share, and what share you would  
2 be allocated?

3 A. MR. GRATTAN: I can do that, yes.

4 Q. Thank you.

5 UNDERTAKING - TO ADVISE HOW METER  
6 READING COSTS ARE DETERMINED AND WHAT  
7 SHARE ATCO ELECTRIC WOULD BE ALLOCATED

8 Q. MS. BENTIVEGNA: Now, are there also any  
9 additional substation costs in relation to implementation of  
10 AMR?

09:46

11 A. MR. MASSIE: No, there's no -- no other  
12 costs than what we've put in the economic model.

13 Q. All right. Thank you. One last question on if you were  
14 to decide -- or if the City were decide to partner with you  
15 if the Board were to approve AMR, would that mean any type of  
16 delay in the project?

17 A. MR. MASSIE: Sorry, if AMR is approved  
18 and --

19 Q. And the City decides to partner, would that delay the  
20 timeline of the implementation of AMR?

09:47

21 A. MR. MASSIE: No, I don't believe so.  
22 We're -- we're definitely in discussions with them. If they  
23 come along, it's a fairly simple process, really, if they do  
24 come along. And of course, if they don't, we're again  
25 putting this project forward based on the merits for the

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 ratepayers, and the benefits to the ratepayers.

2 So I guess in answer to your question, no,  
3 there would be no significant delay.

4 Q. All right. Thank you.

5 Now, if the unamortized value of conventional  
6 mechanical meters -- is the unamortized value of the  
7 conventional mechanical meters that are prematurely replaced  
8 by AMR meters credited to the AMR project, and is this  
9 contained in the business analysis?

10 A. MR. GRATTAN: I'll take a -- I'll take a  
11 crack at that.

09:48

12 The business case is predicated on going  
13 forward, what is the most economic solution to go with?

14 As Mr. Massie has pointed out, we are having  
15 to change out the vast majority of our remaining mechanical  
16 meters regardless of whether we do or do not have approval  
17 from the Board to go forward with AMR.

18 So whatever the remaining unamortized balance  
19 of the mechanical meters is, that will go into our  
20 amortization -- the differences account as part of  
21 depreciation going forward.

09:49

22 Q. So the answer is yes?

23 A. MR. GRATTAN: No, sorry, the answer is --

24 Q. No?

25 A. MR. GRATTAN: -- the economic model does not

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 factor in that.

2 Q. All right.

3 A. MR. GRATTAN: The -- it's based on a  
4 prospective basis, what is the best solution going forward.  
5 And as I just explained whatever remaining unamortized  
6 balance remains for mechanical meters will be dealt with as  
7 normal with any other utility asset.

8 Q. All right. All right.

9 Now, this question goes to the 2014 capital  
10 additions, the line item that refers to replacing ABB-5HK  
11 breakers. 09:50

12 So in that area, then, I can ask you these  
13 questions.

14 A. MR. MASSIE: Just one moment. I'm pulling  
15 that up.

16 Q. Okay.

17 A. MR. MASSIE: All right. I see the Watson  
18 Lake replace ABB, but I know -- I know there's multiple  
19 places. Yeah, please proceed.

20 Q. Well, in YUB-YECL 76, it suggests that 8 ABB-5-HK  
21 breakers are to be replaced during 2014; however, in 2015  
22 when we look at generation capital expenditures it calls for  
23 replacement of ABB-5-H breakers in Watson Lake and Ross  
24 River. So I'm just wondering, is the YUB-YECL 76 correct  
25 when it suggests that eight of these breakers would be 09:51

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 replaced during 2014? Are the 2015, the Watson Lake and Ross  
2 River, are those in addition to those eight?

3 A. MR. MASSIE: No, they shouldn't be in  
4 addition, but let me confirm.

5 Q. Basically will they all be replaced or is the forecast  
6 to replace them in 2014?

7 A. MR. MASSIE: They're all forecast to be  
8 replaced. We have the same concern with all the breakers.

9 I see that just looking at YUB 76, the Watson  
10 Lake had the five, and then the others are in the other  
11 communities.

09:52

12 Q. All right. Thank you.

13 Now, is the replacement total cost of 225,000  
14 as shown on page 9-55 of the application?

15 A. MR. MASSIE: Sorry, I'm at 9-55.

16 Q. Right. And is it correct that the replacement cost, the  
17 total replacement cost is 225,000 as indicated on this page?  
18 I'm just trying to confirm that the -- whether that's  
19 accurate.

20 A. MR. MASSIE: Yes, the -- so the 180,000 is  
21 for the five in Watson Lake, and the Ross River replace  
22 ABB-5-HK breakers is 45,000 for a total of 225.

09:53

23 Q. Okay. All right. Now, can YECL provide the  
24 manufacturer's specification as to what the ABB-5-HK breakers  
25 are rated for in terms of lifetime operation and the actual

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by Ms. Bentivegna

1 number of breaker operations for each of the breakers to be  
2 replaced?

3 A. MR. MASSIE: Yeah, we'll have to undertake  
4 to provide that, the manufacturer information.

5 Q. All right. And that would be the rated -- what it's  
6 rated for in terms of the lifetime operations and the actual  
7 number of breaker operations for each of the breakers to be  
8 replaced.

9 UNDERTAKING - TO PROVIDE THE  
10 MANUFACTURER'S SPECIFICATION AS TO WHAT  
11 THE ABB-5HK BREAKERS ARE RATED FOR IN  
12 TERMS OF LIFETIME OPERATION AND THE  
13 ACTUAL NUMBER OF BREAKER OPERATIONS FOR  
14 EACH OF THE BREAKERS TO BE REPLACED

09:53

15 Q. And, then, has the manufacturer of these breakers issued  
16 bulletins to users of the breakers warning of the dangers  
17 which may occur because of possible cracking and flaking of  
18 the asbestos-lined arc extinguishing shoots during the  
19 operation of the breaker?

20 A. MR. MASSIE: I will have to add that to the  
21 undertaking.

09:55

22 Q. All right. And if there are such bulletins, if you can  
23 provide a copy, please.

24 A. MR. MASSIE: Yes

25 UNDERTAKING - TO ADVISE IF THE

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by The Chair

1                   MANUFACTURER OF THE ABB-5HK BREAKERS  
2                   HAS ISSUED BULLETINS TO USERS OF THE  
3                   BREAKERS WARNING OF THE DANGERS WHICH  
4                   MAY OCCUR BECAUSE OF POSSIBLE CRACKING  
5                   AND FLAKING OF THE ASBESTOS-LINED ARC  
6                   EXTINGUISHING SHOOTS DURING THE  
7                   OPERATION OF THE BREAKER; AND IF SO, TO  
8                   PROVIDE A COPY OF SUCH BULLETINS

9    Q.    MS. BENTIVEGNA:                   And those are my questions,  
10   panel. Thank you.

09:55

11   THE CHAIR:                               Thank you very much,  
12   Ms. Bentivegna.

13                   Are there any Board questions? No?

14                   Actually, I'd like to just ask a clarification  
15   on one and that's to do with the AMR.

16   THE CHAIR QUESTIONS THE PANEL:

17   Q.    Do you have a date as to when you might expect a  
18   response from the City of Whitehorse as to whether they will  
19   be in this project or not be in this project?

20   A.    MR. MASSIE:                       Well, we've had ongoing  
21   discussions with them, and I would imagine by the end of this  
22   year, we will have the go/no-go from them, really, so we  
23   can -- we're going to have to proceed again on the benefits  
24   that we see for the ratepayers, and we'll have to proceed  
25   irregardless here in '14.

09:55

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by The Chair

1 Q. So are you -- I take it what you said is that your  
2 drop-dead date is the end of December?

3 A. MR. MASSIE: We wouldn't give them a  
4 drop-dead date, but we definitely --

5 Q. No, but do you have a drop-dead date that this project  
6 -- you need to move on, even without City participation?

7 A. MR. MASSIE: Well, we just want to keep on  
8 with what we have forecasted for 2014, first stage, really,  
9 to start implementing AMR. And that -- really, I guess, it's  
10 not hard and fast, but we really want to proceed as we have  
11 forecasted the project.

09:56

12 Q. Okay.

13 A. MR. GRATTAN: Just to add to that. Obviously  
14 we're not going to move forward with regards to the AMR  
15 project unless we -- until we get -- if we get, until we get  
16 Board approval --

17 Q. Obviously.

18 A. MR. GRATTAN: -- on the project. So that  
19 decision will come out hopefully sooner rather than later in  
20 2014. And I think once that decision comes out, then that  
21 will be the drop-dead point, assuming if -- assuming the  
22 Board does approve the AMR project that -- whether the City  
23 is or is not in with us going forward.

09:57

24 Q. Okay. Thank you.

25 THE CHAIR: Ms. Sears, do you have any

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by The Chair

1 re-directs?

2 MS. SEARS: No, I don't, sir.

3 THE CHAIR: So at this stage, it's probably  
4 a good time to take a 15-minute break since we started.

5 I want to, first of all, thank the panel for  
6 your participation. I believe Mr. Redden will return. So I  
7 would dismiss the rest of the panel and when we come back  
8 we'll start this whole process again.

9 MS. SEARS: Thank you, sir.

10 THE CHAIR: Sort of like Groundhog Day. 09:58

11 MS. SEARS: But each day is more  
12 interesting.

13 THE CHAIR: It certainly is.

14 (PANEL STANDS DOWN)

15 (ADJOURNMENT)

16 THE CHAIR: Please be seated.

17 So just before we begin, and before I ask  
18 Ms. Sears if there's any preliminary matters, CBC has asked  
19 me if they can come and just take some photo shots of the  
20 room. I've agreed to that subject to there not being any  
21 objections from the applicant or the interveners, and all  
22 they could do is take three minutes. That's all I'm going to  
23 give them, just to take pictures of our happy faces and give  
24 you time to cover up any materials that you -- 10:14

25 MS. SEARS: I wish you had given us a bit

J. MASSIE, J. GRATTAN, D. REDDEN, K. KOENIG

Questioned by The Chair

1 more notice. I...

2 MS. KELLGREN: And for the record I wouldn't  
3 have come up yet.

4 THE CHAIR: But if there's no objections to  
5 doing that, and I would ask you not to come up within -- you  
6 know, block this table. So you have your three minutes time  
7 now shoot away. I'd like to make sure everybody is looking  
8 extremely happy though -- industrious but happy.

9 MS. SEARS: Figure skating smiles.

10 THE CHAIR: So we can get underway now with 10:17  
11 that little bit of excitement in our lives.

12 So Ms. Sears, do you have any preliminary  
13 matters before we go to the next panel?

14 MS. SEARS: No, sir, we don't have any  
15 preliminary matters, so I'll just launch in.

16 We certainly heard your Groundhog Day comment,  
17 and we've taken it to heart, and we've tried to spice things  
18 up a little with our next panel.

19 We're very pleased, sir. To provide the  
20 demand side management panel, which is comprised of 10:17  
21 representatives from both Yukon Electrical and the Yukon  
22 Energy Corporation as well as the DSM subject matter experts  
23 ICF Marbek, who worked with the utilities to prepare the DSM  
24 plan that's been filed as part of the Yukon Electrical's  
25 application in this matter.

## YECL/YEC DSM PANEL

1                   Seated to my left, of course, is Mr. Landry,  
2 who is counsel for the Yukon Energy Corporation, and he will  
3 be up here with me to interject as necessary.

4                   At this point, I'll introduce the panel to  
5 you. So seated closest to you is Ms. Judy Simon, who is  
6 principal at ICF Marbek. To her right is Mr. Paul Robillard,  
7 director at ICF Marbek.

8                   We have Ms. Ms. Laura Carlson, the senior  
9 corporate communications advisor from Yukon Electrical;  
10 Mr. Dwight Redden, who you know already, the general manager  
11 at Yukon Electrical; Mr. David Morrison, president and CEO of  
12 Yukon Energy Corporation; and finally, to his right,  
13 Ms. Stephanie Whitehead, who is the energy conservation  
14 co-ordinator at the Yukon Energy Corporation.

15                   Sir the curriculum vitae for each of these  
16 witnesses was prefiled as part of Exhibit B-9, and while I  
17 will ask Ms. Simon and Mr. Robillard to speak briefly to  
18 their qualifications, before the panels get underway, at this  
19 point if the witnesses could please be sworn or affirmed.

20 THE CHAIR:                   Yes. I'll ask the court  
21 reporter to do that. Thank you.

22

23 J. SIMON, P. ROBILLARD, L. CARLSON, D. REDDEN, D. MORRISON,  
24 S. WHITEHEAD (For YECL/YEC), previously/sworn/affirmed

25 MS. SEARS:                   Given that the panel is a joint

## YECL/YEC DSM PANEL

1 utility panel, we have witnesses from both utilities. Of  
2 course, Ms. Carlson and Mr. Redden will be giving evidence  
3 binding on Yukon Electrical, while Mr. Morrison and  
4 Ms. Whitehead will be giving evidence binding on the Yukon  
5 Energy Corporation. And, of course, though it is only Yukon  
6 Electrical's forecast costs that are before the Board in this  
7 particular proceeding.

8 And at this point, I'll turn it over to  
9 Mr. Landry to make some comments.

10 MR. LANDRY: Thank you, Mr. Chair. This 10:21  
11 obviously is a bit of a unique in the sense of having two  
12 companies have witnesses on a joint page. It arises  
13 obviously from a Board direction that was made in terms of  
14 the DSM issue and that the companies were directed to come  
15 back together jointly.

16 They created a joint plan. You'll hear a lot  
17 about that. They cooperated together to do that, and really  
18 the only reason I'm here is because obviously the YEC  
19 witnesses are here to answer questions about the DSM issue  
20 but only the DSM issue. They're not here to give evidence on 10:21  
21 obviously any other matter in relation to this application  
22 or, for that matter in relation to issues regarding DSM which  
23 is, I suspect you would agree, appropriate.

24 So that's the main reason. It's really a YECL  
25 Limited panel so for the most part, Ms. Sears will be

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 involved, but that's hence the reason why I'm here, just for  
2 that purpose.

3 THE CHAIR: Thank you, planned.

4 MS. SEARS: He's also here to keep me in  
5 line, sir.

6 THE CHAIR: Yes. And I assume he's just  
7 another pretty face, too, for the camera.

8 MS. SEARS: Well, I suppose that's a matter  
9 of debate.

10 MR. LANDRY: I would agree with some of that 10:22  
11 comment.

12 MS. SEARS: Okay.

13 THE CHAIR: Sorry, go ahead.

14 MS. SEARS: Sorry I was going to go through  
15 some brief direct questions before I turn the panel over to  
16 cross-examination if that's okay.

17 THE CHAIR: Yes, please.

18 MS. SEARS: Yes? Okay.

19 **MS. SEARS EXAMINES THE PANEL:**

20 Q. So Ms. Simon, first of all, given that this is your 10:22  
21 first appearance before the Yukon Utilities Board, can I ask  
22 you, please, to just provide a brief summary of your  
23 qualifications and experience in respect of the area of  
24 demand side management?

25 A. MS. SIMON: Sure. I have over 30 years of

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 experience in energy efficiency. This has included the  
2 design and delivery of DSM programs as well as developing and  
3 reviewing DSM plans.

4 I was also an Ontario Energy Board member part  
5 time for ten years and have testified as an expert witness in  
6 a few regulatory proceedings before different boards.

7 Q. Thank you, Ms. Simon. I'd ask the same of you,  
8 Mr. Robillard. You, too, it's your first time before this  
9 Board. Could you, please, provide us with a brief summary of  
10 your qualifications and experience with respect with DSM?

10:23

11 A. MR. ROBILLARD: Sure, thank you. Yes, I also  
12 have over 30 years of experience in this area, which  
13 eventually just begins to sound like I'm saying I'm old. But  
14 I've been doing these kinds of studies for the majority of  
15 that 30 years. These market potential studies, etcetera,  
16 have been a core piece of the work that I've done in that  
17 period. I've probably completed 25 or 30 similar studies in  
18 this area.

19 I have worked for virtually every Canadian  
20 electric and natural gas utility over that period, and on a  
21 recurring basis because these kinds of things studies and  
22 planning processes tend to be on a five-year cycle.

10:24

23 I've also done similar work on behalf of  
24 utility clients in southeast Asia and the Caribbean.

25 Q. And, Mr. Robillard, ICF Marbek prepared a number of

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 reports that have been filed by Yukon Electrical in this  
2 proceeding; in particular, the Yukon five-year demand side  
3 management plan, which has been filed and marked as Exhibit  
4 B-1, which includes the conservation potential review report  
5 as well as the DSM program portfolio.

6 Also filed has been the DSM program  
7 implementation plan which was filed as part of Yukon  
8 Electrical's response to information request CW-YECL 27(d),  
9 and is part of Exhibit B-5, sir; and the DSM program  
10 evaluation measurement and verification plan, which was filed 10:25  
11 as part of Yukon Electrical's response to YUB-YECL 26(a),  
12 again, part of Exhibit B-5.

13 Now, Mr. Robillard, were those reports  
14 prepared by you or under your direction?

15 **A. MR. ROBILLARD: All of those reports were**  
16 **prepared under my direction, yes.**

17 Q. Thank you. And are there any corrections to that  
18 evidence that you'd like to make at this time?

19 **A. MR. ROBILLARD: No.**

20 Q. And, sir, are these reports accurate to the best of your 10:25  
21 knowledge and belief?

22 **A. MR. ROBILLARD: Absolutely.**

23 Q. And do you adopt these materials as your evidence in  
24 these proceedings?

25 **A. MR. ROBILLARD: Yes, I do.**

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 Q. Thank you, Mr. Robillard.

2 MS. SEARS: Mr. Chairman, just before I  
3 turn the panel over for cross-examination, I do have a couple  
4 more direct examination questions to give us a bit of context  
5 here.

6 Q. My first question will be for Ms. Carlson. Can I please  
7 ask you to summarize the steps that Yukon Electrical has  
8 taken since the Board directed the utilities to work jointly  
9 to put together a demand side management plan?

10 A. MS. CARLSON: Yes. Since receiving the Board 10:26  
11 direction, Yukon Electrical and Yukon Energy have been  
12 working together for over two and a half years to develop the  
13 comprehensive five-year demand side management plan that we  
14 filed with this application.

15 After initially consulting local stakeholders,  
16 Yukon Electrical, Yukon Energy and Energy, Mines and  
17 Resources division of the Yukon government formed a joint  
18 committee to complete a conservation potential review.

19 This study was required as a necessary  
20 reference point to determine the potential for electricity 10:26  
21 demand side management in the Yukon.

22 The conservation potential review outlined  
23 that the growth in the residential and commercial sector  
24 could increase by 65 percent over the next 20 years and that  
25 up to 35 percent of the new growth could be met through

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 electricity conservation.

2                   After the completion of the conversation  
3 potential review, the utilities developed the program  
4 portfolio.

5                   The DSM program portfolio is a multistep  
6 process designed to gather and analyze the data necessary to  
7 determine the optimum program structure and cost-effective  
8 design for the Yukon.

9                   The program portfolio identified two broad  
10 solution-based programs: A general service program and a  
11 residential program. The objective is to offer customers a  
12 broad suite of options to meet electricity management needs  
13 rather than forcing customers to sort through a variety of  
14 individual programs.

10:27

15                   From the program portfolio, a program  
16 implementation plan and an evaluation measurement and  
17 verification plan were completed. The program implementation  
18 plan defines the operational and transactional infrastructure  
19 that is required to operate the DSM programs. It includes  
20 performance indicators, the targets, the deliverables, the  
21 human resources, the roles and responsibilities, and the  
22 budgets required to operate the program over the five years.

10:28

23                   As the final step in planning for DSM, the  
24 utilities developed an evaluation measurement and  
25 verification or EM&V plan.

1           EM&V is the process of evaluating the impact  
2 from electricity efficiency programs or projects. It also  
3 assesses the cost effectiveness of programs and uses  
4 stakeholder feedback to improve current and future program  
5 offerings.

6           The EM&V plan will help inform a framework  
7 that will protect the interest of the ratepayers and maximize  
8 the value of DSM for all stakeholders while considering the  
9 context of the Yukon market.

10           The utilities are currently continuing their  
11 joint effort to prepare for the launch of DSM programs to be  
12 introduced in the second quarter of 2014 upon the approval of  
13 the program by the Yukon Utilities Board.

10:28

14 Q. Thank you, Ms. Carlson.

15           And can you explain, will the utilities be  
16 reporting to the Board on the status of the DSM plan?

17 A. MS. CARLSON: Consistent with other annual  
18 quarterly and monthly corporate filings made by the  
19 utilities, the DSM annual reports will be filed with the  
20 Board for information purposes.

10:29

21           The reports will also be available to all  
22 stakeholders as they will be posted to the utilities'  
23 websites. This kind of informational reporting is similar to  
24 reports filed by other Canadian utilities undertaking DSM  
25 programs such as B.C. Hydro.

## YECL/YEC DSM PANEL

Examined by Ms. Sears

1 Q. And can you just explain a bit what would be included in  
2 the annual report?

3 A. MS. CARLSON: Certainly. The program  
4 implementation plan which was filed as part of Yukon  
5 Electrical's response to Information Request CW-YECL 27(d)  
6 outlines the content of the DSM annual report.

7 They will contain, amongst other things, a  
8 budget for the upcoming year and any changes anticipated from  
9 the filed plan.

10 It should be noted, although the program  
11 design allows for budgets to be reallocated according to the  
12 program results, or new programs added if existing programs  
13 have not achieved the desired market penetration, the  
14 utilities have committed that annual budgets will be  
15 respected.

10:30

16 Q. Thank you. And finally, what further input and  
17 consultation will occur with stakeholders during the course  
18 of the five years of the DSM plan?

19 A. MS. CARLSON: Stakeholder input in the DSM  
20 plan has been extensive. Further stakeholder input will be  
21 obtained through the EM&V process which will be undertaken  
22 throughout the program delivery.

10:30

23 In addition, once the EM&V process evaluation  
24 report is completed midway through the program delivery, a  
25 stakeholder workshop will be organized. This input will be

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 used in the design of the next DSM program.

2 Q. Thank you, Ms. Carlson.

3 MS. SEARS: Mr. Chairman, those are all my  
4 direct examination questions. And the DSM panel is now  
5 available for cross-examination, sir.

6 THE CHAIR: Thank you very much,  
7 Ms. Sears.

8 So just going back to the list, in order of  
9 registration, it would be the City of Whitehorse. And I  
10 would invite Ms. Kellgren to pose any questions that she has  
11 to the panel. 10:31

12 MS. KELLGREN: Thank you, Mr. Chair. And I  
13 understand we're under a bit of a time crunch so I'm going to  
14 be mindful of that, keep my questions brief, and try to speak  
15 a little quicker.

16 So, Madam Court Reporter, if I'm going too  
17 fast for you, please just give me a wave and I will tone it  
18 down a bit.

19 **MS. KELLGREN CROSS-EXAMINES THE PANEL:**

20 Q. Good morning, panel. I'm wondering if I can draw your  
21 attention, specifically the YECL members, to page 1-8 of  
22 YECL's application where they forecast the addition of one  
23 FTE in 2013, and that's the demand side management  
24 administrator, although I think we heard yesterday,  
25 Mr. Redden, that that's also the DSM coordinator and that's 10:31

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 how we're going to refer to it. Is that accurate?

2 **A. MR. REDDEN:** That's the correct entitlement  
3 for that position now.

4 **Q.** Has that position been filled?

5 **A. MR. REDDEN:** Yes, it has.

6 **Q.** And when was it filled?

7 **A. MR. REDDEN:** That position was filled on  
8 September 30th of 2013.

9 **Q.** Thank you. Mr. Redden, yesterday you referred to a new  
10 microgeneration policy. And I can provide you with  
11 references to the transcripts if you want, but I'm assuming  
12 that you're familiar to which I'm referring. Did you want  
13 that reference?

10:32

14 **A. MR. REDDEN:** No, that's okay, Ms. Kellgren.

15 **Q.** And I'm just assuming, sir, that you are referring to  
16 the government of Yukon's microgeneration policy released on  
17 or about October 23rd, 2013?

18 **A. MR. REDDEN:** That's the one.

19 **Q.** I'm just wondering, is that anywhere on the record, sir?

20 **A. MR. REDDEN:** I've made a copy of it. I  
21 don't believe that it's on the record anywhere.

10:32

22 **Q.** I'm wondering if you would undertake to get a copy of  
23 the government's policy on the record, sir?

24 **A. MR. REDDEN:** Yes.

25 **Q.** I agree with you, I wasn't able to find it.

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1     **A.   MR. REDDEN:**                     **Certainly, I can do that.**

2     **Q.**   Thank you.

3                     **UNDERTAKING - TO OBTAIN AND PRODUCE THE**  
4                     **GOVERNMENT OF YUKON'S MICROGENERATION**  
5                     **POLICY RELEASED ON OR ABOUT OCTOBER 23,**  
6                     **2013**

7     **Q.**   **MS. KELLGREN:**                 Has YECL included the cost of  
8     implementing the microgeneration policy in its forecast for  
9     the test period?

10                    My understanding of the microgeneration policy     10:33  
11     is that it involves both YEC and YECL.  And I'm wondering are  
12     the costs of participating in that program included in your  
13     forecast for the test period, sir?

14     **A.   MR. REDDEN:**                     **No, that policy came out**  
15     **subsequent to our preparation of our general rate**  
16     **application.**

17     **Q.**   Okay.  And am I correct that the microgeneration policy  
18     contemplates that customers can generate electricity through  
19     various renewable resources and sell any excess electricity  
20     back to the grid?  That's the general gist of it.                     10:33

21     **MS. SEARS:**                             I don't mean to be difficult  
22     here, but I'm not sure why we're discussing that policy with  
23     the demand side management panel.

24     **MS. KELLGREN:**                         It was my understanding that  
25     that falls within the greater concept of demand side

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 management. And certainly your witness has referred to it  
2 several times yesterday in cross-examination with YCS with  
3 respect to demand side management measures. So I thought it  
4 was appropriate.

5 A. MR. REDDEN: I believe I was discussing it  
6 when we were talking about other areas of opportunity for  
7 renewable energy and we were talking alternative energy.

8 But with respect to renewables, I said now  
9 that there is a policy in place, customers in all classes,  
10 industrial, commercial, residential, will have opportunity  
11 then through approved installations to reduce their own -- or  
12 meet their own electrical requirements through these  
13 generation sources. And should there be excess available for  
14 exporting to the grid, then this policy allows them to do  
15 that.

10:34

16 Q. MS. KELLGREN: Okay. Will the AMR meters that  
17 YECL is proposing accommodate net metering or net billing of  
18 this type?

19 A. MR. REDDEN: Once we determine the metering  
20 requirements, there could be the addition of additional  
21 meters with respect to the particular installation, so...

10:35

22 I don't have those details before me.

23 Q. Okay. Maybe I can frame this a different way. Are the  
24 AMR meters capable of bidirectional communication for the  
25 purposes of net metering?

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1    **A.   MR. REDDEN:**                    That I would have to confirm  
2    for you just to be accurate.

3    Q.    Could you undertake to confirm that, sir?

4    **A.   MR. REDDEN:**                    I could -- yeah, I'll undertake  
5    just to verify that just so that I get it right because there  
6    will be a number of different potential scenarios, I think,  
7    for interconnection. I would rather just do it that way.

8    Q.    I would appreciate that. Thank you, sir

9                    **UNDERTAKING - TO ADVISE IF THE AMR**  
10                   **METERS ARE CAPABLE OF BIDIRECTIONAL**  
11                   **COMMUNICATION FOR THE PURPOSES OF NET**  
12                   **METERING**

10:35

13    Q.    **MS. KELLGREN:**                So I'd like to turn you to a  
14    YECL response to YUB 24(b), and that's Attachment 1 of that  
15    response. And this is a breakdown of DSM costs for 2015.

16    **A.   MR. REDDEN:**                    We've got that.

17    Q.    Thank you. And sir, there YECL provides a forecast of  
18    DSM general service program costs of \$353,000 and a forecast  
19    of DSM residential program costs of \$267,000; is that  
20    correct?

10:37

21    **A.   MR. REDDEN:**                    That's correct.

22    Q.    And are those numbers -- are those expenditures  
23    dependent on the uptake associated with various DSM  
24    initiatives?

25    **A.   MR. REDDEN:**                    So those detailed costs there,

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 they do include incentives then which have a level of  
2 variability depending on the uptake rates so they can vary.  
3 However, the annual budgets, as we mentioned or Ms. Carlson  
4 had mentioned, will be respected.

5 Q. So if there's not the projected uptake and these  
6 incentives are not paid to the extent that YECL has forecast,  
7 that money would not be spent. Am I correct?

8 A. MR. REDDEN: That's correct. If in one area  
9 there is a lower adoption rate or a lower uptake, then those  
10 incentives aren't presented out. If other areas are  
11 exceeding, then there's that sort of movement within each of  
12 those items with respect to incentive uptake.

10:38

13 Q. And I'm wondering: How did YECL forecast the uptake  
14 associated with these various programs?

15 A. MR. REDDEN: So that would be -- and I'll  
16 let our experts jump in where appropriate. However, we've  
17 done a conservation potential review that has looked at what  
18 are the options that are available within the Yukon Territory  
19 to electrical customers that have been targeted, are the ones  
20 that we're going after, and based on a whole breadth of  
21 experience, that has been the basis of the determination of a  
22 success rate or uptake rate with respect to each particular  
23 measure that's being proposed.

10:38

24 A. MR. ROBILLARD: If I could just maybe add to  
25 that.

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 Q. Please.

2 A. MR. ROBILLARD: The participation rates that  
3 are populated for each of the programs are a bottom-up  
4 calculation. And they're based on between -- we did a  
5 detailed market characterization study that was been the  
6 market potential and the actual program in which we went out  
7 and talked to the march customer groups, the major suppliers  
8 of the product, the major suppliers of the services that we  
9 needed to get out to market.

10 Based on the combination of those -- the  
11 results of those discussions and the results of our knowledge  
12 and experience with similar programs throughout North  
13 America, what you have in there is our best estimate of what  
14 we think is -- or what we feel confident that that's what  
15 we're going to be able to accomplish with the resources that  
16 we've allocated to it.

10:39

17 Q. Thank you, sir.

18 Ms. Carlson, when you say "respecting budget,"  
19 I'm just wondering what that means in terms of if there's  
20 greater uptake than was forecast? It only accommodates a  
21 certain amount of ratepayers using that as an initiative and  
22 it's cut off?

10:40

23 A. MS. CARLSON: When we talk about respecting  
24 the annual budget, each year we have established a budget for  
25 the whole program, and the utilities commit not to exceed

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 that budget for the year. However as we go through the  
2 program and as we go through our EM&V processes, which happen  
3 on a regular basis, we have opportunity to evaluate the  
4 success of each program.

5 And if we're seeing that a program is more  
6 successful or has more demand from a participation rate, we  
7 can look to see where other programs are not as successful  
8 and look to reallocate funds from one program to another  
9 within the budget envelope that we have identified for that  
10 year.

10:41

11 Q. Okay. And if the budget envelope is already at  
12 capacity, what then?

13 A. MS. CARLSON: I think as we originally  
14 stated, we want to respect the annual budget for this term of  
15 the five-year program. That's the approach the utilities  
16 have decided to take.

17 Q. So just to clarify, that means no more for that  
18 particular year? The opportunities would cease, is that  
19 fair, if you've reached the budget?

20 A. MS. CARLSON: That's correct.

10:41

21 Q. Okay. Thank you. And I'm just wondering what are  
22 YECL's views on deferral treatment associated with the DSM  
23 program costs? Has YECL considered that?

24 A. MR. REDDEN: We've considered that. We're  
25 not proposing that at this time.

## YECL/YEC DSM PANEL

Cross-examined by Ms. Kellgren

1 Q. Is there a rationale one way or another, sir?

2 A. MR. REDDEN: I guess for the basis of a  
3 deferral account, you know, we would look at the magnitude of  
4 cost variation and what is within and without the utilities'  
5 control. There's certainly variability in the numbers that  
6 are going to come out within the DSM uptakes and costs, but  
7 they're just not of a magnitude at this point that we would  
8 think it's viable or necessary to enact a deferral account.

9 Q. Thank you. And lastly, and this is a more general  
10 question and I apologize, but I was just conferring with  
11 someone from the City. And as you know, sir, there's some  
12 significant interest on the City's part with respect to LED  
13 street lighting.

10:42

14 A. MR. REDDEN: Hmm, hmm.

15 Q. And I'm wondering, sir -- I believe there's a pilot  
16 program currently in place. Is that accurate?

17 A. MR. REDDEN: Yes. We're participating with  
18 Yukon Energy on a study of that, so the performance and  
19 electrical consumption related to various LED streetlights.

20 Q. Thank you. And I'm wondering: Have you looked at the  
21 experience in other jurisdictions with respect to LED street  
22 lighting?

10:43

23 A. MR. REDDEN: Certainly we have, and I can  
24 speak to the technologies that that Northland Utilities are  
25 utilizing in the city of Yellowknife. So they have made a

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 selection, and they're putting in LED streetlights now.

2 Q. Was there an assessment by Northland with respect to  
3 street lighting and LEDs?

4 A. MR. REDDEN: Yes, they had done an  
5 assessment -- done some similar testing within the city to  
6 check the particulars with respect to lumens and how it works  
7 for spacing of their pedestals, and they also had experience  
8 reference from ATCO Electric in Alberta who is gaining  
9 experience in LED streetlight technology as well.

10 MS. KELLGREN: Thank you. Panel. Those are  
11 my questions.

10:44

12 A. MR. REDDEN: No problem.

13 THE CHAIR: Thank you, very much,  
14 Ms. Kellgren, and thank you for your participation in this  
15 hearing.

16 MS. KELLGREN: Thank you, Mr. Chair. I'm back  
17 on. I'm just wondering, sir, with the Board's leave, I would  
18 like to excuse myself and read the transcripts from here on.

19 THE CHAIR: That's fine with me.

20 MS. KELLGREN: Thank you.

10:44

21 THE CHAIR: Fine with the Board, sorry.

22 So I would now call on Utilities Consumers'  
23 Group, Mr. Janigan, if he could come up to the mic once we  
24 get some clearance there.

25 MR. JANIGAN CROSS-EXAMINES THE PANEL:

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 MR. JANIGAN: Thank you very much, Mr. Chair,  
2 Board Members.

3 Q. Good morning, panel. I hope to be as succinct as my  
4 predecessor, my friend -- counsel from Whitehorse was in her  
5 questioning so that we can depart on time today.

6 The first question I have, and it relates to  
7 my book of cross-examination materials page 63. In the cyber  
8 edition it's Tab 12. It's page 9 from the YUB Order 2009-8  
9 dated September 8, 2009. And I'm going to read the sections  
10 associated with Sections 40, 41 and 42 of that order.

10:46

11 MS. SEARS: Just a moment, sir.

12 Ms. Carlson has a full copy of his package recall. Sorry,  
13 there's just only one copy of the extract up at the panel.

14 MR. JANIGAN: Sorry, on the first day I had  
15 to cull about 550 pages down to 70, and they still have my  
16 tear stains on it for the process.

17 MR. REDDEN: Mr. Janigan, would be able to  
18 reference also the tab number that was within your 550 pages?  
19 So I will pull that up electronically as well.

20 Q. MR. JANIGAN: It was Tab 12, Mr. Redden.

10:47

21 A. MR. REDDEN: Tab 12, and...?

22 Q. Which is page 9 from the YUB order, 2009-8?

23 A. MR. REDDEN: Does that page contain Item 3,  
24 revenue requirement?

25 Q. It will have Sections 40, 41 and 42 on it.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 A. MR. REDDEN: All right. We've got that.

2 Q. Okay. All right. Thank you. On paragraph 40:

3 (as read)

4 "The Board directs YEC, in connection  
5 with YECL, to consult with stakeholders  
6 and develop a policy paper with respect  
7 to DSM initiatives. YEC and YECL are  
8 to jointly lead this process and submit  
9 a policy paper and plan within the next  
10 GRA. Further, the utilities are to be  
11 cognizant of and work with ESC where  
12 necessary so as not to duplicate  
13 efforts. The plan should include  
14 initiatives developed through  
15 negotiations with intervener groups,  
16 communities in the Yukon. The plan  
17 should provide a wide variety of energy  
18 efficiency and conservation measures  
19 that will assist ratepayers in dealing  
20 with the high cost of energy in the  
21 Yukon and also provide support for  
22 local initiatives identified through  
23 community initiative planning  
24 initiatives.

25 The Board finds that UCG in any

10:48

10:48

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 proposals for deferral accountants in  
2 support of DSM initiatives acceptable  
3 and both YEC and YECL can propose  
4 appropriate treatment of these accounts  
5 at the time of the next GRA."

6 Now, the YUB's direction to the  
7 utilities in this order was to consult  
8 with stakeholders and develop a policy  
9 paper plan with respect to DSM  
10 initiatives and include this policy  
11 paper as part of the YECL's and YEC's  
12 next GRA.

10:49

13 The question is, why did YECL go  
14 beyond what appears to be YUB's  
15 direction and supply for applying for  
16 approval of 1.7 million in DSM-related  
17 capital expenditures and a five-year  
18 DSM plan before the YUB and other  
19 stakeholders have had an opportunity to  
20 review the proposed plan or policy?

10:49

21 **A. MR. REDDEN:** Well, firstly, I can't agree  
22 that Yukon Electrical went beyond what was required in  
23 putting this plan together, including conservation potential  
24 review and well-laid out plan for programs, implementation,  
25 evaluation, measurement verification in a broad range of

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 areas as directed and to ensure that, while we are working  
2 jointly with Yukon Energy, that we are also very aware that  
3 we're not duplicating areas -- other programs by government,  
4 for example.

5 So we think we've done exactly what has been  
6 asked in putting this plan together.

7 Q. Now, I understand that you had input from stakeholders  
8 in developing the plan. Was the plan put before stakeholders  
9 and reviewed before it was brought before the Board?

10 A. MS. CARLSON: The final plan was presented in 10:50  
11 June of this year for presentation to the stakeholders that  
12 had participated with us along the entire process of  
13 development of the plan.

14 Q. Mm-hm. And who were they again?

15 A. MS. CARLSON: Sorry, could you clarify?

16 Q. Who were the stakeholders again?

17 A. MS. CARLSON: In which -- at the  
18 presentation?

19 Q. Well, I thought it was the same group that was involved  
20 in providing input that reviewed the plan at the end of the 10:51  
21 day?

22 A. MS. CARLSON: All stakeholders that were part  
23 of our process -- consultation process were invited to the  
24 presentation. We did not take a registration of who attended  
25 the presentation.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. Okay. Did you ask at that point in time for approval or  
2 suggestions for recommendations for improvement of the plan?

3 A. MS. CARLSON: I'm sorry.

4 Q. Was it an information session or was it a session that  
5 was to develop any improvements to the plan?

6 A. MS. CARLSON: It was an information session.

7 Q. Okay. Now, in response to UCG-YECL 128(d) and (e) --  
8 and I'll give you some time to turn that up.

9 A. MR. REDDEN: We've got UCG 128.

10 Q. Okay. And it's sections -- sections (d) and (e) that 10:52  
11 I'm going to be referring to. In those sections, YECL states  
12 that: (as read)

13 "There were no programs under the joint  
14 DSM plan delivered from 2008 to 2012,  
15 so no customer participation  
16 information can be provided, and there  
17 was no reduction in electricity  
18 consumption as a result of DSM in this  
19 period."

20 My question is, does YECL know if any DSM programs were 10:52  
21 delivered in the Yukon during the 2008 and 2012 period by any  
22 agency?

23 A. MS. CARLSON: Yes, Yukon Electrical and Yukon  
24 Energy are both aware of the programs that are offered by the  
25 Energy Solutions Centre, which is a division of the Energy,

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Mines and Resources department of the Yukon government.

2 Q. Does YECL know how much was spent on DSM during 2008 to  
3 2012 and how effective these programs were at reducing  
4 electricity consumption or how many customers participated?

5 A. MS. CARLSON: No, we do not have visibility  
6 of the government spending or savings.

7 Q. Is that not available through access to information?  
8 You don't know?

9 A. MR. MORRISON: That's something we'd look at  
10 through an accessed information request. These are  
11 government programs. Government tracks them. We don't have  
12 that information.

10:53

13 Q. Okay. So you don't know.

14 YECL has applied for recovery of costs  
15 associated with a demand side management administrator I  
16 believe my friend was referring to this morning. If the  
17 joint DSM plan is not scheduled to commence until 2014, what  
18 benefit will ratepayers receive from this position prior to  
19 implementation?

20 A. MR. REDDEN: So that position is involved  
21 with the preparation of the plan, and subject to approval by  
22 this Board for the DSM program would continue on with  
23 delivery of that. Should that not be the decision of the  
24 Board to proceed with DSM, then the caveat on that position  
25 is that it would be terminated.

10:54

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. And what would happen to the expenses to date?

2 A. MR. REDDEN: They would be part of the DSM  
3 expenses to date as preparation of the plan.

4 Q. Okay. In response to UCG-YECL 128(n), YECL states that:  
5 (as read)

6 "The allocation of the costs of the  
7 proposed DSM plan between the various  
8 rate classes and accounting for  
9 differences between the participation  
10 levels and savings per participant  
11 between the various customer classes  
12 will be examined as part of a future  
13 GRA Phase 2 process."

10:55

14 My question is, shouldn't the YUB understand how costs will  
15 be recovered from ratepayers prior to approving any type of  
16 DSM plan or policy?

17 A. MR. REDDEN: The cost and the savings with  
18 respect to the DSM plan are included here as part of our  
19 general rate application which will set the revenues for  
20 Yukon Electrical for the years 2013, '14 and '15. So we're  
21 not able, as part of this process -- this is not where it's  
22 done to do any differentiation in rate design, then, between  
23 the classes.

10:56

24 Q. So we don't know who benefits, but how are you  
25 allocating the costs across the board between various

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 customer classes?

2 A. MR. REDDEN: The costs are included within  
3 Yukon Electrical's capital program.

4 Q. Mm-hm.

5 A. MR. REDDEN: So they'll be included as other  
6 capital projects, then, as part of our revenue requirement  
7 and the depreciation requirements with respect to capital  
8 projects.

9 Q. Okay. In response to UCG-YECL 128(x), YECL states that:  
10 (as read)

10:56

11 "The potential impacts of system-wide  
12 efficiency savings are not part of the  
13 proposed joint DSM plan."

14 The question is, will system-wide efficiency savings not be  
15 measured as part of the benefits of the DSM program?

16 A. MS. CARLSON: Demand side management focuses  
17 on the customer side of the meter and the programs and  
18 technologies that the customer can utilize to effect electric  
19 savings.

20 So in this DSM program that we have put  
21 forward, we're not looking at the system efficiencies as part  
22 of the measurement of this DSM program.

10:57

23 Q. This is simply benefits to the customer that you're  
24 computing?

25 A. MS. CARLSON: Sorry, could you clarify?

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. Well, when you're looking at what savings the programs  
2 will produce, you're saying that the only focus will be on  
3 the savings to the customer?

4 A. MR. ROBILLARD: I think the -- if I can just  
5 jump in, the savings -- as Laura is saying, the savings that  
6 we're pursuing under this particular plan are those that  
7 occur on the customer side of the meter. Of course, when  
8 those savings occur on the customer side of the meter, they  
9 work backwards into the overall system.

10 I believe, if I understood your question  
11 correctly, that the system planning -- those, I think, refer  
12 to upgrades to the transmission distribution, the generation  
13 facilities which are the purview of utilities themselves, not  
14 their customers. Does that distinction answer your question?

10:58

15 Q. It does. I guess what I'm saying is when does the  
16 computation of those system-wide savings take place?

17 A. MR. MORRISON: Well, those system-wide savings  
18 are part of other matters that are dealt with by the  
19 utilities on an ongoing basis.

20 So Yukon Electrical's application or Yukon  
21 Energy's application, system enhancements or supplied side  
22 enhancements are part of our normal business activities and  
23 they're either in or not in as appropriate in our  
24 applications to the Board.

10:58

25 Q. Well, I mean, with respect, Mr. Morrison, I think it

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 would be helpful for the Board and interveners to understand  
2 the impact of DSM programs on things like system-wide  
3 efficiencies so that we can, not only better adjudicate the  
4 benefits of the DSM program but also adjudicate those  
5 benefits versus things like builds of distribution and  
6 transmission in the future.

7 MS. SEARS: Is there a question there, sir?

8 Q. MR. JANIGAN: I'll ask them, do you agree or  
9 disagree?

10 A. MR. MORRISON: With what? 10:59

11 Q. With my last statement.

12 A. MR. MORRISON: It was a long statement. So  
13 which part of it do you want me to agree or disagree with?

14 Q. Actually, to tell you the truth, these questions are for  
15 YECL, not for YEC. I've got some questions for YEC a little  
16 later.

17 So we're dealing with YECL's application here  
18 in relation to system-wide efficiency savings.

19 My question to them is when will we see the  
20 computation of system-wide efficiency savings as part of the 11:00  
21 DSM program?

22 A. MR. REDDEN: Sorry, Mr. Janigan, we're still  
23 trying to understand your question.

24 But, I mean, this program is going to show  
25 savings to customers immediately. What we're trying to do is

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 make ourselves as small as we can electrically so that we are  
2 deferring delaying or even to eliminating some of the needs  
3 for additional generation in the system. There's a definite  
4 value for everyone in that

5 So this program -- and as we see, as it gains  
6 momentum through the years, the savings then accrue and get  
7 larger, and then there's long-term savings that are in  
8 perpetuity as part of this program.

9 Q. I'm not disagreeing with you. I'm just saying: When  
10 will we get the computation of the savings on the other side  
11 of the meter? 11:01

12 A. MR. REDDEN: Well, I guess, customers could  
13 take a look at -- they can reconcile their bills before and  
14 after --

15 Q. No, no, that's the customer side of the meter. On the  
16 other side of the meter looking at system-wide efficiency  
17 savings. At some point in time, aren't you going to take a  
18 look at: Look it, our DSM programs have enabled us to enjoy  
19 these kind of system benefits, and they are beneficial  
20 because of that and we encourage investment -- 11:01

21 A. MR. REDDEN: Okay.

22 Q. Do you see what I mean? It's part and parcel of the  
23 evaluation --

24 A. MR. REDDEN: Perhaps they'd do it. If it's  
25 with respect to what might occur in the future, then that

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 you'd say: We've reduced consumption by 8.5 gigawatt hours  
2 and didn't need to add that capacity to some generating  
3 urinate. There's all sorts of scenarios that could occur if  
4 DSM does not happen and our electricity consumption keeps  
5 growing at the rate it does without taking these measures.

6 It's very challenging from a system  
7 perspective, in my mind, to be able to compare what is --  
8 again, we know there's a value associated with a generation  
9 mix for new supply, and that's been taken into account. So  
10 here's a value on what these measures are displacing with  
11 respect to consumption that can be related to call it avoided  
12 generation.

11:02

13 Q. Okay. Well, all I'm saying is from our standpoint, we  
14 would hope that these savings would be -- some attempt to  
15 compute these savings on a going-forward basis.

16 A. MR. REDDEN: I guess one of the savings in  
17 my mind would be that then perhaps noticeably absent in a  
18 future filing or cost requirement for generation. I don't  
19 know what that generation might be, but with successful  
20 conservation, you won't see it as much, requirement for  
21 additional generation.

11:03

22 Q. See, in my jurisdiction all the requests for  
23 construction now are met with computations of different  
24 efficiency savings across the system that would be obtained  
25 --

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 MS. SEARS: Sir, you seem to be giving  
2 evidence on what's done in your jurisdiction.

3 MR. JANIGAN: I'll get to the question. I'll  
4 get to the question. All I'm saying is this is what is being  
5 done in that jurisdiction, and hopefully --

6 MS. SEARS: Sir, there's no evidence on the  
7 record of what is being done in that jurisdiction.

8 MR. JANIGAN: I'm not asking them to -- all  
9 I'm is that I hope we can bring that forward in the context  
10 of future applications.

11:03

11 A. MR. MORRISON: Mr. Chair, maybe to bring this  
12 to a close, although Mr. Janigan isn't particularly keen in  
13 me answering the question, let me say that DSM is part of the  
14 planning processes that Yukon Electrical and Yukon Energy  
15 have for future generation, future transmission and capital  
16 spending.

17 So I'm trying to say to Mr. Janigan, as I was  
18 earlier, that all of those computations that he wants us to  
19 do incorporate -- when we do our resource plan, when Yukon  
20 Electrical does capital planning, we already anticipate these  
21 DSM savings in there; right? So we're not duplicating and  
22 saying: Well, we're going to go out and build this because  
23 -- you know, without the knowledge of a DSM plan in front of  
24 us.

11:04

25 So we have the DSM plan in front of us. We

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 know what our planning and load growth is going forward, and  
2 this is a big part of it. So if system enhancements are  
3 looked at, then the value of those system enhancements come  
4 into future plans.

5 Q. How much savings and net benefits associated with DSM  
6 are reflected in the proposed revenue requirements for 2013,  
7 2014 and 2015?

8 THE CHAIR: Perhaps while they're looking  
9 that up, we can do a little housekeeping. Can we give this  
10 exhibit number that you presented a number? And I believe by 11:06  
11 my records -- and I'll just check with Ms. Henry -- that it  
12 would be C-3-15, and that is the excerpt from the --

13 MS. SEARS: Board direction or the board  
14 decision.

15 THE CHAIR: Yes, that's correct. So  
16 marked.

17 EXHIBIT C-3-15 - EXCERPT FROM BOARD

18 DECISION

19 A. MR. REDDEN: So I can, Mr. Janigan, walk you  
20 through our costs then -- 11:07

21 Q. MR. JANIGAN: Sure.

22 A. MR. REDDEN: -- related to DSM. So we've  
23 got costs for 2011 of \$204,000, for 2012, \$143,000, 2013,  
24 \$135,000, 2014, a total of \$522,000, and 2015, \$730,000. So  
25 those are all within the revenue requirements of the filing.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. And how much savings or net benefits are built into  
2 those figures? Are those net numbers, or are they just --

3 A. MR. REDDEN: No, that's the total cost. So  
4 the savings are a different set of numbers.

5 Q. Okay. And do you have those readily available, or do  
6 you want to undertake to provide them?

7 MS. SEARS: I think to move things along,  
8 why don't we take it as an undertaking, sir?

9 MR. JANIGAN: That would be fine.

10 A. MR. REDDEN: Yeah, we'll undertake to  
11 provide you that, Mr. Janigan.

11:08

12 Q. Thanks very much.

13 UNDERTAKING - TO ADVISE HOW MUCH  
14 SAVINGS OR NET BENEFITS ARE BUILT INTO  
15 THE FIGURES RELATING TO DSM FOR THE  
16 2011 TO 2015 (SEE TEXT)

17 Q. MR. JANIGAN: Is the 1.734 million DSM budget  
18 all related to expenditures on property, plant and equipment?

19 A. MR. REDDEN: Well, there's study costs in  
20 there, as well, so, no.

11:09

21 Q. Okay. Is YECL planning on undertaking any pilot  
22 projects to test DSM program design concepts?

23 A. MR. REDDEN: Sorry, could you restate that,  
24 please?

25 Q. Is YECL planning on undertaking any pilot projects to

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 test DSM program design concepts?

2 A. MR. REDDEN: We are, and we can provide you  
3 the details on -- specifically with respect to ground source  
4 heat pumps.

5 A. MR. ROBILLARD: I think that is a pilot. Do  
6 you mean the overall portfolio of programs?

7 Q. No, just pilot projects.

8 A. MR. ROBILLARD: Just pilots, yes. There was  
9 one pilot program relating to heating systems that was  
10 proposed.

11:10

11 Q. And is that located anywhere in the evidence?

12 A. MR. ROBILLARD: I believe so.

13 Q. A description of that?

14 A. MR. ROBILLARD: It's certainly in the program  
15 design documents that I believe are included.

16 Q. Okay. Can YECL provide a list of all the programs it  
17 considered for inclusion in the DSM plan, the TRC ratio for  
18 each program, the cost for each program and the rationale for  
19 against proceeding with the program?

20 MS. WHITEHEAD: I can answer this one. When we  
21 looked at all of the technology in the CPR, we looked at a  
22 cost of conserved energy for each of those measures.

11:11

23 In going forward with the program design, we  
24 took into account the lowest cost of conserved energy, or  
25 levelized cost. We took into account the greatest savings we

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 could realize by year three as well as the customer payback  
2 that was available from those technologies. So that helped  
3 us to highlight these priority opportunities that we then  
4 moved forward into a program design.

5 So when we took those programs and those  
6 priority opportunities, we looked at the TRC tests for each  
7 of those, but for each of the technologies in the CPR, it was  
8 based on the cost of conserved energy.

9 Q. Could we obtain a summary of the programs that you  
10 looked at and the results associated with both of those  
11 tests. Go ahead.

11:12

12 A. MS. WHITEHEAD: The programs that we've  
13 brought forward, you can see a summary of those in the  
14 program portfolio. In terms of all of the technologies we  
15 looked at, they were not in terms of programs, they were in  
16 terms of technologies.

17 Q. And those contain the results of the TRC test and this  
18 sort of thing?

19 A. MS. WHITEHEAD: Yes.

20 Q. What about the ones that you rejected? Do you have a  
21 list of those somewhere?

11:12

22 A. MS. WHITEHEAD: We have a list of all of the  
23 technologies that were considered.

24 Q. Okay.

25 A. MS. WHITEHEAD: And how we think that they

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 will react in the Yukon.

2 In terms of TRCs, those were only done for the  
3 programs that were brought forward?

4 Q. And I have what you did with respect to the ones that  
5 you rejected, is that possible?

6 A. MR. ROBILLARD: If I could just maybe add.  
7 Just so there's no confusion, when we're doing these kinds of  
8 studies, there are, like, literally several hundreds of  
9 measures - technologies or behaviours that you could  
10 implement. Each one of those is analyzed separately in terms 11:13  
11 of its cost, its savings, its lifetime and that sort of  
12 thing. And it generates what we call a cost of conserved  
13 electricity, CCE.

14 And the CCE is a concept that's used widely  
15 throughout the industry because it's a relatively symmetrical  
16 comparison with the cost of new generation.

17 So in the detailed conservation potential  
18 reports that have been filed, I believe -- I'm sorry I don't  
19 know the exact numbers -- there's that list. And essentially  
20 what we did was we drew the line, if you want, on those 11:14  
21 measures that provided savings but were within the cost  
22 envelope; i.e., that was equal to or cheaper than the cost of  
23 new energy.

24 Those are the ones that we, then, brought  
25 forward to the next level of analysis. And at that stage,

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 that's where we had -- as Stephanie just outlined -- we had a  
2 defined package of technologies that we then formulated into  
3 program packages. And we formulated them into program  
4 packages now with our thinking about how we would take this  
5 to market. So -- around packages so that it's a similar  
6 market. It's a commercial market. It's a residential  
7 market. It's a lighting program because there are certain  
8 distribution and supply channels where that's how the product  
9 gets to market and, therefore, you can build a program around  
10 it.

11:14

11 There's detailed costing at the measure level,  
12 then at the program level, and then at the portfolio of all  
13 programs. And all of that material is in the filing. And,  
14 again, I apologize, I don't know the filing numbers, but all  
15 of that data is there in what's been provided.

16 Q. For the rejected programs, do you have that -- I don't  
17 want all of the inputs. All I want is just the  
18 measurement of the -- and I've forgotten the acronym that  
19 you've given me for that -- CCR --

20 A. MR. ROBILLARD: CCE.

11:15

21 Q. CCE, the CCE measurement of those. Are those contained  
22 in the evidence?

23 A. MR. ROBILLARD: Yes, they are.

24 Q. Okay. Is YECL seeking approval of all of the elements  
25 of its DSM plan for five years?

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 A. MR. REDDEN: What we're seeking approval on  
2 is the revenue requirement with respect to DSM over the test  
3 period years.

4 Q. Okay. And, effectively, I think you mention that you  
5 will be doing -- filing a report after two years for the  
6 operation of the program. Did I get that correctly?

7 A. MS. WHITEHEAD: We'll be filing the EM&V or  
8 evaluation, measurement verification process evaluation  
9 report midway through the DSM's five-year plan.

10 Q. Okay. Now, as I understand, that's for informational 11:16  
11 purposes, not for approval purposes. Did I get that correct?

12 A. MR. REDDEN: That's correct.

13 Q. If you wished to make changes during the five-year  
14 period, what process would you take?

15 A. MS. WHITEHEAD: When we're doing our  
16 evaluation, measurement and verification, we'll be looking at  
17 the program performance. And this process will -- it will  
18 highlight if we have programs where the delivery mechanism  
19 has a weakness or programs that are just not performing as we  
20 thought. 11:16

21 So if we need to make changes to those  
22 programs, we'll be going back through the same process that  
23 we outlined in our program portfolio to choose the original  
24 programs. So the same kind of tests, the same kind of rigor  
25 to take changes forward into iterations.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. But you wouldn't come forward with those programs at  
2 that point in time; you would simply make the changes. Is  
3 that correct?

4 A. MS. WHITEHEAD: Yes.

5 Q. What is the bill impact on a residential customer in  
6 each of the 2013, 2015 test year's related -- DSM-related  
7 costs?

8 A. MR. REDDEN: I can give you comparison or a  
9 delta with respect to what was filed as opposed to if there  
10 is no DSM program.

11:17

11 For the first year of the test period, the  
12 delta would be .1 percent impact on rates.

13 Q. Mm-hm.

14 A. MR. REDDEN: In the second year, a .2  
15 percent impact.

16 Q. Mm-hm.

17 A. MR. REDDEN: And in the third year, a .2  
18 percent impact. And those are rounded numbers, and those are  
19 in the test period years' reductions in the rate impact.

20 Q. In UCG-YECL 128(f), UCG asked how much of the proposed  
21 DSM plan is targeted at ratepayers living on low or fixed  
22 incomes and to compare this to the proportion of DSM programs  
23 in other jurisdictions that are dedicated to low-income  
24 ratepayers.

11:18

25 YECL's response was that the utilities have no

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 visibility of ratepayer income levels.

2 I wonder if you could turn up, first of all,  
3 reference to page 65 in my book of cross-examination  
4 materials, Tab 13. And in dealing with the Dimensions of  
5 Social Inclusion and Exclusion in the Yukon, a report from  
6 the Yukon Health and Social Services, it noted that there  
7 were 360 Yukon families living below the low-income cutoff in  
8 2005.

9 My question is, would YECL agree that using  
10 low-income cutoffs would be one approach to estimating  
11 low-income cutoff points for DSM programs?

11:20

12 **A. MR. REDDEN:** Yeah, I guess, you know, if we  
13 go back to the UCG-YECL 128 answer that utilities don't have  
14 visibility into the ratepayer income levels, that's the case,  
15 but it's probably I should probably defer to our experts on  
16 the panel here for some of the experience with respect to  
17 low-income programs.

18 **Q.** Could you perhaps give us some guidance, the  
19 representatives from Marbek with respect to the measures that  
20 can be taken to try to target programs to low-income  
21 customers?

11:20

22 **A. MS. SIMON:** Measures that can be --

23 **Q.** Used to try to target low-income customers. For  
24 example, low-income cutoffs are one; self-certification,  
25 obviously, would be another; and there are other measures

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 like --

2 A. MS. SIMON: You're talking about how to  
3 identify --

4 Q. Correct.

5 A. MS. SIMON: -- as opposed to marketing.

6 The low -- the low-income cutoff, the pre-tax  
7 post-transfer lycos (phonetic) are ones that are used in  
8 Ontario as well as in British Columbia as one of the screens.

9 Others that are used are social assistance  
10 indicators. For example, if an individual is on some form of 11:21  
11 social assistance, whether it's employment or housing  
12 assistance, are other common ways of identifying low  
13 income -- people of lower income.

14 Q. If YECL wished to target programs to low-income  
15 customers, what would you recommend as the appropriate  
16 measures for identification of customers?

17 A. MS. SIMON: I don't have sufficient  
18 information at this time at the program level to be able to  
19 provide a recommendation.

20 Q. Is this something that you might be able to provide a 11:22  
21 recommendation, given appropriate study?

22 A. MS. SIMON: Yes.

23 Q. Okay.

24 A. MR. ROBILLARD: It might also be worth just  
25 adding that when we were designing the portfolio programs,

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 what we wanted to do was to ensure that the utilities had  
2 opportunity to walk before they run.

3 Low-income programs -- I should say we have  
4 one of the residential programs that focuses on low cost  
5 measures. We also have a program designed to community  
6 engagement.

7 We think that what makes sense is once we get  
8 our feet on the ground, it may be possible further down into  
9 the program history to look at more targeted or specific  
10 programs such as a low income. But, to our knowledge, no  
11 jurisdiction in Canada has hit the ground with specialized  
12 programs. They hit the ground with general programs so that  
13 everybody can gain confidence and then we start to look at  
14 more specific programs like that.

15 Q. Thank you. I wonder if you can turn up page 71 of my  
16 brief of cross-examination materials?

17 THE CHAIR: Mr. Janigan, can we just mark  
18 this exhibit, please?

19 MR. JANIGAN: Absolutely.

20 THE CHAIR: So by my recording, I believe  
21 this exhibit that you just presented on the dimensions of  
22 social inclusion and exclusion in the Yukon 2010 would be  
23 marked as C-3-16. So marked.

24 **EXHIBIT C-3-16 - REPORT ENTITLED**  
25 **DIMENSIONS OF SOCIAL INCLUSION AND**

11:23

11:24

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1                   **EXCLUSION IN THE YUKON 2010.**

2   THE CHAIR:                                 Sorry to interrupt you.

3   MR. JANIGAN:                               No, that's fine.

4   Q.   If I can ask you to turn up page 71 of the brief, which  
5   is Tab 14 of the cyber electronic edition. It's the Ontario  
6   Energy Board guidelines for electricity distribution,  
7   conservation and demand management.

8                   And it's noted here on page 6 that in its  
9   guidelines for electricity it: (as read)?

10                  "... considers that the inclusion of  
11                   low-income programs is an important  
12                   element of a CDM portfolio and  
13                   distributors are encouraged to include  
14                   low-income programs in their plans."

15   I take it that that statement of importance would also apply  
16   to YECL's objectives with respect to the DSM?

17   A.   MS. CARLSON:                        I would say that the low-income  
18   customer is an important customer to us. I would suggest  
19   that the utilities are not excluding the low income from any  
20   of our programs. All of our programs are available to every  
21   customer and that we are also indicating that at this time we  
22   are not offering a low-income program, but as we gain  
23   experience within the market and experience within our staff  
24   and delivering of DSM programs that we will be able to look  
25   at more sophisticated programs and target more market

11:25

11:26

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 segments.

2 Q. Would you say that would be an objective for the future?

3 A. MS. CARLSON: I can say that would be an  
4 objective for the future, yes.

5 Q. I wonder if you could turn up Tab 15 of the electronic  
6 version -- I guess we better mark that.

7 THE CHAIR: So if we mark that as an  
8 exhibit, I believe it would be C-3-17. So marked.

9 EXHIBIT C-3-17 - ONTARIO ENERGY BOARD  
10 GUIDELINES FOR ELECTRICITY  
11 DISTRIBUTION, CONSERVATION AND DEMAND  
12 MANAGEMENT

11:24

13 Q. MR. JANIGAN: And with respect to my book of  
14 cross-examination materials, at Tab 15, electronically page  
15 77 in the hard copy version, it's noted that: (as read)

16 "In its demand side management  
17 guidelines for natural gas utilities,  
18 the Ontario Energy Board spells out the  
19 DSM deadlines for low-income  
20 ratepayers."

11:27

21 And page 79, it's noted that: (as read)

22 "The DSM budget levels for Ontario's  
23 largest natural gas distributors  
24 represent about 2.8 percent and 4.1  
25 percent of their respective

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 distribution revenues."

2 Does that represent a reasonable target for YECL down the  
3 road?

4 A. MR. ROBILLARD: I think one of the things we  
5 have to keep in mind here is that -- because both of these  
6 are clients of mine over as well -- both have been delivering  
7 programs for over 20 years. So I think we go back to our  
8 original statement that what we're trying to do is recognize  
9 that there's a suite of programs that make sense when you're  
10 getting your feet on the ground and that these are definitely 11:28  
11 I think considerations as utilities gain experience and go  
12 forward.

13 Q. When do you think these kind of metrics are achievable,  
14 Mr. Robillard?

15 A. MR. REDDEN: Could I add that these  
16 referenced numbers are from another jurisdiction. So we  
17 couldn't say that those are objectives or targets that are  
18 relevant for Yukon.

19 Q. Okay.

20 A. MR. ROBILLARD: I think it's very difficult 11:28  
21 because you have to keep in mind that this is a far, far  
22 smaller jurisdiction. There is greater isolation from some  
23 of the resources that are needed. So it's a unique market.  
24 It's a market of 35,000, not 15 million, etcetera. So those  
25 have a number of implications that kind of run through the

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 design process.

2 Q. What percentage of YECL's distribution revenues is the  
3 proposed annual DSM expenditures currently?

4 A. MR. REDDEN: As an approximate number,  
5 subject to confirmation, about 2 percent.

6 Q. Two percent, okay. Now, on page 26 of that same  
7 document I was referencing, it noted in this jurisdiction:  
8 (as read)

9 "The annual low-income DSM budget shall  
10 be no less than 15 percent of the  
11 natural gas utilities' DSM budgets."

11:29

12 Is that an appropriate objective for YECL in the future?

13 A. MR. REDDEN: Again, we'd have to look at  
14 that -- you know, with the expert help that we've got here,  
15 looking to the jurisdictions we're making sure that what  
16 we're doing in the Yukon is relevant for our situation. So  
17 we can't say that that target is an appropriate benchmark or  
18 not.

19 A. MR. ROBILLARD: Yes, I think that's very true.  
20 Each market that has its own unique characteristics that you  
21 really have to understand before you make commitments --  
22 broad commitments like this.

11:30

23 Q. Further on page 26, it notes that: (as read)

24 "The natural gas utilities' total DSM  
25 budgets may be increased by up to 10

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1                   percent provided the funds are solely  
2                   used to support low-income programs."

3       Would YECL consider this as an endorsement for an incentive  
4       to support low-income DSM programs?

5       **A. MS. CARLSON:**                   **I think that we can restate**  
6       **that in this iteration of the DSM program, we will be**  
7       **respecting the annual budgets that have been put forward.**  
8       **But in future programs, we would look at how we could target**  
9       **the low-income sector and what those programs and the**  
10      **expenditures to them would look like.**

11:31

11      **Q.**    With respect to the current programs that you are  
12      considering offering, how will low-income ratepayers become  
13      aware or sign up for these DSM programs?

14      **A. MS. CARLSON:**                   **As outlined in our education**  
15      **and communication plans within our program portfolio as well**  
16      **as our program implementation plan, we will be targeting all**  
17      **ratepayers in the Yukon, all residential customers including**  
18      **all of our customers that are located outside of the**  
19      **Whitehorse area.**

20                    **It is our intent to deliver these programs to**  
21      **all ratepayers which will include the low-income customer.**  
22      **In specific, I can illustrate that we have an excellent**  
23      **working relationship with Yukon Housing through the Energy**  
24      **Solution Centre as well as other First Nation agencies that**  
25      **provide housing for low income. So we will continue to work**

11:31

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 with those stakeholders throughout the five years of the  
2 program.

3 Q. Now, in DSM Business Case No. 30, YECL notes on page 6  
4 that: (as read)

5 "Large industrial customers would be  
6 addressed separately from this  
7 five-year DSM program since it is more  
8 practical to work directly with these  
9 customers."

10 Q. Do you have that?

11:32

11 A. MR. REDDEN: Yes, we've got that here.

12 Q. Since no other customer class will be allowed to  
13 participate in DSM programs designed for industrial  
14 customers, will the cost of these programs be recovered only  
15 through industrial customers?

16 A. MR. MORRISON: Mr. Chair, perhaps I can  
17 help. The DSM program for industrial customers is a separate  
18 application primarily because of the uniqueness of each  
19 individual industrial customer. So they will be part of the  
20 overall DSM or overall costs from the utilities side, but  
21 they won't be part -- or sorry, maybe give me your words  
22 again, Mr. Janigan. I'm just...

11:33

23 Q. Will the costs of these programs be recovered only from  
24 industrial customers?

25 A. MR. MORRISON: No, they will be part of our

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 overall recovery of costs.

2 Q. And that goes for YECL and YEC?

3 A. MR. REDDEN: That's correct.

4 Q. Okay. Now, will industrial customers be allocated any  
5 portion of the costs of the DSM programs provided to  
6 non-industrial customers?

7 A. MR. REDDEN: So these rates then are  
8 applicable to all customers.

9 Q. Okay. The costs of the DSM programs associated with  
10 non-industrial customers, are they going to be part of the  
11 rates paid by industrial customers?

11:34

12 MS. SEARS: I'm going to interject at this  
13 point. I think we're getting into a Phase 2 issue again,  
14 sir. It's a rate structure issue that you're talking about.

15 MR. JANIGAN: What do they plan to do next  
16 year?

17 MR. LANDRY: Mr. Chair, since Yukon Energy  
18 obviously at the moment has the industrial customers, I'm not  
19 sure I understand the question, given the rate situation in  
20 the Yukon. Maybe Mr. Janigan can explain it better.

11:34

21 If and when -- well, when there is a Phase 2,  
22 after the appropriate OIC issues are dealt with, obviously it  
23 will be an issue dealt with at that point in time. I don't  
24 think this panel is ready to be answering cost-of-service  
25 issues such as that.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 MR. JANIGAN: All I'm asking is how they  
2 expect to treat them in rates with respect to the cost of the  
3 industrial DSM programs. If the industrial customers are --  
4 the DSM programs is being picked up in rates for the general  
5 customer class, then presumably the industrial customers will  
6 pick up costs from the general customer class. It's a simple  
7 proposition.

8 MR. LANDRY: It may be a simple proposition  
9 to my friend. I'm not sure it's a simple proposition from a  
10 cost-of-service perspective. It's a Phase 2 question 11:35  
11 clearly, and, you know, to speculate at this point in time  
12 when we don't even know what the DSM programs are, their  
13 impact of them I think is going well beyond where we are  
14 today.

15 This is a YECL application. There's no  
16 industrial costs that are being asked to be put into YECL's  
17 rate. So from my perspective, since this is a YEC-related  
18 issue, first of all, I don't think it's relevant and, second,  
19 I don't think it's appropriate to ask these individuals that  
20 question. 11:35

21 MS. SEARS: And I would also remind  
22 Mr. Janigan that there aren't currently any YECL industrial  
23 customers at this time.

24 THE CHAIR: Mr. Janigan, would you like to  
25 drop that question?

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 MR. JANIGAN: I guess with respect to YECL,  
2 the answer is that there's no industrial customers it could  
3 be applicable to. The answer of the YEC is that this they're  
4 not -- this is not their application before the Board, and it  
5 will be answered in the Phase 2 proceeding. Is that  
6 effectively the answer?

7 THE CHAIR: That's the answer I heard.

8 MR. LANDRY: I think my position was put on  
9 the record, sir.

10 THE CHAIR: Thank you.

11:36

11 Q. MR. JANIGAN: With respect to stakeholder  
12 engagement, I believe Marbek has had extensive experience  
13 with respect to stakeholder engagement. And can you possibly  
14 relate to the panel the importance of having stakeholders  
15 engaged in each potential step in the development of a DSM  
16 program?

17 A. MR. ROBILLARD: I think what I can tell you is  
18 that the level of stakeholder participation in this process  
19 has been very much in the top 10 percent of any process that  
20 I've been involved in. And they've been involved at the  
21 stage where we were outlining what we were going to do. They  
22 were involved at the stage where we had come to some  
23 preliminary conclusions.

11:37

24 And, personally, as the consultant charged  
25 with bringing all this together, during the achievable

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 potential workshops -- and many of the people that  
2 participated are in this room today or here yesterday, their  
3 contributions were fantastic. We -- very, very essential to  
4 the final results that we produced. And those were  
5 particularly in areas such as "let's make sure that what  
6 we're talking about here isn't theory, it's practical.  
7 People will participate."

8                   And so those pieces of information that we got  
9 in those stakeholder workshops ran over a series of four  
10 days, I believe, and were very well attended and very well  
11 participated in, and those very much coloured the final --  
12 final conclusions we came to. So they've -- I would say the  
13 stakeholder contribution has been quite important all the way  
14 through.

15 Q. So the stakeholders that were engaged, first of all,  
16 were consulted prior to the commencement of the DSM project  
17 and over the life of the plan; is that correct?

18 A. MR. ROBILLARD:                   Yes.

19 Q. And they reviewed the scope and the levels of evaluation  
20 proposed for each of the projects?

21 A. MR. ROBILLARD:                   Not at that level, no.

22 Q. No?

23 A. MR. ROBILLARD:                   It's a difficult enough chore  
24 to do that on a small team. Try to do that with a group of  
25 100. I think what one needs to do is to make sure that you

11:38

11:38

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 have an opportunity to get people's views into the process,  
2 and then you have to kind of steer a practical route through.

3 Q. You think the development of a consensus in that  
4 circumstance is important?

5 A. MR. ROBILLARD: I don't know that -- I mean, in  
6 my mind consensus means you have virtual universal agreement.  
7 And my experience in a group of 100 people, that's pretty  
8 hard to get to. I think getting to a large -- a  
9 majority-shared view is where we got to on most issues, and I  
10 think that's valuable.

11:39

11 Q. And is Marbek the independent auditor that's associated  
12 with the program, the so-called independent auditor? Do you  
13 have such a thing?

14 A. MR. ROBILLARD: If you're referring to the  
15 third-party evaluation, no, no, that would be a conflict of  
16 interest.

17 Q. How will that person or company be selected?

18 A. MR. ROBILLARD: In the program implementation  
19 plan, which is part of the documents located here -- or  
20 included here, there is a suggested procurement process, but,  
21 ultimately, that will be finalized once the program is  
22 approved and gets underway.

11:40

23 Q. Will stakeholders be part of the selection process for  
24 the independent auditor?

25 A. MR. REDDEN: We'll be going through a tender

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 process for EM&V.

2 Q. And in terms of the final selection of the people that  
3 respond to that, will stakeholders be involved in that?

4 A. MR. REDDEN: No.

5 Q. Thank you. Were stakeholders involved in the  
6 preparation of the filing of the DSM plan before the --  
7 before the Board?

8 A. MR. REDDEN: The plan was prepared with a  
9 stakeholder --

10 Q. Input --

11:41

11 A. MR. REDDEN: -- consultation and input, and  
12 then that plan was put into our general rate application.

13 Q. I take it when it was presented to them, it was  
14 presented to them for information rather than for sign-off?

15 A. MR. REDDEN: I think we discussed that  
16 earlier.

17 Q. Okay. And that's correct?

18 A. MR. REDDEN: That's correct.

19 A. MR. ROBILLARD: It might be worth adding that  
20 in the process of designing the programs, and we did say this  
21 a little earlier, there was very extensive consultation with  
22 people here in the Yukon who would be either the ultimate  
23 users of that program or would be the equipment or service  
24 providers of that service or energy efficiency technology.

11:41

25 So, to that extent, those reviews on

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 willingness to participate, capability to participate, that  
2 was all very carefully documented and is reported as part of  
3 the background to the plan.

4 Q. I know, Mr. Robillard, you have familiarity with the  
5 stakeholder engagement process that is required in the  
6 Ontario Energy Board with respect to DSM programs. Would  
7 you --

8 A. MR. ROBILLARD: I'm sorry, I actually haven't  
9 participated on that particular angle of the OEB. Judy would  
10 probably be more the expert there than me.

11:42

11 Q. Okay. Sorry. Ms. Simon, I know you have familiarity  
12 with that. Can you tell me whether or not the stakeholder  
13 engagement process that has been put in place for this  
14 particular plan, and what is contemplated for future plans,  
15 meets the minimum requirements of the Ontario Energy Board  
16 for stakeholder engagement?

17 A. MS. SIMON: The Ontario Energy Board  
18 doesn't have a general standard of stakeholder engagement.  
19 The guidelines that you put forward -- the guidelines for  
20 electricity, distributor conservation and demand management  
21 don't really set a standard for consultation other than an  
22 expectation that there will be consultation.

11:42

23 On the natural gas side, the gas lines, the  
24 guidelines that you also included, the demand side management  
25 guidelines for natural gas utilities --

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 Q. Yes.

2 A. MS. SIMON: -- there are very extensive  
3 requirements there, but that's a reflection of a very mature  
4 DSM program and a very different market situation. And so  
5 I'm not sure that all the -- I'm not sure that what's in  
6 those guidelines is particularly applicable to Yukon.

7 I think what we have in Yukon is a governance  
8 structure that works here. This was set up with a joint  
9 utility governance structure. And it's proposed that on a  
10 quarterly and annual basis, recommendations would be made by 11:43  
11 the staff of the two utilities to their senior management  
12 which will form the joint steering committee. And that is  
13 the oversight that's proposed.

14 In the Ontario situation, there's -- there's  
15 no analog and so stakeholders really are needed to provide  
16 additional oversight.

17 In the case of Yukon, the governance was  
18 established from beginning that way by the YUB, and it's as a  
19 joint effort and the joint governance has continued in that  
20 regard. 11:44

21 So I think what's being proposed here is a  
22 continuation of how this was formulated in the same way that  
23 the natural gas guidelines in Ontario are the same.

24 In 1993, when the DSM framework was created in  
25 Ontario, there was -- it was -- there was the -- the

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 stakeholders were instrumental in initiating that.

2 In this case, the YUB provided direction on  
3 how this should be established, and the utilities have set up  
4 a governance structure consistent with that.

5 Q. Well, is there some impediment to -- in the context of  
6 the governance structure of introducing the stakeholder  
7 engagement process similar to that which exists in Ontario?

8 A. MS. SIMON: I'm sorry, could you repeat the  
9 question?

10 Q. Is there some impediment that's built into the  
11 governance structure that you referred to that prevents the  
12 introduction of the stakeholder engagement process similar to  
13 what's been developed in Ontario?

11:45

14 A. MS. SIMON: I'm not aware of institutional  
15 impediment. However, I wouldn't recommend that the structure  
16 that's in Ontario would necessarily be applicable here.

17 A. MR. ROBILLARD: I think, also, my overarching  
18 comment was that, as far as my experience in all the other  
19 jurisdictions in Canada, it's been extensive here. It's been  
20 very good.

11:46

21 Q. But you would agree with me that the stakeholder  
22 engagement that has taken place up to this point in time,  
23 falls short of what is required under the minimum guidelines,  
24 at least in the natural gas area in Ontario?

25 MS. SEARS: I'm going to object at that

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 point. I'm not sure that we've established really what those  
2 are.

3 A. MR. ROBILLARD: No, again, I don't have Judy's  
4 knowledge or depth of knowledge of the specifics, but I have  
5 worked with both of the clients here through very similar  
6 process. And my experience, the level of stakeholder  
7 engagement here has been at least equal to what we had in  
8 those jurisdictions. In fact, perhaps more here.

9 A. MS. SIMON: What I would add is on the  
10 electricity side in Ontario, there has not been very much  
11 consultation at all that the local utilities have done. 11:47  
12 They're just starting now because it was an Ontario Power  
13 Authority directed process. And it's only in the last couple  
14 of years and the Ontario Power Authority has been asking  
15 electricity distributors to do DSM or CDM, as it's called on  
16 the electricity side in Ontario, since 2007.

17 But, really, the Ontario Power Authority has  
18 only created a consultation body beyond including the  
19 utilities in the last couple of years.

20 On the natural gas side, because of the -- 11:47  
21 because of the very formal process that's been established  
22 with an audit done of the evaluation report and a setup of a  
23 technical advisory group, the actual consultation that now  
24 takes place on the natural gas side with the group of  
25 stakeholders that traditionally interveners in regulatory

## YECL/YEC DSM PANEL

Cross-examined by Mr. Janigan

1 proceedings before the Board has been reduced to two meetings  
2 per year to just find out for progress reports simply because  
3 of the way in which the audit process has been -- has been  
4 structured.

5 The the level of consultation from that  
6 perspective that's taken place here to prepare a DSM plan has  
7 been, you know, much more extensive from that point of view.

8 The EM&V is somewhat comparable, and there's  
9 typically -- the gas utilities are just now starting to have  
10 meetings to ask for input on program design rather than just 11:49  
11 input on evaluation. So you're really asking to compare  
12 apples and oranges.

13 Q. Would you be satisfied with that level of stakeholder  
14 engagement that's been proposed in the Yukon if you were  
15 advising a stakeholder client in Ontario?

16 A. MS. SIMON: Yes.

17 A. MR. ROBILLARD: Yes.

18 Q. And just following up on that question, the stakeholder  
19 guidelines for natural gas are still being adhered to by both  
20 the companies and stakeholders in Ontario? 11:49

21 MS. SEARS: How is that relevant here?

22 MR. JANIGAN: Because she just indicated  
23 they've only had two meetings per year.

24 MS. SEARS: Sir, what is happening with  
25 them and whether they're being adhered to I really -- we're

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1 really reaching beyond how that's relevant to the DSM plan  
2 that's before this Board.

3 MR. JANIGAN: I'll leave that question.

4 Q. I wonder if it's possible -- if you could undertake to  
5 provide a copy of those DSM guidelines for engagement of  
6 natural gas in Ontario?

7 MS. SEARS: No, that is an absolutely  
8 inappropriate undertaking, sir.

9 MR. JANIGAN: Why is that?

10 MS. SEARS: Well, how is it relevant? 11:50

11 MR. JANIGAN: Because we've just been  
12 speaking on that, on that same issue, and doing comparisons  
13 to the Yukon situation. If you wish, we can refer to it in  
14 the context of our argument, but it seems to me it would be  
15 best on the record.

16 MS. SEARS: First of all, I'm not sure that  
17 it was appropriate for you to have brought your snippets in  
18 the first place, but if you had wanted to talk about that  
19 one, then surely you would have provided that one in advance  
20 as well. 11:50

21 My position, Mr. Chairman, is that it's not an  
22 appropriate undertaking.

23 THE CHAIR: My preliminary views are that  
24 it is not a appropriate undertaking as well, but I'd like to  
25 defer to our legal counsel if they could advise on that or

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1 confirm that that ruling would be an appropriate ruling.

2 MS. BENTIVEGNA: Mr. Chairman, I'm not going to  
3 comment on the appropriateness of your ruling. That's the  
4 Board's prerogative.

5 However, I can provide advice that basically  
6 the -- even though it's been referred to by the experts  
7 asking for the actual document in Ontario is not relevant to  
8 this proceeding considering that there's a plan here before  
9 the Board and that that's the plan that's being asked to be  
10 considered.

11:51

11 THE CHAIR: So I would rule that it is an  
12 inappropriate request and that you do have information on the  
13 record from the expert witnesses that does discuss generally  
14 the issue. So you can use that in your argument if you so  
15 chose.

16 MR. JANIGAN: Thank you, Mr. Chair.

17 Q. MR. JANIGAN: And my questions now are  
18 directed to the YEC part of the panel. Does YEC adopt all of  
19 the IR responses provided by YECL in this current proceeding  
20 on DSM as their own?

11:52

21 MR. LANDRY: May I just interject there  
22 to -- firstly, I think what we have to realize is that this  
23 is a bit of an odd situation where we have both people here  
24 on the direction of the Board. I'm not sure adopting the  
25 evidence for Yukon Energy -- I'm not sure I understand the

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1 question.

2 My friend has already gone through in direct  
3 the key issues, I think, but going to that level of  
4 specificity, I can tell you I'm uncomfortable with because  
5 I'm not sure what's it will be used for. If it's going to be  
6 used for the purposes of what is being sought here by Yukon  
7 Electrical, then obviously from my perspective, I object to  
8 that. I'm not sure how it's relevant to that.

9 Secondly, if it's going to be used at a later  
10 date to well deal with something, I obvious to that, too. 11:53  
11 There are an extensive number of IRs on DSM, and that's a  
12 very broad question, and I think it's inappropriate.

13 MR. JANIGAN: Mr. Chair, the panel has been  
14 produced to give evidence together with YECL today on the DSM  
15 program as a whole. I'd like to know, insofar as it hasn't  
16 offered evidence of its own, whether or not it agrees with  
17 the evidence that's been offered by YECL with respect to both  
18 -- that which has been offered in the application and as well  
19 with respect to the interrogatory responses. If not, what  
20 are they here to testify about to today? 11:53

21 MS. SEARS: Well, I'm going to speak up at  
22 this point, and Mr. Landry can pipe up as well afterwards.

23 Surely I think it's quite evidence that the  
24 DSM plan materials that have been produced as part of this  
25 application by Marbek are representative of the joint plan,

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1 and it is the joint plan that both of the utilities have  
2 participated in. So, you know, that's a -- those are  
3 documents that are applicable to both the utilities.

4 As for Yukon Electrical's particular responses  
5 to IRs, those were directed to Yukon Electrical, and that  
6 would be the evidence of Yukon Electrical.

7 THE CHAIR: Ms. Bentivegna, do you want to  
8 provide any advice or do you want to withdraw your request,  
9 Mr. Janigan?

10 MR. JANIGAN: Well, I guess my question would 11:54  
11 probably be: What elements of this particular application  
12 does YECL (sic) accept and agree with and believe to be true?  
13 If they don't wish to extend that to the IR responses, that's  
14 fine, we understand that.

15 If it's only to the -- only with respect to  
16 the evidence that's been offered in the application, that's  
17 fine. We understand that as well. But we have to know one  
18 on the other.

19 We have witnesses and they're on the stand  
20 testifying without an evidentiary backup, and we'd like to 11:55  
21 know what that is.

22 THE CHAIR: Mr. Landry, would you like to  
23 try to address that?

24 MR. LANDRY: Sure, I'll try to address it,  
25 sir. But it is a joint plan. The parties are here together

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1 to provide the joint plan pursuant to the direction of this  
2 Board. And, of course, in terms of the plan, you've heard --  
3 and you can see that Yukon Energy and Yukon Electrical are  
4 aligned in that.

5 The application that is before you relates to  
6 a revenue requirement issue. IRs, some of the application in  
7 the context of YECL putting together is YECL-related. I  
8 don't think it's appropriate nor do I think it's possible to  
9 be going through the application and the IRs and figuring  
10 which is YECL-related application and what is the plan and 11:56  
11 what do they endorse and what they don't they endorse.

12 It's going to take a long process, even if you  
13 think that's relevant, which in my submission it's not  
14 relevant to the issue. The question is: If he wants to ask  
15 questions about YECL in terms of their application, he can do  
16 that. He can't ask Yukon Energy about YECL's application.  
17 That's why I'm here.

18 MS. SEARS: Sorry, just one last thing to  
19 mention. It's not complicated to understand what is the plan  
20 and what is the application for the 2013-to-2015 general rate 11:56  
21 application of Yukon Electrical, in my submission. And  
22 that's the distinction that we're drawing here.

23 MR. JANIGAN: Okay. But what is YEC  
24 testified to today? Is their testimony confined to their  
25 answers to questions put to them about the plan? Do they

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1 have any evidence that they are prepared to accept as their  
2 own for the purpose of cross-examination?

3 If it's simply on the basis that they're here  
4 to answer questions on the plan, then we'll go forward on  
5 that basis. But it's very unusual to have somebody on an  
6 evidentiary panel that has no evidence before the Board, is  
7 simply there to answer questions.

8 MS. BENTIVEGNA: Mr. Chair, maybe I can assist  
9 the Board. I think what's been stated and from my  
10 understanding and what's been suggested to the Board is that 11:57  
11 YEC is here to speak to the plan, and it's a joint plan  
12 between YEC and YECL.

13 The specifics as to the revenue requirement  
14 and what is being forecast for the DSM program, if it's  
15 accepted by the Board, that is what YECL has responded to in  
16 their IRs and in their evidence which may be further to those  
17 IRs or their application.

18 THE CHAIR: And I would -- I would have,  
19 even without Ms. Bentivegna's advice, I probably would have  
20 made the same conclusion. 11:58

21 MR. JANIGAN: Okay.

22 Q. With respect to, I'd like to refer to a response that --  
23 to YUB-YEC 120(f).

24 A. MR. MORRISON: YECL?

25 Q. MR. JANIGAN: In YEC's 2012-2013 GRA.

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1 MS. SEARS: It's not before the Board, sir.

2 MR. JANIGAN: Okay. That's fine, I can move  
3 on to another question here.

4 THE CHAIR: So just before you do, just a  
5 little housekeeping, I guess, two questions. First of all, I  
6 just wanted to mark this one exhibit from the demand side  
7 management guidelines for natural resources for Ontario,  
8 which we did not mark yet, which I believe should be marked  
9 as Exhibit C-3-18. So I have a nod so it's so marked.

10 **EXHIBIT C-3-18 - DOCUMENT RE DEMAND**

11:59

11 **SIDE MANAGEMENT GUIDELINES FOR NATURAL**

12 **RESOURCES FOR ONTARIO**

13 THE CHAIR: And I guess the other question,  
14 I'm just noting the time. We can continue to go on for a  
15 bit, if you like, or you can make a decision if you would  
16 like to recess here. But I'll leave that in your hands,  
17 Mr. Janigan.

18 MR. JANIGAN: I'll push ahead, Mr. Chair, and  
19 hopefully will not be too much over the scheduled noon limit.

20 Q. In its order of 2013-01, the Board directed YEC to track  
21 all DSM O&M-related costs in a deferral account and hold all  
22 DSM-related capital costs in work in progress until the Board  
23 approves a final DSM policy for YEC. And that was in Order  
24 2013-01, the Reasons For Decision paragraph 367.

12:00

25 In its current application, YECL lists the

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1    approvals it is seeking from the YUB on pages 1.1 and 1.2.  
2    Nothing is mentioned regarding approval of a DSM policy. Has  
3    YEC applied for approval of a DSM policy?

4    **A.   MR. REDDEN:**                    **Are you referring to Yukon  
5    Electrical?**

6    Q.   That's correct?

7    **A.   MR. REDDEN:**                    **You refer to YEC which would be  
8    Yukon Energy Corporation.**

9    Q.   I'm sorry, I meant Yukon Energy Corporation, yes?

10   **MS. SEARS:**                            Which one? 12:01

11   **Q.   MR. JANIGAN:**                    Yukon Energy Corporation. I'm  
12    sorry.

13   **A.   MR. REDDEN:**                    **But this is Yukon Electrical's  
14    revenue requirement application. If you're referring to our  
15    application for Yukon Electrical --**

16    Q.   Yes.

17   **A.   MR. REDDEN:**                    **-- we have costs for DSM in a  
18    cost to date in a deferral account that we are seeking  
19    approval of as well as our costs related to DSM in our test  
20    periods, 2013 through '15, that that's where we're asking for  
21    approval of DSM-related costs.** 12:01

22   **MR. JANIGAN:**                            I might be able to eliminate  
23    some of this questioning.

24    Effectively, as I understand YEC's presence  
25    here today, it is to testify to the joint plan and the joint

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1 plan only. So questions concerning YEC's own revenue  
2 requirement associated with DSM are not particularly  
3 appropriate at this stage.

4 Would that be correct, Mr. Chair?

5 THE CHAIR: I would say that would be  
6 correct.

7 MR. JANIGAN: Okay. In that case, Mr. Chair,  
8 those are all my questions for this panel, and thank you for  
9 your patience. Everyone have a safe trip home.

10 THE CHAIR: Thank you very much,  
11 Mr. Janigan, and thank you for your participation in all  
12 three aspects of this hearing.

12:02

13 So what I would propose -- actually maybe just  
14 -- I'll try to get a sense of the -- there's basically three  
15 organizations left to hear from in the afternoon. Is there  
16 any way that I can get sort of a sense of the timing of at  
17 least Mr. Maissan's and the Yukon Conservation Society's  
18 requirements for time? And again, I don't want to -- I'm not  
19 going to hold you to it; I just want to get just a general  
20 sense because I'll decide if I'm going to shorten the lunch  
21 break or keep the lunch break the same.

12:03

22 MR. MAISSAN: I would expect about half an  
23 hour. Yesterday I was wrong by a factor of two.

24 THE CHAIR: We'll just double --

25 MR. MAISSAN: In any case, it certainly won't

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1 be more than an hour. And I think there's a better chance of  
2 staying within the half hour than yesterday's hour.

3 THE CHAIR: Thank you very much,  
4 Mr. Maissan.

5 Ms. Middler?

6 MS. MIDDLEL: I have 15 questions.

7 THE CHAIR: So give you an hour, two hours?

8 MS. MIDDLEL: Sure, an hour maybe, hopefully.  
9 Yeah.

10 THE CHAIR: Okay. And Ms. Bentivegna,  
11 just --

12 MS. BENTIVEGNA: We think about an hour,  
13 Mr. Chair. So I would suggest that we shorten the lunch  
14 break.

15 THE CHAIR: That's what I'll -- just  
16 because I'll just double all those times because I don't  
17 think anybody took into account the responses from the panel,  
18 how long they might take. So we'll resume at 1:00 if that's  
19 fine, and we'll see you then.

20 (Proceedings adjourned at 12:04 p.m.)

21

22 PROCEEDINGS ADJOURNED TO 1:00 p.m.

23

24

25

12:03

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 Volume 4

2 November 7, 2013

3 P.M. Session

4

5 (Proceedings recommenced at 1:00 p.m.)

6 THE CHAIR: Please be seated.

7 Just a couple of things. I just want to  
8 mention that Bob Laking has joined us. He's not on the  
9 Panel, as you know from earlier this week. He had a bit of  
10 medical issue, but he looks a lot better today than he did  
11 the last couple of days that I've seen him. So I'd like to  
12 welcome Bob to the hearing.

13:00

13 And I will ask Ms. Sears if she has any  
14 preliminary matters she wants to bring.

15 MS. SEARS: No, sir.

16 THE CHAIR: So I will now turn the mic over  
17 to Mr. Maissan if you can proceed, thank you very much.

18 **MR. MAISSAN CROSS-EXAMINES THE PANEL:**

19 Q. Yes, I have a few follow-up questions from the  
20 examination earlier today. And if I understood correctly,  
21 panel YEC supports the DSM plan as filed; is that correct?

13:01

22 A. MR. MORRISON: That's correct.

23 Q. Thank you. When YECL was presented with IRs on the DSM  
24 plan, did YEC provide any assistance with answering those  
25 IRs?

## YECL/YEC DSM PANEL

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1     **A.   MR. MORRISON:**                    **Yes, we did.**

2     **Q.**    If that is the case, I guess, can we assume that YEC  
3     would stand behind or support or adopt that material provided  
4     in the IRs?

5     **A.   MR. MORRISON:**                    **You asked me about three**  
6     **different things there, some of which I will say yes and some**  
7     **of which I will not say yes to.**

8     **Q.**    Okay.

9     **A.   MR. MORRISON:**                    **So yes, we do agree with the**  
10    **IRs related to DSM. We support -- we are -- we have a**  
11    **partnership on the DSM plan, and we support those IRs.**

13:01

12    **Q.**    Yes. What I was asking for was: For that particular  
13    information that you provided to YEC -- YECL you would  
14    obviously stand behind that; correct?

15    **A.   MR. MORRISON:**                    **Of course we would, yes.**

16    **Q.**    Yes. Thank you.

17                    This is a question for the whole panel. We  
18    were speaking of costs in this GRA. Now, YECL has costs  
19    they're applying for as part of their GRA.

20                    If the Board approves this plan and it becomes  
21    part of your costs, will though costs be recovered along with  
22    other approved costs through a rider until a Phase 2 hearing  
23    is held?

13:02

24    **A.   MR. REDDEN:**                    **That's our expectation, is that**  
25    **those costs are included with the rate application that would**

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 **be addressed for recovery by a rate rider --**

2 Q. All right. And do those rate riders apply to all  
3 customer classes, including the industrial class?

4 **A. MR. REDDEN: That's correct.**

5 Q. Thank you. In regards to cost savings, the plan applies  
6 to diesel-served communities as well as communities on the  
7 integrated system. Am I correct?

8 **A. MR. REDDEN: That's correct.**

9 Q. So if a customer participates in the DSM program, saves  
10 a kilowatt hour of electricity, reduces their bills, this  
11 also reduces the cost for diesel for Yukon Electrical in that  
12 community; is that right?

13:03

13 **A. MR. REDDEN: Those costs related to fuel  
14 that Yukon Electrical and customers bear would be reduced.**

15 Q. Thank you. And if somebody on the integrated system  
16 participates and saves a kilowatt hour on their electricity  
17 bill, then presumably it would reduce your wholesale  
18 purchases by a corresponding kilowatt hour?

19 **A. MR. REDDEN: That's correct.**

20 Q. Right. And, Mr. Morrison, if I correctly recall the YEC  
21 GRA -- and exact numbers are not required here -- but I  
22 recall that forecasted -- based on forecasted 2013  
23 electricity loads, any new load would incrementally require  
24 in the order of about 50 percent diesel energy. Am I correct  
25 in that recollection?

13:04

## YECL/YEC DSM PANEL

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1 A. MR. MORRISON: You know, subject to check.

2 Q. Sure.

3 A. MR. MORRISON: I don't know.

4 Q. And nothing more accurate than that is required. So if  
5 your wholesale sales went down by a kilowatt hour, then some  
6 portion of that kilowatt hour would probably result in some  
7 reduced diesel generation and, therefore, some reduced diesel  
8 generating costs as well?

9 A. MR. MORRISON: Well, Mr. Chair, I think the  
10 question's a little more complicated than that. I'm not  
11 probably the right person to answer it. But the DSM savings  
12 that are in the plan certainly would eliminate generation on  
13 the grid of those kilowatt hours or gigawatt hours.

13:05

14 But, you know, I'm not -- I'm not trying to --  
15 I'm not exactly sure of the question that you're asking me,  
16 and we are kind of using some fairly loose numbers. So I  
17 just want to be a little careful about that, that's all.

18 Q. Sure. What I was getting at basically is that savings  
19 -- a reduction in sales means a reduction in generation which  
20 some portion of it, whatever the percentage may be, is  
21 probably a reduction in diesel generation, so savings in  
22 costs.

13:05

23 So am I correct, then, in believing that as  
24 soon as the DSM program is implemented and customers start  
25 realizing savings, then the savings also begin to flow

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 through to both Yukon Electric and Yukon Energy through  
2 reduced costs and ultimately back to ratepayers?

3 A. MR. MORRISON: Well, that's generally the  
4 system.

5 A. MR. REDDEN: Yeah, I would add there,  
6 Mr. Maissan. So you're right that this will offset  
7 generation requirements, so the associated costs with respect  
8 to generation, and then there is also an offset -- a  
9 reduction in sales, then, of revenue for --

10 Q. Yes, it has to be netted out. Yes, accepted.

13:06

11 Right. Turning to my own original questions,  
12 then, I'll start with a question I started to ask yesterday,  
13 which was inappropriate for the panel at that time. And I  
14 was referring to the response to Leading Edge YECL 24(c),  
15 item (iii), which asked: (as read)

16 "Did any of the parties included in the  
17 list above indicate to the utilities at  
18 any time that they wished to see a more  
19 aggressive DSM plan?"

20 And YECL responded saying that: (as read).

13:07

21 "Input of that nature was not  
22 recorded."

23 And the question I wanted to ask was -- I wasn't sure what  
24 that really meant -- did that mean that no party suggested  
25 they wanted a more aggressive DSM plan or simply that that

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 information -- that request if made was not recorded?

2 A. MS. CARLSON: I can answer that for you,  
3 Mr. Maissan.

4 During our consultation process, we, for the  
5 most part, discussed with stakeholders technologies and/or  
6 measures that would be implemented into the DSM programs  
7 which then inform the greater plan. Those measures were  
8 tested against a number of different desires from  
9 stakeholders, everything from extremely aggressive programs,  
10 or extremely aggressive measures, extremely aggressive  
11 technologies, and we took all of that information and that is  
12 how we ended up formulating the plan.

13:08

13 Now, input speculative to the actual targets  
14 and/or aggressiveness of the plan as a whole was never  
15 recorded.

16 Q. So requests could have been made, for instance, for  
17 programs aimed at peak reduction, but you don't recall those,  
18 or that kind of request would not have been recorded?

19 A. MS. CARLSON: Discussions related to measures  
20 that addressed peak programs were recorded especially through  
21 the achievable potential workshop that Mr. Robillard spoke to  
22 earlier today. And those factored into the discussions and  
23 in the final determination of the program design.

13:08

24 Q. Thank you. Can someone perhaps tell me what the  
25 avoided -- I forgot the correct terminology now -- the

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 avoided cost of new generated energy is that was used as sort  
2 of the bar for the purposes of this plan?

3 **A. MS. WHITEHEAD:** We used an avoided cost of new  
4 supply. So a blend of avoided cost and supply of 21 cents.

5 **Q.** 21 cents. Thank you. In the plan in Section 1.2.1, the  
6 2010 residential consumption is estimated to be 146 megawatt  
7 hours. And I've wondered whether there was similar  
8 information or updated information available for 2012.

9 **A. MS. CARLSON:** We can provide updated 2012  
10 numbers related to overall residential consumption, but not  
11 as in the format that it's been broken down in this study.

13:10

12 **Q.** All right. Reverting to the --

13 **THE CHAIR:** Is that an undertaking to do  
14 that?

15 **A. MS. CARLSON:** Would you like me to provide  
16 that information?

17 **Q. MR. MAISSAN:** That would be helpful, sure.  
18 Thank you. Sorry, let me follow up there. You said you  
19 could provide an estimate -- a comparable estimate for 2012  
20 comparable to the report or you could not?

13:10

21 **A. MS. CARLSON:** No, not comparable to the  
22 report. I can provide you just consumption numbers for the  
23 residential class for 2012.

24 **Q.** That's probably in the application somewhere as actuals.

25 **A. MS. CARLSON:** It is, yes.

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 MR. MAISSAN: No undertaking required,  
2 Mr. Chair.

3 Q. Reverting to the numbers in the plan, the combination of  
4 domestic hot water and electric heat were both estimated at  
5 about 19 percent of that residential consumption, so a total  
6 of 38 percent of the residential energy.

7 And I was wondering if you have in this plan  
8 any programs to shift load from any of these loads from  
9 nighttime to daytime?

10 A. MS. CARLSON: No, we do not have any programs 13:11  
11 that specifically address shifting that load from daytime to  
12 nighttime.

13 Q. If such a program were to be considered, would you agree  
14 that these loads that shift load from daytime to nighttime  
15 might reduce some daytime fossil fuel consumption and might  
16 reduce some peak loads for benefits to the whole system?

17 A. MR. MORRISON: Sorry, Mr. Maissan, say it  
18 again, if you don't mind.

19 Q. I was asking if you would agree that if we could shift 13:12  
20 some of these daytime hot water and space heating loads from  
21 daytime to nighttime, might there be potential savings to  
22 reduce diesel generation in the daytime that could be met,  
23 say, with hydro at night and, potentially in reducing peak  
24 loads, some capacity savings as well?

25 A. MR. MORRISON: So, Mr. Chair, to try to be

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Cross-examined by Mr. Maissan

1 helpful, I'm going to ask Mr. Robillard to maybe talk in a  
2 general way about the concept that Mr. Maissan is raising.

3           And the other half of it, I don't necessarily  
4 disagree with what he's trying to say, but when you look  
5 at -- when you look at modelling the load, it's a little more  
6 complicated than that, and I don't think I'm really --  
7 without -- I don't think it's really helpful for me to try to  
8 answer that is what I -- I think somebody else would have to  
9 answer it.

10           But in general terms I understand what he's  
11 trying to say. I don't totally have a disagreement there,  
12 but I really can't give him a specific answer, but perhaps  
13 Mr. Robillard can help him out.

13:13

14 A. MR. ROBILLARD:           Well, I think there's two parts  
15 to what you're saying. One is as it might impact on the  
16 system, so I think I need to be kind of cautious on that. I  
17 don't think you've asked it yet, but I assume we're kind of  
18 heading towards why isn't there a program element in there  
19 which is perhaps more where I could speak to, but I don't  
20 know if that's even where you're going, so I better stop and  
21 confirm with you.

13:14

22 Q. Well, ultimately, that would be where I was leading,  
23 yes. So perhaps you can deal with each of those sort of  
24 perspectives in turn, step 1. And then step 2,  
25 considerations why, if there aren't such programs, what your

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 views are.

2 A. MR. ROBILLARD: I think that I would feel  
3 competent to speak to the program side of it. I wouldn't  
4 presume to talk about the system because that's complex and  
5 that's not where -- or how I was engaged in the process.

6 On the program side, the objective was to, as  
7 you've heard before, is to get a program rolled out Q2.

8 It was also our objective to recognize that we  
9 wanted to roll out a program that is -- it's going to be --  
10 I'm sure you're familiar with this, or the hockey stick shape 13:15  
11 to it. It takes a while to ramp up.

12 During that ramp-up, we expect there to be a  
13 lot of learning going on. So we want to start with the stuff  
14 that we know we're going to do a really good job on, because  
15 the last thing we want to do is mess up by taking on  
16 something that's too complex too soon. In time we'll have  
17 that ability, but we've got to build that up.

18 So that was one of the important premises.

19 When we look at something like load shifting,  
20 and particularly, I'm going to presume and jump ahead to 13:15  
21 things like electrothermal storage and things like that,  
22 which, there's no question, technology works. But, from a  
23 program perspective, we don't have the rate structure in  
24 place yet to do that. So we didn't want to get into things  
25 that might delay our ability to roll those programs out.

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Cross-examined by Mr. Maissan

1                   We know that there's other research in terms  
2 of its overall applicability here to the electric space heat  
3 load because there's more homework that needs to be done here  
4 to be clear about the magnitude of that electric space heat  
5 load.

6                   We know from the residential end use survey  
7 the number of households etcetera that have electric space  
8 heating equipment installed, but we don't know exactly how  
9 much it contributes to the overall space heating load because  
10 many of those facilities have wood stoves and other things in 13:16  
11 there. And this, by the way, is a really, really common  
12 problem.

13                   I've spent 15 years trying to sort some of  
14 this stuff out with B.C. Hydro and some of the really  
15 smartest brains there, and it's a moving target. It moves.

16                   So that's a long-winded way to say there's  
17 more considerations that need to be in place before that can  
18 roll out, and we didn't want to do something that was going  
19 to slow down the process of getting a good initial suite of  
20 programs out onto the market. 13:16

21 Q.   So, conceptually, you would agree that perhaps those  
22 sorts of programs will be beneficial at some point in future  
23 in Yukon, applicable and beneficial?

24 A.   MR. ROBILLARD:                   I think particularly the  
25 thermal storage may very well be applicable going forward.

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1 Again, there's other ramifications in terms of what impact  
2 that might have on a small system like this, and I understand  
3 at the distribution level. I don't know any of those  
4 implications and, obviously, they would have to be researched  
5 before I could say definitively.

6 A. MS. CARLSON: And just to add to that. I  
7 think, not unlike the discussion we had this morning related  
8 to low income programs, the utilities look at peak shifting  
9 or peak demand programs as part of DSM. Just in this  
10 iteration of the DSM plan, again the walk-before-you-run  
11 analogy being utilized here, we want to get our feet going,  
12 we want to get our staff trained, we want to ensure that we  
13 understand our market. And that, yes, in the future, we  
14 would certainly look at, and, again, through the EM&V  
15 process, demand response and demand shifting programs.

16 Q. Thank you. In the commercial sector of the plan, I see  
17 that the 2010 estimate for energy -- electrical energy  
18 consumption is 166 I think it's thousand megawatt hours, and  
19 it's indicated that about 22 percent of this would be  
20 heating, ventilating and air-conditioning. And I wondered if  
21 you had an idea of what portion of that would be electric  
22 heating as opposed to ventilating.

23 A. MR. ROBILLARD: It would be -- somewhere in the  
24 process of building up the CPR there would be an estimate in  
25 there.

13:17

13:18

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 Q. There would be an estimate in there?

2 A. MR. ROBILLARD: And I think it would be  
3 reported in the commercial conservation potential report.  
4 It's in there somewhere.

5 Q. Yes. I wondered if we were speaking of load shifting,  
6 presumably it's easier to deal with larger individual  
7 customers than a lot of smaller customers, such as  
8 residential might be. Might this area of the commercial  
9 sector be an area where, say, a load shifting program could  
10 start? Would that be easier to start there than in the  
11 residential sector?

13:19

12 A. MR. ROBILLARD: I think I'd have to say I  
13 honestly don't know the answer to that until we did a little  
14 more homework on it, because while I agree that the  
15 transaction costs on a larger load, that makes it more  
16 attractive. On the other hand, sometimes when I get into  
17 these commercial buildings, it depends on what the specific  
18 HVAC configuration is, I might be getting myself into other  
19 considerations that make it more complicated.

20 On the first part, yes, when I can deal with  
21 one transaction for a much larger load, typically that makes  
22 it much more attractive. In terms of the specifics here, I'd  
23 have to get my commercial engineering guys in to actually  
24 work our way through what the system configurations are to be  
25 able to answer that better.

13:19

## YECL/YEC DSM PANEL

Cross-examined by Mr. Maissan

1 Q. Thank you. Given that your report indicates that an  
2 increasing percentage of new home or new residential unit  
3 construction, homes and condominiums, are installing electric  
4 heat, I wondered if you had given any consideration to  
5 programs that might proactively deal with the new  
6 construction, sort of trying to get in at the front end as  
7 opposed to doing retrofits afterwards?

8 A. MS. CARLSON: I think when we started looking  
9 at the new home construction component related to space  
10 heating, we felt that the new City of Whitehorse plumbing and 13:21  
11 building standards -- bylaws, sorry, are quite stringent and  
12 we're addressing that issue. So being aware of not  
13 duplicating efforts and wanting to be, of course, cost  
14 effective were our programs, we felt that that addressed that  
15 issue.

16 A. MR. ROBILLARD: And if I could just add. As  
17 you recall, the residential program as currently proposed  
18 includes two -- or includes a pilot to look at cold-climate  
19 heat pump and ground-source heat pump. And, of course, as  
20 you are I'm sure well aware, those are potentially far more 13:21  
21 efficient.

22 As you know, electrothermal storage doesn't  
23 save storage, it just moves it. It has a certain value  
24 whereas there is an opportunity through some of these new  
25 technologies to reduce the amount of energy. So those are --

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Cross-examined by Mr. Maissan

1 those are all, I think, potential advancements in how we heat  
2 our homes going forth, and I think the idea is over time to  
3 gain better insight into what is most appropriate here.

4 Q. Right. And I look forward with great anticipation to  
5 these pilot projects. Have you given any thought to how you  
6 select participants for such programs?

7 A. MR. ROBILLARD: There is some preliminary  
8 recommendations that's contained in the PIP and in the  
9 program plan, and obviously in the next stages of this, in  
10 the program preparation phase, that's when those kinds of  
11 areas would be finalized.

13:22

12 Q. Thank you. I've heard with interest something about  
13 Yukon Electrical working with the City of Whitehorse on the  
14 district's heating system. Are projects of such scale  
15 outside of your DSM plan?

16 A. MR. REDDEN: That is a separate  
17 collaborative study that is occurring outside of this DSM  
18 plan.

19 Q. And should such programs come to fruition, would they  
20 perhaps influence your programming in demand side management?

13:23

21 A. MR. REDDEN: I guess, as the system  
22 evolves -- you know, that one is not necessarily -- it's not  
23 a direct electrical system-related projected but it can have  
24 a bearing relating to -- if it's displacing electric heat,  
25 for example.

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1                   As the system evolves and as our demand side  
2 management plan and program go forward and we're continually  
3 evaluating what the situation is, then it would certainly be  
4 one of the factors for consideration.

5 Q. Does the demand side management program currently  
6 include any programs for large customers, such as the City of  
7 Whitehorse, to manage their loads, again, for a time shifting  
8 kind of basis, i.e., perhaps moving water pumping to a lower  
9 demand time? There's typically some flexibility in some of  
10 these kinds of large loads, or is that some of the one-off  
11 kind of project that would be dealt with separately outside  
12 the plan?

13:24

13 A. MS. CARLSON: I think going back to the fact  
14 that the program again is anticipated to be available for all  
15 ratepayers, which would include the City of Whitehorse.  
16 However, we are not anticipating in this iteration of the DSM  
17 plan to have any programs that address load shifting. So  
18 that would not be the case.

19 Q. Thank you. Based on what you've said so far, can I  
20 conclude, then, that right now you're not anticipating any  
21 programs that would focus on decreasing loads in summertime  
22 when we have an increasing portion of hydro on the system and  
23 at times still hydro surplus?

13:24

24 A. MS. CARLSON: Just to clarify, are we talking  
25 about a seasonal type of load shifting?

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Cross-examined by Mr. Maissan

1 Q. I'm talking about not load shifting at all but just  
2 increasing load at times when we have higher hydro  
3 availability on the system, i.e., if you could encourage  
4 summer-only loads? You know, have there been any thoughts  
5 given to such programs?

6 A. MR. REDDEN: Maybe I'll talk about the solar  
7 thermal project, exactly what that one is, is that during the  
8 summer months -- and that's when solar energy is stored in  
9 the ground and then recovered in the wintertime for meeting  
10 winter space and domestic hot water loads. I mean, I guess, 13:25  
11 in theory, if you wanted to take one of the highest grades of  
12 energy in electricity form and store that in the ground,  
13 that's taking a higher form of energy and storing it in sort  
14 of the lowest grade, that's possible.

15 But, you know, the solar thermal district heat  
16 project is looking at a seasonal project that stores at one  
17 part of the year for use later in the year.

18 Q. So you're not doing any promotional of electric  
19 barbecues or anything just to increase summer loads?

20 A. MS. CARLSON: Not as part of the DSM program, 13:26  
21 no.

22 Q. Not as part of the DSM program. Thank you. I'm aware  
23 that Yukon Energy has a secondary sales program for larger  
24 customers, and I believe those are still active, are they  
25 not, Mr. Morrison, or some of them are?

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Cross-examined by Ms. Middler

1     **A.   MR. MORRISON:**                    **Yes, that's correct.**

2     **MR. MAISSAN:**                         Thank you. That concludes my  
3     questioning, Mr. Chair.

4     **THE CHAIR:**                            Thank you very much,  
5     **Mr. Maissan.**

6                         As soon as Mr. Maissan has vacated the chair,  
7     we'll move to the Yukon Conservation Society.

8                         Ms. Middler, you can proceed whenever you're  
9     ready.

10    **MS. MIDDLEL:**                         Thank you.

13:27

11    **MS. MIDDLEL CROSS-EXAMINES THE PANEL:**

12    **Q.**    YCS acknowledges that it would seem to be  
13    counterintuitive for utilities to spend money to take action  
14    to reduce their sales, which has a been referred to by the  
15    Board as perverse economics.

16                         Why that in mind, what does DSM have for the  
17    utilities? In other words, why are you participating in a  
18    program that's ultimate goal is to reduce your energy sales  
19    and as a result of shareholder profits?

20    **A.   MR. REDDEN:**                    **Well, from Yukon Electrical's**  
21    **perspective, I mean, we're continually looking at ways in**  
22    **helping customers reduce their electricity costs, looking at**  
23    **ways of reducing consumption.**

13:28

24                         From the number side that you talk about, the  
25    **strange economics, well, you know, if we're selling less, we**

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Cross-examined by Ms. Middler

1 are also having to purchase less energy to meet the  
2 requirements of Yukon Electrical's customers. And if we can  
3 help avoid driving the next development of generation units  
4 that, you know, we anticipate to be costing more than what  
5 our present wholesale purchase cost of electricity is, that  
6 will help offset an increase in the cost of purchase --  
7 purchased electricity by Yukon Electrical.

8 A. MR. MORRISON: Mr. Chair, if I could just  
9 add, as part of Yukon Energy's resource and system planning  
10 process, we look at all of the various options there are for  
11 bringing new generation into the system to meet growing  
12 loads. And from the start of our resource planning process  
13 in 2003, we have looked at the various options, and we have  
14 had great discussion around this table and in front of this  
15 Panel about all of those.

13:29

16 And we look at the what the economics are and  
17 what the technological constraints are of all of the  
18 different options, and we also try to make sure that we're  
19 doing what's is best in the ratepayers' or consumers'  
20 interest. What are the options that we put forward?

13:29

21 We have talked extensively about the  
22 requirement to have a basket of options available in the  
23 Yukon so that we can employee that basket of options to make  
24 sure that ratepayers are best served and in the most economic  
25 light. And demand side management is one of them.

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1           As we've talked about, it will be a lower-cost  
2 option than some other options of bringing new generation  
3 onto the system, this is reducing the requirement to bring  
4 that new generation on, and it's doing it at a more  
5 cost-effective level.

6           So we look at it -- for us it's not perverse  
7 economics. I'm not sure who she was blaming for saying that,  
8 but we look at it as very consistent with our economic  
9 analysis of all the various options. If it's cheaper to  
10 reduce the consumption than bring a higher-cost option onto  
11 the system, then it just makes perfect sense for us.

13:30

12 Q. Thank you. In your IR response YCS-YECL 7-6 to our  
13 question of whether this DSM plan includes any actual demand  
14 or load management to maximize system efficiency by shaving  
15 the peaks and filling the valleys, you state that: (as read)

16           "The DSM actions in the plan will have  
17 incidental peak savings."

18 Can you confirm that the actions in the DSM or reduction plan  
19 will also, by design, have incidental reductions in the sales  
20 of hydro and would increase the amount of hydro potential  
21 wasted?

13:31

22 A. MR. MORRISON:           Well, Mr. Chair, I'm not -- my  
23 colleagues from YECL may well want to jump in on that, but  
24 we're not wasting anything. So I would disagree with that  
25 characterization.

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Cross-examined by Ms. Middler

1                   What we're trying to do is reduce electrical  
2 load on the system overall, and the system has a mix of hydro  
3 and diesel in it. You know, there are communities that  
4 aren't on the integrated grid and there are communities that  
5 are part of the integrated grid. So reducing that overall  
6 demand is a positive from our perspective.

7                   And yes, we have a largely hydro-based system  
8 in the summertime, but nonetheless, that winter load requires  
9 diesel peaking on the margins, and it has for some time. And  
10 as we grow, the system going forward and remembering that the  
11 demand side management plan is not a one-year, it's not a  
12 six-month plan. It's the long game.

13:32

13                   And if it's not the long game, it's not very  
14 worth doing from our perspective because, you know, there are  
15 dips and valleys in loads, but we see loads growing summer  
16 and winter over time and maybe they've slowed down somewhat  
17 in the last year or so, but that doesn't mean that that  
18 growth won't increase again in the near future.

19                   And we've got to look at this on a long game,  
20 and the growth in the summer -- I think somebody  
21 characterized earlier we have a surplus in the summer. Well,  
22 we have very little surplus in the summer, and that growth  
23 will take that surplus away and move us into, you know,  
24 diesel on the margin, you know, as we go forward, and we've  
25 already got diesel on the margin in the winter.

13:32

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Cross-examined by Ms. Middler

1                   So the idea here is to develop a long term  
2 that will get people thinking about their energy usage long  
3 term and it will bring the overall requirement down, but  
4 there's nothing in this plan that says that there isn't still  
5 growth over and above what we can achieve with -- growth and  
6 load over and above what we can reduce with DSM?

7 Q. YCS recognizes that the utilities have undertaken pilot  
8 studies on the effectiveness of LED streetlights that are  
9 scheduled to be completed the end of this year. Can you  
10 confirm that if the studies show favourable results, that all 13:33  
11 the future streetlight installation will be using LED  
12 streetlights in the spirit of reducing consumption around  
13 lighting?

14 A. MR. REDDEN:                   Well, from -- I think we talked  
15 about it yesterday. From Yukon Electrical's perspective,  
16 we're fully confident in that technology developing into and,  
17 at one point, displacing conventional or high pressure  
18 sodium; however, it's got to be verified on the different  
19 lumens level.

20                   So the ones now for side streets are one 13:34  
21 situation, but then the higher lumen intensity lights are  
22 another.

23                   So I think there will be perhaps a different  
24 timeframe of when those are both being met, but we're  
25 confident that the lifecycle analysis of LED streetlights

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Cross-examined by Ms. Middler

1 will drive everyone to want to adopt them.

2 Q. I wonder if we can walk through an example of a general  
3 service customer taking advantage of a DSM program. For  
4 example, I look at this room which has at least 29  
5 incandescent bulbs and heated floors and fans to counter the  
6 overheatedness. How would this kind of customer take  
7 advantage and access the DSM program?

8 A. MS. CARLSON: So in the proposed programs  
9 that we have for a commercial customer, which this facility  
10 would be, in particular would drive to the lighting program. 13:35  
11 There is opportunity for the commercial customer to receive  
12 incentives for a lighting designed study as well as for  
13 replacement of individual bulbs if they chose an LED specific  
14 bulb to their application.

15 There is also opportunity -- and not knowing  
16 the specifics of this facility, there are refrigeration  
17 programs that are available as well. Whether this facility  
18 would qualify for them, I couldn't tell you for certain as,  
19 again, I'm not familiar with their actual installations here.

20 To walk you through the actual process of how 13:36  
21 that would look, that is part of the process that we're now  
22 undertaking is the development of how a customer would reach  
23 out to the utility, how they would apply for it, how we would  
24 work them through the process.

25 But this would be an example of what we would

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Cross-examined by Ms. Middler

1 consider a custom program. So we work very closely with the  
2 customer to determine what their specific requirements are  
3 and how their needs and where we see the efficiency  
4 opportunities would model together into an incentive package  
5 that we could offer them.

6 A. MR. MORRISON: Sorry.

7 A. MS. CARLSON: The other piece of our  
8 commercial and our residential program, of course, is the  
9 education. So it's also a component that we will be  
10 delivering around providing expert advice to commercial,  
11 specifically, customers that is not available here in the  
12 Yukon. It's one of the things that we discovered through our  
13 market characterization study. There are a number of gaps in  
14 the marketplace as to specific areas of expertise that cannot  
15 be accessed locally.

13:36

16 So part of our education program is the fact  
17 that we will be able to bring up specific expertise to assist  
18 our commercial customers in looking for efficiency  
19 opportunities, and, of course, just the general education  
20 about electricity efficiency measures that we'll be providing  
21 through the program.

13:37

22 Q. So it's a sort of an opt-in program. A general service  
23 customer would approach you and then you would help them. Is  
24 part of your education to sort of solicit that --

25 A. MS. CARLSON: Absolutely, yes. We fully

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Cross-examined by Ms. Middler

1 intend on being very proactive in the ways that we deliver  
2 these programs, especially in the commercial sector. It is  
3 an opportunity for us to engage further with our customers  
4 and to offer them solutions to issues they may have related  
5 to, obviously, energy efficiency, but it certainly is by no  
6 means a passive approach that we're taking.

7 Q. And the education component, is that the In Charge  
8 component it's called, and when does that start rolling out?

9 A. MS. CARLSON: So In Charge is the brand front  
10 that the programs will have. And that's really to  
11 distinguish the energy or the electricity efficient programs  
12 and the DSM program as a whole to the customer, to provide  
13 them a one-stop shop, if you will, without physically having  
14 a shop. It would be more related to website and material  
15 development, and take away the two utility brands from the  
16 front face of the information to the customer because it  
17 really is the two utilities rolling these programs out and  
18 presenting them jointly.

13:38

19 So, for us, we felt that it was a good  
20 opportunity to present one brand to a customer so that there  
21 was less confusion between the two utilities.

13:39

22 So whether you were a Yukon Energy customer or  
23 whether a Yukon Electrical customer, you could approach In  
24 Charge as the place you would go for electricity programs and  
25 information and education.

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1 Q. Perhaps to remember back to an actual storefront, I  
2 wanted to ask Mr. Morrison -- I note in your CV that you were  
3 chairman of the Energy Solution Centre in the years  
4 2003-2004. Do you recall from that time any DSM programs  
5 undertaken by the Energy Solution Centre?

6 A. MR. MORRISON: Mr. Chair, she's taxing an old  
7 memory. But I recall a few.

8 We did -- my memory goes to a -- I'm lost for  
9 words here -- a plug-in timer for car -- for vehicles, and --  
10 or maybe that was a study that we did. I think it was a  
11 study. 13:40

12 There was -- we did a number of others. We  
13 did a program out in a couple of communities. I think we did  
14 a couple of small community programs where we went in and did  
15 hot water heating wrapping and low flow shower heads and  
16 things like that. But you're really taxing my memory on the  
17 breadth of those.

18 I think there was an energy efficiency  
19 appliance program at some point, but I -- that's the best of  
20 my memory. 13:40

21 Q. I think that YCS was a partner in one of those  
22 programs --

23 A. MR. MORRISON: Yes.

24 Q. -- and the house calls and --

25 A. MR. MORRISON: Yeah.

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Cross-examined by Ms. Middler

1 Q. -- as part of an outreach.

2 So what do you see has happened to the DSM  
3 programs between then and now?

4 A. MR. MORRISON: Well, I'm not exactly sure,  
5 Mr. Chair, what you're asking for, but the DSM program  
6 development that we've been going through for the last couple  
7 of years I would say is a separate initiative over and above  
8 what the Energy Solution Centre and Yukon Housing continue to  
9 do today.

10 Q. Okay. I wonder when you are implementing your measuring 13:41  
11 and evaluation, your EM&V, within the DSM plan, how are you  
12 going to be able to determine whether it's the DSM programs  
13 that are resulting in savings or whether it's just simply a  
14 result of the price shock of -- or the rate shock of a  
15 24-percent increase in rates?

16 A. MR. ROBILLARD: Well, there are two parts to  
17 the EM&V. One is the impact. So that will -- that will  
18 return to the YUB, and basically assurance that we're getting  
19 dollar -- value for the dollars spent and how that compares  
20 to plan. 13:42

21 The other part which I think maybe is closer  
22 to where your question is, there's a process piece to the  
23 evaluation, and that process evaluation will kick in -- I  
24 forgot exactly where we set it up, but it's well into year 2  
25 because we have to have a sufficient body of experience out

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1 there to determine -- just so that we can review.

2 And as part of that, we will be -- not we, but  
3 the third-party evaluators that are to be hired, will be in  
4 discussion with participants, with nonparticipants. They  
5 will be in discussion with the supply, so the manufacturers,  
6 the distributors, the contractors who are out and providing  
7 the service.

8 Part of that, there will be a structured  
9 approach to, you know, what happened and what was -- what was  
10 the driving force behind the -- you know, the implementation  
11 of the measures? 13:43

12 And so that discussion is where clarity will  
13 be drawn in terms of how effective these programs are in  
14 making that decision or, you know, helping that customer to  
15 make the decision to proceed.

16 So that's one piece of it.

17 The other part of that discussion will also  
18 be, "Okay, how can we make this easier, more accessible, and  
19 more effective?" And so the second part of that will be  
20 coming back and suggesting tweaks to the program to make it  
21 more effective as we go into the last quarters of the  
22 programs. 13:43

23 So there's two parts to that -- to that  
24 approach.

25 Q. If I could ask you to refer to the DSM plan, the

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1 conservation potential review, Appendix G-1. This is on the  
2 pdf page 316 of 5-56. I am afraid I'm not sure if it's the  
3 same on the hard copy. The Exhibit ES-5, base year  
4 electricity use by end use residential sector.

5 **A. MS. CARLSON:** **Sorry, could you give the**  
6 **reference again?**

7 **Q.** Yes. It is page 316 of 5-56 in the DSM plan -- the pdf  
8 of the DSM plan.

9 **MS. SEARS:** Do you have a paper reference  
10 or page reference.

13:44

11 **A. MR. ROBILLARD:** **Can you tell us the content of**  
12 **what you're looking at?**

13 **Q. MS. MIDDLEL:** It's part of the CPR 2011  
14 residential final report, Appendix G-1, and what does it  
15 contain?

16 **A. MR. ROBILLARD:** **What does it contain?**

17 **Q.** It is the Exhibit ES-5 base year electricity use by end  
18 use residential sector. It's a graph. It's not really easy  
19 for us to point to it in the hard copy. So it says V7, I  
20 guess VII, under Appendix G-1.

13:45

21 **MS. SEARS:** Okay. So VII of the  
22 conservation potential review residential sector final  
23 report?

24 **MS. MIDDLEL:** Thanks, Allison, Ms. Sears.

25 **Q.** Can you -- anyone on the panel describe the largest

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1 consumers of electricity now and into the future according to  
2 this graph?

3 A. MR. ROBILLARD: In the current base year, which  
4 is 2010, the largest end-use consumption was domestic hot  
5 water, followed by space heating. And, again, I'm just  
6 interpreting. And there was -- spot heaters and pumps were  
7 another significant load, followed by small -- sorry,  
8 computers and related peripherals.

9 Q. Does anyone else want to take a crack at looking at that  
10 graph and determining what are the two largest loads in the  
11 residential sector? 13:47

12 A. MR. ROBILLARD: The two largest are space  
13 heating and domestic hot water. I'm sorry, I didn't hear you  
14 ask for just two.

15 Q. Essentially our understanding of the conservation  
16 potential review was undertaken to determine what were the  
17 low-hanging fruit, where the biggest savings could occur. So  
18 what in the DSM plan targets these largest consumers of the  
19 electricity in the residential sector, domestic hot water and  
20 space heating? 13:48

21 A. MR. ROBILLARD: If I can, maybe the first thing  
22 I liked to -- the purpose of the CPR, I would suggest, was  
23 not to find the low-hanging fruit, but rather, it was to  
24 paint a very comprehensive picture of where the fruit lay and  
25 at what price.

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1                   So that's why all of the -- I'm probably going  
2 to get in trouble if I keep that analogy going. So it's  
3 totally comprehensive. The whole fruit salad is here, and if  
4 you're asking which of the two largest pieces of fruit in  
5 that salad, it's clearly space heating and domestic hot  
6 water.

7 Q. I'm sorry, Stephanie, for bringing up the analogy. I  
8 won't say it again.

9                   So then I'll re-ask the part of my question  
10 that contemplates what in the plan targets these largest  
11 consumers of electricity.

13:48

12 A. MR. ROBILLARD:                   Maybe to try to answer your  
13 question, I think the question is: How do we get from the  
14 results of the conservation potential review to the actual  
15 programs that we're putting forward? And what we did is --  
16 and Laura outlined it earlier in her presentation -- we went  
17 through a very structured process where we reviewed all of  
18 those measures.

19                   We looked at them from first what was the cost  
20 of conserved electricity. In other words, how did they  
21 compare against the cost of the new generation.

13:49

22                   We looked at it in terms of payback. How did  
23 this look from the customer's perspective.

24                   We also looked at the experience around the  
25 world, around Canada more importantly, in terms of the

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1 success and the ease of delivering programs that would meet  
2 energy reductions in those areas, and that's how we got to  
3 the portfolio of measures -- I guess, sorry, the other piece  
4 that was quite important is that we also made -- looked very  
5 carefully at what was already in existence here in terms of  
6 some of the programs that the City of Whitehorse already had  
7 on the table or the Solution Centre, and at the end of that,  
8 that's how we came up with our portfolio of programs.

9 In the portfolio that we have in front of us  
10 at the moment, the pilots for the electric space heating  
11 systems are very much directed forwards this -- the large  
12 load of space heating. There are already a number of  
13 initiatives in play related to reducing the load of new  
14 housing, and the one piece that was particularly unique to  
15 what the utilities could attribute was looking at innovative  
16 technology for reducing the load for those homes that were  
17 going to be electrically space heated. So that was a major  
18 focus there.

13:50

19 In terms of the domestic hot water, there are  
20 appliances that consume hot water that are included. There  
21 are some low cost measures that we talk about up front in  
22 terms of aerator give-aways and ultra-low-flow shower heads  
23 and whatnot. They are included as our some of the promotion  
24 on the Energy Star appliances, dishwashers, clothes washers,  
25 etcetera. That's where the hot water is used. So that's

13:51

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1 where we particularly focused. As well as, you know, there  
2 are give-aways in terms of even proposed potential for hot  
3 water pipe insulation, etcetera.

4 So there's a mix of technologies and  
5 approaches that are both of those, but not just those two  
6 because there are others as well.

7 Q. This may have been covered already, but I just wanted to  
8 see if I could have confirmed that as it seems like there  
9 will be future iterations of DSM programs in the Yukon, will  
10 in future actual load and demand management initiatives to  
11 shift loads from peaks to valleys to reduce diesel  
12 consumption and maximize hydro and other renewable energy  
13 resources, will that be part of the next iteration of DSM  
14 planning?

13:52

15 A. MS. CARLSON: We certainly will look at the  
16 those technologies to be implemented in a next iteration of  
17 DSM; and, of course, based on all of the criteria that we've  
18 outlined a number of times so far today and with the  
19 technology on the system is appropriate to support those  
20 types of programs.

13:53

21 Q. Okay. Bear with me here. On that note, it seems that  
22 at least three of the interveners at this hearing have stated  
23 interest in ambitious and accessible efficiency in  
24 conservation measures, and this interest was apparent during  
25 your stakeholder engagement and in this hearing through

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1 questions about the AMR meters.

2 So the DSM plan itself on pages -- page 540 of  
3 556, virtual pdf copy, the section talking about  
4 electrothermal storage.

5 MS. SEARS: Are you still referring to the  
6 DSM on storage?

7 Q. MS. MIDDLEL: Yes, and it's got number 217 on  
8 the bottom of the page. It's also under Appendix G-1,  
9 residential sector final report.

10 MS. SEARS: Okay. So page 217 of the hard 13:54  
11 copy.

12 MS. MIDDLEL: Yeah.

13 Q. MS. MIDDLEL: Yeah. So it discusses the  
14 requirement for off-peak pricing. Electrothermal storage is  
15 an important proven space-heating technology that, as you  
16 say, doesn't necessarily save energy, but it saves diesel,  
17 and it maximizes renewable energy.

18 The proven space-heating used in other  
19 jurisdictions in Canada and around the world, as you note,  
20 and it could have significant penetration here in the Yukon 13:55  
21 considering this huge space-heating market now and into the  
22 future but would require a different rate structure.

23 And over the past few days, I'm still feeling  
24 kind of confused about this because we've heard some from  
25 conflicting information about whether the AMR meters could

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1 accommodate potentially near-term future programs with  
2 time-of-use price rates. I'm still confused about whether  
3 it's just merely a data and billing adaptation, or will these  
4 meters going in, will they will be able to do time-of-use  
5 rates or would they be obsolete if that program moves  
6 forward? Because we just really need to know if these meters  
7 would complement or prevent important and significant  
8 programs to shift loads from diesel times to surplus hydro  
9 times.

10 A. MR. REDDEN: Maybe I can start with a couple 13:56  
11 of pieces of everything that's in there. I believe on the  
12 AMR side, we do have an undertaking that's going to clarify  
13 the capabilities of the meters that we are presenting. So  
14 that's still to be completed.

15 You talked about electrothermal storage,  
16 proven technology, and said that it reduces diesel. And  
17 that's possible, but it can also increase diesel, depending  
18 what the grid situation is.

19 So you could imagine when these systems are on  
20 or required for heating and if diesel units happen to be 13:57  
21 supplementing generation, then that's not an efficient way to  
22 go from a requirement of space heating.

23 If you're generating on the diesel efficiency,  
24 say, as opposed to your home furnace heating oil-based energy  
25 source, the heating oil is going to be probably twice as

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1 efficient than generating electricity by diesel unit to heat  
2 up an electrothermal storage unit.

3 So when you say it displaces diesel, it can at  
4 times, but only if the hydro is always available.

5 Q. I guess I'd venture to say it would be a bad situation  
6 if we were burning diesel in the middle of the night, which  
7 is when the ETS systems would be charging.

8 A. MR. MORRISON: I think what Mr. Redden is  
9 saying is that if it increases the load and it pushes you to  
10 put diesel on the margin at a different time of day or  
11 because you don't have any hydro available, then -- I think  
12 all he was saying is your statement isn't blanket true. It  
13 is generally and should be true, but it isn't a blanket  
14 statement that's correct.

13:58

15 Q. Although I'm sure a customer who would be implementing  
16 that technology in their home would be doing it to take  
17 advantage of any rewards of using surplus hydro in off-peak  
18 times.

19 A. MR. MORRISON: I didn't hear her question.

20 Q. If we could ask for an undertaking, if the information  
21 is not available at hand, for a list of the stakeholders  
22 described in the engagement process and also the points at  
23 which they were engaged.

13:59

24 A. MS. CARLSON: I believe that question was  
25 answered in an IR. If you give me a moment, I will find that

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1 for you.

2 The information you're looking for is in  
3 UCG-YECL 128(a). Within there is the list of consultation  
4 and workshops with stakeholders that began in January of 2011  
5 and continued through until June of 2013. That has dates  
6 attached to each one of those presentations.

7 Q. Thank you.

8 A. MS. CARLSON: I could also provide to you  
9 additional information within UCG-YECL 128(c), which also  
10 lists a number of surveys that were conducted in support of  
11 the DSM plan.

14:01

12 MS. MIDDLEL: Thank you, panel. We have no  
13 further questions.

14 THE CHAIR: Thank you very much,  
15 Ms. Middler and your assistants for your questions to the  
16 panel and for your participation in this hearing.

17 MS. MIDDLEL: Thank you.

18 THE CHAIR: Thank you.

19 So I'd now call on counsel for the -- sorry,  
20 the advisers for the Yukon Utilities Board. And,  
21 Ms. Bentivegna, if you want to proceed in a couple of seconds  
22 here once YCS has had a chance to settle themselves or sit  
23 down.

14:03

24 MR. LANDRY: Mr. Chair, I wonder if I could  
25 just -- unfortunately, I have a commitment out of town that I

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1 couldn't get away from and, as everybody knows in this room,  
2 the flights have changed in November, and I think we're going  
3 to be okay. I've talked to Ms. Bentivegna about it, but if  
4 it gets a little close, I may take leave, is the point.

5 I just wanted you to be aware of that.

6 THE CHAIR: No problem.

7 MR. LANDRY: Quite frankly, my presence here  
8 was really for the purposes of the interveners and not the  
9 Board counsel.

10 THE CHAIR: As long as you promise to read 14:04  
11 all the transcripts.

12 MR. LANDRY: I promise.

13 MS. BENTIVEGNA QUESTIONS THE PANEL:

14 THE CHAIR: So proceed when you're ready.

15 MS. BENTIVEGNA: Thank you, Mr. Chair.

16 Q. I have a couple of general questions and then some  
17 specific ones.

18 So it's been mentioned this morning that there  
19 are -- or this afternoon, as well, that there are demand side  
20 management or energy-saving programs already in place. And I 14:04  
21 understand, through Energy Solutions Centre, the Yukon  
22 Housing -- I don't know if there's any others, but what -- in  
23 designing the current proposed programs, how have you ensured  
24 that there isn't duplication that what's being proposed  
25 complements those programs?

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Questioned by Ms. Bentivegna

1 I understand this morning Ms. Carlson said you  
2 didn't have visibility into these programs or their success,  
3 but I want to get an understanding of how it's been designed  
4 to complement so that, you know, there isn't this duplication  
5 of effort.

6 A. MS. CARLSON: So we have worked quite  
7 collaboratively with the Energy Solutions Centre all through  
8 the process, including them as a full partner in the  
9 conservation potential review study to be cognizant of the --  
10 not to duplicate efforts on both parts. 14:05

11 We included them not only in the conservation  
12 potential review area, we had conversations and discussions  
13 with them all through the program portfolio design portion  
14 as, again, to ensure that none of our programs would be  
15 duplicated.

16 We also included them as part of our market  
17 characterization study. And we continue to have an excellent  
18 working relationship with them and look for synergies as we  
19 move forward in delivery of the program so that we can  
20 maximize the benefits of both the utility programs and the 14:06  
21 programs that the Energy Solutions Centre provides.

22 Q. And what about any other programs such as Yukon Housing  
23 or -- I don't know if there's any others, but I'm sure you  
24 can enlighten me.

25 A. MS. CARLSON: So Yukon Housing works quite

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Questioned by Ms. Bentivegna

1 closely with Energy Solution Centre and their representatives  
2 have worked with us on a number of occasions as well. Beyond  
3 that, we aren't aware of any other formal programs that are  
4 being offered in the territory around electricity  
5 conservation.

6 There are other informational components that  
7 are available to customers through the federal government.  
8 And a lot of customers utilize website information from other  
9 jurisdictions. So we are aware of those.

10 But as a formal program being offered, those  
11 were the only ones -- the previously mentioned Energy  
12 Solution Centre programs are the only ones we're aware of.

14:06

13 Q. Okay. Thank you. Now, would -- I understand you worked  
14 closely with Energy Solutions Centre. Would the proposed DSM  
15 program take over some of those programs now being offered --  
16 take over, I mean in the sense of replace or -- is there any  
17 potential for shifting what the solution energy -- the Energy  
18 Solutions Centre does onto this -- the proposed DSM program?

19 A. MS. CARLSON: There isn't any proposal of  
20 that nature as those programs are funded solely through the  
21 Yukon government. And we don't have any visibility as to  
22 what their plans are related to their programs. So at this  
23 time, there would be no effort to shift those programs to the  
24 utilities.

14:07

25 Q. Now, a question as to -- and I realize and I understand

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Questioned by Ms. Bentivegna

1 that there will be some audit process to determine the  
2 success of the program, but in looking and designing this  
3 program -- and maybe Mr. Robillard can address this -- is,  
4 how will the program, the DSM, the proposed DSM be able to  
5 set or measure or have a baseline measure that determines the  
6 potential success of the programs if there's these two others  
7 programs out there?

8 A. MR. ROBILLARD: First of all, the programs are  
9 designed so that there's no significant overlap in the  
10 measures themselves.

14:08

11 In terms of the baseline, the baseline is part  
12 of what the CPR has been accumulating and what the market  
13 research did as part of the -- when we were doing the market  
14 characterization. Essentially, those discussions helped us  
15 establish what share of lighting sales, for example, are  
16 currently of technology 'X' or technology efficiency.

17 So we've gone through a systematic process  
18 like that for each of the program areas, and that's part of  
19 establishing that baseline so we know where we're starting  
20 from. And then the programs, of course, are designed to  
21 engage the various pieces of that whole supply channel and  
22 customer base to help to encourage a movement away.

14:09

23 So we start with the measured, and then as the  
24 program proceeds, we're constantly measuring. So now what is  
25 the shelf space? Now what is your sales share of technology

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Questioned by Ms. Bentivegna

1 'A' versus 'B'? And as part of the process evaluation that  
2 we talked about earlier, we're not only trying -- the program  
3 will not only be tracking what that shift is, but we'll be  
4 talking -- I mean, that's the small market of the Yukon  
5 presents some challenges in terms of your access to, you  
6 know, highly specialized expertise. But on the other hand,  
7 it provides a number of enormous advantages given the  
8 relatively small number of actors involved. And so we  
9 envision with the program that over time those major actors  
10 are very closely linked to the program, and we're constantly 14:10  
11 keeping track of how those changes are occurring, why they're  
12 occurring and how we can do it better.

13 Q. And how will this tracking occur?

14 A. MR. ROBILLARD: There's the -- there's a series  
15 of reports reporting that we will -- for each of the  
16 programs, there will be -- in the report, outlines the  
17 suggested starting point. There are a number of KPIs, key  
18 performance indicators. And we will be tracking -- those  
19 will include number of participants, number of events, number  
20 of rebates applied, number of successes. Depending on the 14:10  
21 technology as we move forward, if it's a fairly standard  
22 technology, so we're trading -- we're changing out one light  
23 bulb for another, we know, and we will have a technical  
24 resource manual that we'll use to confirm what the net  
25 savings is for each one of those transactions, and we'll know

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1 the number of transactions.

2 For larger customized applications like a  
3 hotel or something, the vision would be here that we would do  
4 an initial audit of the facility. We'd know where we're  
5 starting from. We would perhaps, depending on the  
6 complexity, engage a lighting specialist to do a redesign.  
7 And then we -- then we would proceed with the implementation,  
8 and we would do -- you know, we would do some actual  
9 measurement post installation to ensure that the savings were  
10 there.

14:11

11 And these are all going -- each client that's  
12 going to enter the program is essentially going -- you know,  
13 it's going to be a number, if you want, in our tracking  
14 system, and we're going to be tracking over time what the  
15 savings are and number of participants.

16 Q. I know you had this discussion with Ms. Middler about  
17 the rising price of electricity and whether it could affect  
18 the ability to determine the impact of the DSM program. And  
19 I wanted to go a little bit further on that and ask your  
20 opinion. I know, again, you suggested there will be an  
21 audit, and they will look at all the different factors, but  
22 in your experience with DSM programs, what impact is rising  
23 price of electricity on whether there's more uptake on a DSM  
24 program or whether it has more of an impact?

14:12

25 A. MR. ROBILLARD: At this time, it's my opinion,

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1 based on, you know, quite a few years of experience.  
2 Electricity consumption historically has proven to be rather  
3 price inelastic, at least within, you know, the kinds of  
4 increases that we're talking about here.

5 So that's been my experience. Even when we  
6 talk about time-of-use rates, most jurisdictions find that to  
7 actually get any sort of significant uptake, those peak rates  
8 need to be two, three, sometimes four times what the base  
9 rate is before you really get a lot of active participation  
10 in it.

14:13

11 So again, to try to come back and answer your  
12 question as best I can, experience would suggest that within  
13 the kinds of rate increases that I would think we're talking  
14 about, electricity consumption is fairly price inelastic.

15 The second part of that would be, as we're out  
16 doing our process evaluation as part of that third party M&V,  
17 we will be constantly monitoring not just is the impact but  
18 the drivers of that impact. So that be the second -- that  
19 would be the opportunity to determine whether or not price --  
20 if again that was actually a factor -- if that was  
21 significant driver, or if in fact it had been one of the  
22 other attributes of the services that the program was  
23 offering.

14:14

24 Judy is just reminding me that when we do  
25 these kinds of exercises, there are two additional potential

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1 market influences or players that we usually try and track.  
2 One is a free rider. And when we -- and a free rider is  
3 somebody that participates in the program but might have done  
4 it or would have done the measure anyway.

5 When we're doing the cost benefit analysis, we  
6 net those people out. You'll see that in the -- in the  
7 report or the plans that we've tabled we've estimated, as a  
8 starting point, free ridership. So generally when you stop  
9 to think about it, if you're in a small market, if you're  
10 dealing with a relatively new technology, etcetera, it's  
11 unlikely that you've got a very high free ridership. If  
12 you're dealing with something that's been around for a long  
13 time and there's very ample supply, then you're apt to get a  
14 higher free ridership. But again, that's something that  
15 we'll establish.

14:15

16 The other side is there are what's called free  
17 drivers. So in other words, I may not participate in the  
18 program, but I may adopt it because I hadn't actually heard  
19 about it until saw your -- it was on the shelf and without  
20 the program it wouldn't have been there. So I'm going to  
21 install it, but I'm not actually going to submit a rebate  
22 application because it's not necessary for it.

14:15

23 So as part of assessing the overall impact of  
24 the program, the ideal is to net those two out. Is it a  
25 precise science? No. Is it -- is it fair game and included

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1 in most EM&Vs? Yes. And oftentimes what will happen,  
2 because there's a variety of views on what it should be, one  
3 of the things that a board like this may do is actually say:  
4 Okay. Well, let's come together, and let's agree on what's a  
5 reasonable -- a reasonable kind of consensus, and let's use  
6 that to drive forward.

7 Q. Thank you.

8 A. MR. ROBILLARD: Okay.

9 Q. Now, if I can take you to YUB 24(b). And in that  
10 response YECL stated or submitted, sorry, schedules showing a  
11 breakdown of DSM costs from 2011 and forecast costs to 2015.  
12 And my question is whether you can explain whether the DSM  
13 cost forecasts for 2013, '14 and '15 include government  
14 buildings in the general service program.

14:17

15 A. MR. REDDEN: We can confirm that they do  
16 include government.

17 Q. Thank you. Now, with regard to the 2011 schedule, can  
18 you provide more detail on the line item labelled "One-Change  
19 Community Engagement" as to what that means and what it  
20 refers to?

14:17

21 A. MS. CARLSON: The one-change costs are  
22 related to a territory-wide community engagement tour, for  
23 the most part, that was completed on behalf both of the  
24 utilities -- both utilities participated with the one-change  
25 organization that was engaged to perform the stakeholder

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1 relations effort.

2 Q. So was this a tour where a group of people toured the  
3 territory to explain or to gain input about the program?

4 A. MS. CARLSON: Yes. That's what the objective  
5 of that initiative was to actually touch into as many  
6 communities as we possibly could across the territory.  
7 Including communities we visited were Old Crow, Burwash  
8 Landing, Dauphin, Mayo.

9 So it was a very extensive geographical tour,  
10 and this was to engage directly with community leaders as  
11 well the general public in the community to get an idea of  
12 what their knowledge at the time was of demand side  
13 management and electricity conservation. Were they aware of  
14 the programs that were being currently offered in the  
15 territory, and was this something they were interested in  
16 participating in, wanted to see delivered in the territory?

14:19

17 Q. Thank you. Now, can you give me some detail around  
18 energy -- it's on the same schedule -- energy block  
19 feasibility?

20 A. MS. CARLSON: As part of looking at education  
21 for the customer around electricity conservation, we felt  
22 that it was important that the customer understand the block  
23 structure that is currently in place for them here in the  
24 Yukon.

14:19

25 They don't have visibility of that currently

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1 on their statement that they receive on a monthly basis.  
2 They are provided a statement that gives just a total energy  
3 consumption amount, but it does not break down for them how  
4 that energy is being put into the separate blocks based on  
5 their rate classification.

6 This was an initiative for us to do  
7 investigative work with our billing system to determine if we  
8 could actually display that in a way that the customer could  
9 visibly see on the bill and what those costs were to roll  
10 that out to the entire billing system.

14:20

11 Q. Thank you. Now in the 2012 schedule, there was an item  
12 labelled "EM&V data preparation." If you can explain what  
13 that was.

14 A. MS. CARLSON: Could I undertake to provide  
15 further detail on that item?

16 Q. Certainly.

17 UNDERTAKING - TO ADVISE WHAT THE ITEM  
18 LABELLED "EM&V DATA PREPARATION"  
19 RELATES TO AS SET OUT IN THE 2012  
20 SCHEDULE

14:20

21 Q. MS. BENTIVEGNA: The next one I have is in the  
22 2012 schedule, and it's just simply labelled "Communication  
23 Services." And, again, if you can explain what that  
24 included?

25 A. MS. CARLSON: Certainly. That value was for

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1 the development -- sorry, that particular line item was for  
2 the rollout of the CPR results. We hosted a workshop and  
3 required printing and design services to create a document  
4 that condensed all of the multiple pages that we have here on  
5 the record today into something that the general public could  
6 digest a little easier. So that's what that line item is.

7 Q. And what about In Charge branding? Again, it's on the  
8 2012 schedule.

9 A. MS. CARLSON: So that value is for the work  
10 that we've done with a local communications group to assist  
11 us in developing the brand of In Charge. This would be for  
12 developing a logo as well as brand values and rules of use  
13 within the brand, so that, as stated earlier, we would be  
14 rolling out a joint brand to deliver DSM programs rather than  
15 under the individual utility brand.

14:22

16 Q. All right. And materials purchased/lights.

17 A. MS. CARLSON: That is the purchase of the LED  
18 streetlights that we're currently piloting in a joint pilot  
19 study with Yukon Energy. So that is the purchase of the  
20 actual, subject to check, about eight lights that were  
21 purchased from four different suppliers. If I could just  
22 correct that, it was six lights purchased.

14:23

23 Q. All right. Thank you. And what did the line item  
24 "Program Design ICF Marbek" entail? I understand ICF is  
25 the consultant, but that particular line item.

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1 A. MS. CARLSON: So those were the costs  
2 incurred to develop the program design portfolio document  
3 that we have here before us today.

4 Q. All right. Thank you. Then going to the 2013 schedule,  
5 there's a line item that's labelled "ICF Marbek Program  
6 Implementation/EMV -- EM&V Plans."

7 A. MS. CARLSON: Those, again, would be to --  
8 they were contract services that ICF Marbek provided to us to  
9 develop the program implementation plan and the EM&V plan  
10 that is before us here today.

14:24

11 Q. And you'll let me know what EM&V stands for?

12 A. MS. CARLSON: I apologize, evaluation  
13 verification and measurement plan.

14 Q. All right. So is that, then, the same when you say EM&V  
15 data preparation in 2012 -- is that -- how do the two relate,  
16 or will you do that in your undertaking?

17 A. MS. CARLSON: We will do that in our  
18 undertaking.

19 Q. That's fine.

20 **UNDERTAKING - TO ADVISE HOW THE PROGRAM**  
21 **IMPLEMENTATION PLAN AND THE EM&V PLAN**  
22 **RELATE TO ONE ANOTHER (SEE TEXT)**

14:25

23 Q. MS. BENTIVEGNA: Now again, with the 2013  
24 schedule, there was a line item labelled "DSM Administrator."  
25 Can you provide more detail about that?

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 A. MR. REDDEN: I can jump in there. That cost  
2 is for what -- now the position of the DSM coordinator. So  
3 those are costs related to that position.

4 Q. And was that position only responsible for work related  
5 to the preparing of the DSM plan, or did they have other  
6 functions as well?

7 A. MR. REDDEN: Other functions after the start  
8 at September 30th. And just to clarify, that is all within  
9 the DSM plan preparation.

10 Q. Right. So that's what I wanted to be clear --

14:26

11 A. MR. REDDEN: Yeah.

12 Q. -- is that the work that's being done by the DSM  
13 coordinator is all related to the DSM plan?

14 A. MR. REDDEN: Yes, it is.

15 Q. Thank you. So can you explain the program's now been  
16 designed, you have a program proposal, what other types of  
17 duties or what other types of functions that the DSM  
18 coordinator will need to carry out?

19 A. MS. CARLSON: So within the program  
20 implementation plan are outlined the responsibilities of the  
21 DSM coordinator. And currently, and into the start of  
22 actually delivering programs, the work that needs to be done  
23 is related to all of the processes and forms, websites,  
24 internal processes that have to be designed and developed to  
25 handle the inputs that will be coming in from customers.

14:26

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1                   So this will be everything from working with  
2 our EM&V contractor to develop what information and data will  
3 be gathered through the program implementation phase, what --  
4 how a customer would actually engage in getting a rebate on a  
5 light to how a customer will have to engage in participating  
6 in a custom program such as would be offered for this hotel.  
7 Those processes have not been developed as of yet and that is  
8 the intent of the next approximately six months worth of work  
9 to be done.

10                   So the DSM coordinator for Yukon Electrical  
11 will be leading that side of the next phase.

14:27

12 Q. Thank you. Now, on -- there's a line item on the 2013  
13 schedule "launch contractor". Can you give me some details  
14 on that?

15 A. MS. CARLSON:                   So the intent is to engage a  
16 launch contractor with previous experience in starting up a  
17 demand side management program to come in and provide  
18 guidance, assistance and best practice information to the  
19 utilities as to how to best set up and deliver our programs.

20                   And this launch contractor will also provide  
21 some training to our staff, ensure that they understand how  
22 to collect the data appropriately to feed into our EM&V plans  
23 and how to best engage the customer.

14:28

24 Q. And have you selected a launch contractor in  
25 anticipation that the Board might approve the program?

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 A. MS. CARLSON: We have not yet selected a  
2 launch contractor.

3 Q. Thank you. And what about projected costs in the 2014  
4 and 2015 schedules? There's projected cost for staff  
5 education.

6 A. MS. CARLSON: We anticipate that we would  
7 require some additional staff training for our DSM  
8 coordinator. And, again, with the approval of the -- from  
9 the Board for the plan, there is additional staff that would  
10 be brought on to assist, that there would be some opportunity  
11 for training with them; in particular, training that would be  
12 with other jurisdictions that have had many years of  
13 experience.

14:29

14 Just as an example, in the past, we have sent  
15 some people that have worked on the DSM plan to training that  
16 B.C. Hydro offers to tap into their experience and engage  
17 with their experts and their staff to learn as much as we can  
18 from other best practice jurisdictions.

19 Q. And I note that in the 2011 and 2013 schedule, there  
20 were -- there was an item labelled "Staff Training and  
21 Development." So can you tell me if this has happened and  
22 what that training and development was?

14:30

23 A. MS. CARLSON: It was. So again, it was  
24 the -- two of our staff members did attend a set of workshops  
25 and training that B.C. Hydro offers in Vancouver, and that

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 was an opportunity for the staff to engage with other experts  
2 as well as other individuals in the same roles that have been  
3 doing DSM for well over 20 years.

4 There was also another opportunity for one of  
5 our staff members to attend a conference where demand side  
6 management experts from across North America gather, and  
7 there is extensive training that is offered at that session  
8 as well which our staff member took up.

9 Q. All right. Thank you. Now, if you or other members of  
10 the panel want to look at YUB 24(b), that response.

14:31

11 A. MR. REDDEN: Yeah, we're there.

12 Q. All right. Now, do the utilities consider that all of  
13 them costs listed in the schedules provided in that response  
14 for 2011, 2012 and 2013 are the costs as being the costs  
15 towards developing the policy paper that the Board directed?  
16 So basically are all the costs there in that response have  
17 gone to developing the DSM policy paper?

18 A. MR. REDDEN: Ms. Bentivegna.

19 Q. Yes?

20 A. MR. REDDEN: So those costs, basically four  
21 areas in there that one of them deals with the plan,  
22 preparation and dealing with the policy, putting together a  
23 demand side management plan and policy. There's also costs  
24 in there for the coordinator, so that's more around the  
25 delivery, getting ready in preparation for delivery of the

14:33

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 DSM program.

2 There's also costs in there that we talked  
3 about with respect to the LED street light pilot work that we  
4 talked about, and also costs related to the billing system,  
5 looking at the rate block structure.

6 So those costs are all within there, and the  
7 one biggest piece of the plan the policy development.

8 Q. Sorry, that last statement you made, the biggest piece  
9 of the plan...?

10 A. MR. REDDEN: Is the plan, preparation of the demand side management plan. 14:34

12 Q. All right. Are there any other DSM-related costs in  
13 2011-2013 that haven't been identified in those schedules?

14 A. MR. REDDEN: No, there are not.

15 Q. Now, can you provide any explanation as to how the  
16 decision was made to retain IFC Marbek?

17 A. MR. MORRISON: Originally IFC Marbek was  
18 retained through a tender process.

19 Q. Sorry?

20 A. MR. MORRISON: A tender process. 14:35

21 Q. A tender process? Thank you.

22 Now, with regards to the costs related to IFC  
23 Marbek, can you explain whether the costs provided in the  
24 schedules in response YUB-YECL 24(b) are the full costs of  
25 any engagement with IFC Marbek, or have portions of these

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 studies already been allocated to Yukon Energy and the Yukon  
2 government?

3 **A. MS. CARLSON:** Yukon Electrical has 50 percent  
4 of the costs from IFC Marbek as the two utilities agreed to  
5 share equally the costs of the development.

6 **Q.** Thank you. Now, in YUB 24(a), YECL submitted that the  
7 utilities are now in the process of preparing for an  
8 anticipated public launch of DSM programs in late second  
9 quarter of 2014.

10 Now, can you comment on whether the utilities  
11 have begun implementing the DSM program even though there  
12 hasn't been a publicly launched program and whether it's  
13 still on track for second quarter of 2014 if it were to be  
14 approved?

14:36

15 **A. MS. CARLSON:** No. The utilities are not  
16 implementing any of the programs that are outlined in the  
17 plan currently. We are still in the implementation phase of  
18 development. So it is still -- there is still a number of  
19 months of work that are required to get us to a place where  
20 we could actually start rolling out programs to customers to  
21 be able to respond to customers, as well as to deliver  
22 information to our market partners such as in the retail  
23 sector and the service sector.

14:36

24 That work is currently on schedule. We are  
25 anticipating to continue to move forward to that second

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 quarter 2014 public launch.

2 Q. Thank you. Now, if I can take you to page 2 of Business  
3 Case 30.

4 A. MR. REDDEN: We're there.

5 Q. All right. Now, in the first paragraph it states:

6 (as read)

7 "Yukon Electrical in partnership with  
8 Yukon Energy has developed a five-year  
9 plan, 2013 to 2018, to implement and  
10 measure demand side management programs  
11 for the Yukon that is being filed with  
12 this application."

14:37

13 Now, does YECL have cost forecasts for DSM in 2016, '17 and  
14 '18?

15 A. MR. REDDEN: So we've identified costs  
16 related to those years beyond the test period with respect to  
17 the plan only, but not a forecast on the cost outside of the  
18 plan.

19 Q. Would YECL be able to provide what it believes the cost  
20 forecast for the plan if it were to be implemented would be  
21 for years 2016 -- for its share, of course, 2016, 2017 and  
22 2018?

14:38

23 MS. SEARS: Can I just clarify? Are we  
24 talking about the joint -- YECL's joint costs --

25 MS. BENTIVEGNA: Yes.

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 MS. SEARS: -- of the joint utility plan or  
2 anything related to DSM?

3 Q. MS. BENTIVEGNA: Well, its costs arising from  
4 the plan and the implementation, the share -- YECL's share.

5 A. MR. REDDEN: So, Ms. Bentivegna, just to  
6 clarify, you're looking for the costs for 2016, 2017, 2018  
7 with respect to Yukon Electrical's costs related to its  
8 portion of the demand side management plan?

9 Q. Yes.

10 A. MR. REDDEN: Yes, we can provide that.

14:39

11 Q. Thank you.

12 **UNDERTAKING - TO PROVIDE THE COSTS FOR**  
13 **2016, 2017, 2018 WITH RESPECT TO YUKON**  
14 **ELECTRICAL'S COSTS RELATED TO ITS**  
15 **PORTION OF THE DEMAND SIDE MANAGEMENT**  
16 **PLAN**

17 Q. MS. BENTIVEGNA: Now, with regards to YECL's  
18 costs and that were provided in YUB 24(b) for 2013, '14 and  
19 '15, would these be the -- all the costs YECL will incur for  
20 the implementation of the DSM portfolio, including program  
21 elements for both residential and general service program?

14:40

22 A. MS. CARLSON: Yes, that's correct.

23 Q. Thank you. Now, would you be able to provide, excluding  
24 the costs related to the development of the plan or the  
25 policy paper, an estimate of the total cost that the

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 utilities have spent and will spend together on all  
2 DSM-related activities up to the end of 2018?

3 A. MR. MORRISON: Ms. Bentivegna, perhaps -- we  
4 want to make sure we can do what you're asking, so can you  
5 repeat that?

6 Q. Certainly. What I'm asking is if you can prepare an  
7 estimate of the total costs, so with the actuals of what's  
8 already been spent and what you forecast on spending, both  
9 utilities, on all DSM-related activities to the end of 2018  
10 but subtract out the cost for -- related to the development  
11 of the plan or the policy paper.

14:42

12 MS. CARLSON: Yes, we can undertake to do  
13 that.

14 Q. Thank you.

15 **UNDERTAKING - TO PREPARE AN ESTIMATE OF**  
16 **THE TOTAL COSTS, WITH THE ACTUALS OF**  
17 **WHAT'S ALREADY BEEN SPENT AND WHAT IS**  
18 **FORECAST TO BE SPENT BY BOTH UTILITIES**  
19 **ON ALL DSM-RELATED ACTIVITIES TO THE**  
20 **END OF 2018, SUBTRACTING OUT THE COST**  
21 **RELATED TO THE DEVELOPMENT OF THE PLAN**  
22 **OR THE POLICY PAPER**

14:42

23 Q. MS. BENTIVEGNA: Now, if I can take you to  
24 page 6 of the Yukon five-year demand side management plan.

25 A. MS. CARLSON: Okay. We're there.

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 Q. If I can draw your attention to the statement: (as read)  
2 "Based on full implementation of the  
3 five-year DSM plan, the utilities  
4 commit to an electricity conservation  
5 target of 8.5 gigawatt hours of  
6 sustained savings by year five. This  
7 target recognizes and acts in  
8 complement to the Yukon's government  
9 commitment in the energy strategy to  
10 increase territory-wide efficiency by  
11 20 percent by 2020."

14:43

12 Now, can you explain whether this commitment to reduce  
13 consumption by 8.5 gigawatt hours is independent of any  
14 saving derived from the Yukon government's activities?

15 **A. MS. CARLSON:** Yes, this 8.5 gigawatt hour  
16 target is independent of Yukon government programs.

17 Q. Thank you. Thank you. And based on the full  
18 implementation of the five-year DSM plan, do the utilities  
19 have a lifetime megawatt hour electricity conservation target  
20 or commitment at this time?

14:44

21 **A. MS. CARLSON:** No, we do not have a lifetime  
22 target.

23 Q. Thank you. Now, on page 2 of Appendix F to the Yukon  
24 five-year demand side management program, the utilities  
25 submit that an avoided cost of supply of 21 cents per

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 kilowatt lower.

2 Can you explain how the utilities came up or  
3 arrived at that figure?

4 **A. MS. WHITEHEAD:** The 21 cents was developed  
5 using a blended cost of supply options from Yukon Energy's  
6 20-year resource plan. Those options included two hydro  
7 projects, the Gladstone and Marsh Lake project as well as  
8 LNG, Biomass and Wind.

9 Q. I understand that that was in the application, but if  
10 you can explain -- or an undertaking as to how the  
11 calculation -- I understand that's what went in, but how was  
12 it actually derived? Why was it 21 cents as opposed to 25 or  
13 19?

14:46

14 **A. MR. MORRISON:** Okay. Not exact -- you're not  
15 looking for the math, are you, Ms. Bentivegna?

16 Q. Yes. Basically --

17 **A. MR. MORRISON:** It's an average of the  
18 costs --

19 Q. Okay.

20 **A. MR. MORRISON:** -- of those supply options  
21 coming on line as an alternative to DSM.

14:46

22 So if we were going to bring on 8 and a half  
23 gigawatt hours of new supply and we have an average or a  
24 blended cost of those supply options calculated, because  
25 we -- you know, depending on what the load looked like, it

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 would depend on which of those -- we're trying to be fair so  
2 we've looked at them all. So the ones that Ms. Whitehead  
3 outlined, and we've taken an average or a blended cost of  
4 those.

5 Q. All right. Now, could you -- are you able to quantify  
6 in dollars the energy savings the utilities believe will be  
7 saved if the plan is approved as filed?

8 A. MS. CARLSON: We can undertake to provide  
9 that, yes.

10 Q. Thank you.

14:47

11 **UNDERTAKING - TO QUANTIFY IN DOLLARS**  
12 **THE ENERGY SAVINGS THE UTILITIES**  
13 **BELIEVE WILL BE SAVED IF THE DSM PLAN**  
14 **IS APPROVED AS FILED**

15 Q. MS. BENTIVEGNA: Now, I'll take you to the  
16 engagement, education and communication program element  
17 that's described on page 19 of -- and page 23 of the Yukon  
18 five-year demand side management plan. Sorry, are you there?

19 A. MS. CARLSON: Could you repeat the page  
20 number?

14:48

21 Q. I was waiting for you to find the reference.

22 A. MS. CARLSON: Page number, sorry.

23 Q. 19 and 23. And one relates to the residential program.  
24 That's why there's two page references. And the other one,  
25 the general service program, and it's the engagement,

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 education and communication program element.

2 **A. MS. CARLSON:** Thank you. Yes, I'm there.

3 **Q.** All right. Now, it appears that the engagement,  
4 education, and communication program elements support the  
5 other residential and general service programs elements.  
6 Would the other residential and general service program  
7 element be less successful without this element -- without  
8 the engagement, education and communication program element?

9 **A. MR. ROBILLARD:** As I understand, just so that  
10 I'm clear, the question is if we were -- is the engagement  
11 and communication and training element essential to both the  
12 residential and the general service?

14:50

13 **Q.** Yes, to the other -- to those program -- other program  
14 elements, not just that one. Like, is it basically  
15 essential --

16 **A. MR. ROBILLARD:** Yes.

17 **Q.** -- to --

18 **A. MR. ROBILLARD:** It's an essential piece for  
19 each of the program packages on the residential and on the  
20 general service.

14:50

21 **Q.** Thank you. Now in response to YUB-YECL 27, YECL  
22 stated -- and I can wait if you want to pull that up.

23 **A. MR. REDDEN:** We're there.

24 **Q.** Okay. (as read)

25 "In the model used to design the

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 programs, these costs are allocated to  
2 the residential or the general service  
3 segment using bottom-up budgetary  
4 estimates. These costs are not  
5 allocated to the direct impact program  
6 elements."

7 Can you confirm that the engagement, education, and  
8 communication costs of 1.2 million and .657 million for the  
9 general services program and residential program respectively  
10 are not allocated among the individual program elements when  
11 determining the benefit cost ratios for each program element.

14:51

12 **A. MR. ROBILLARD:** The way that -- what we have is  
13 we have certain programs that are necessary to drive  
14 customers to engage in the actual activity. Those are the  
15 engagement pieces here.

16 Because there are no savings attached to that  
17 specific activity, we do not try to do it for the engagement  
18 piece of it. However, those costs are included in the  
19 benefit cost calculation for the portfolio as a whole, and  
20 they are allocated amongst each of the individual program  
21 elements in what, to be honest, is a subjective assessment of  
22 what the relative contribution to each piece is, roughly,  
23 going to be.

14:52

24 Oh, and it's also included as part of the TRC  
25 calculation. That cost is included there, yes.

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 Q. Just to confirm, my understanding of what you've just  
2 said is that the engagement, education, and communication  
3 costs are included in the cost benefit ratio for each program  
4 element?

5 A. MR. ROBILLARD: Correct.

6 Q. Thank you. Now, taking you to page 16 of the Yukon  
7 five-year demand side management plan. Now, the utilities  
8 provide four cost benefit ratios. I'll wait --

9 A. MR. REDDEN: We're there.

10 Q. Now, can you please provide a brief explanation of each  
11 of the four benefit cost ratios that are provided there. And  
12 if you can specifically also give me a bit more detail on the  
13 TRC, the PAC, the PC and RIM.

14:54

14 A. MR. ROBILLARD: Certainly. First of all, I  
15 think it's important to note that these are defined in terms  
16 of California standard test. So there's a recipe that's  
17 agreed to throughout the North American industry. So this is  
18 what this is based on.

19 Essentially what they're doing is they're  
20 looking at and reporting on the financial or economic value  
21 to that transaction, depending on your perspective. So this  
22 is all looking at that installation or the program from four  
23 different perspectives. The first, the total resource cost,  
24 is generally how this -- the benefit cost to the Yukon as a  
25 whole.

14:55

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1           The PAC is the program administrator cost. So  
2 this is, how does this look from -- in this case, it would be  
3 the perspective of the utilities? So the utilities -- the  
4 utilities cost test look stronger than the TRC because  
5 there's certain costs in there that they don't incur. So,  
6 for example, if the more efficient widget costs a dollar and  
7 the customer pays 80 cents of that and they pay 20 cents,  
8 they only see that 20-cent cost in terms of what their --  
9 their particular benefit cost ratio.

10           The PC is the participant cost test. So how  
11 does this look from the customer's perspective? And again,  
12 because they have incentive that they're receiving or may be  
13 receiving, they don't have the program costs, so they have a  
14 different mix of those costs that accrue to them. And their  
15 savings, of course, are what's going to show up in their  
16 bill.

14:55

17           So if it's a positive there, it means it's --  
18 in this case, I'm looking at the first one there, 2.4, so  
19 it's a very positive option for the customer.

20           The final one is the RIM test or the rate  
21 impact measure. This used to be years ago also be called the  
22 non-participant test, and it's looking at this from the  
23 perspective of the overall system, and is there likely to be  
24 some influence on rate? And if it's less than one, yes, it  
25 means it could be a little bit negative influence on the

14:56

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 overall rate in order to maintain the total revenue  
2 requirement.

3 But, of course, from a customer's perspective,  
4 what your total bill is, is how much electricity times the  
5 rate? So even if you in theory did experience a small  
6 increase in rate given what the scores are on this first one,  
7 it's clear that the savings would overwhelm the slight change  
8 in rate, and it would still result in a very significant  
9 decrease in their monthly bill.

10 Q. Now, Mr. Robillard, in your opinion, which of these  
11 metrics is the important if and when the -- well, when the  
12 utilities are trying to evaluate from the perspective of a  
13 rate payer, whether the avoided cost of energy consumption  
14 outweighs the cost of DSM?

14:57

15 A. MR. ROBILLARD: The norm throughout  
16 North America is to the TRC results as the overall indicator  
17 of the desire to proceed or not.

18 Q. Thank you. Now, can you tell me what the effect of the  
19 implementation of a program with a RIM of .6 would have on a  
20 utility bill of a rate payer? I'm not asking for specifics,  
21 but, I mean, like, I'm not asking you to calculate a number,  
22 but more if you can -- from your experience what might the  
23 effect be?

14:58

24 A. MR. ROBILLARD: It's very difficult to answer  
25 at the level of an individual program. The -- where, again,

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 the norm is, is to view this from the perspective of the  
2 total portfolio. And indeed, the strategy of most  
3 jurisdictions that are attempting to get as much  
4 cost-effective DSM as they can is to, in fact, weigh off --  
5 sometimes there are some programs that have just phenomenal  
6 benefit/cost ratio.

7 Sometimes those are used to bring on  
8 next-generation programs that maybe don't, because the  
9 products are not yet as fully commercially available or the  
10 price hasn't come down, there's a very consistent price shape 14:59  
11 as new technologies enter the market and then become mature.

12 So it's a way that some utilities  
13 strategically operate in order to make sure that there's  
14 always a pipeline of new technologies that coming along,  
15 because as we've heard in their testimony earlier the idea is  
16 that this is a long-term -- this is an ongoing process where  
17 we're constantly looking to feed the next-generation  
18 technology into the process.

19 So therefore -- so, I guess, what I'm trying  
20 to say there is that at the level of the -- my opinion is 14:59  
21 that where the more important question is at the level of  
22 portfolio, because that's got all the averaging done. And at  
23 a .8 -- again, I actually haven't done that math -- I'm not a  
24 rates guy -- my estimate would be that it's not going to be a  
25 huge number. It's going to be decimal points, but I don't

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 actually -- I haven't worked on that utility side of rate  
2 rates myself.

3 Q. Could you -- I understand you haven't done the math, but  
4 in your view, would the bill with that type of RIM, let's say  
5 a .6 -- would the rate payer see an increase in the utility  
6 bill or a decrease?

7 A. MR. ROBILLARD: In -- again, from the  
8 perspective of a participant, it's going to depend on what  
9 the benefit cost to them looks like. And as I'm looking on  
10 this page, the overwhelming situation is very, very positive 15:01  
11 for the customer. So in this particular case where I've got  
12 these kinds of participant benefit costs, then the net  
13 effect -- I would be very -- quite certain would be still a  
14 significant reduction in their bill.

15 Q. Thank you. Now, in YUB-YECL 26, that response, YECL  
16 stated that the DSM evaluation measurement and -- sorry, they  
17 submitted the DSM evaluation measurement and evaluation plan.  
18 And now if I go to page 18 of 11 of that plan -- sorry, 8 to  
19 11, not 8 of 11. I'm in YUB-YECL 26, and then it's the DSM  
20 evaluation measurement and valuation plan. And I'm referring 15:02  
21 to pages 8 to 11 of the plan.

22 A. MS. CARLSON: Okay. We're there. Thank you.

23 A. MR. ROBILLARD: I think we're there, yes.

24 Q. All right. So there's a table that delineates the  
25 responsibility among the stakeholders for the DSM program.

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1                   According to this table, the following YECL  
2 staff or department will have responsibilities with regards  
3 to the DSM program: YECL back office coordinator, YECL  
4 billing office, YECL DSM supervisor, YECL communications  
5 coordinator, customer coordinator, customer engagement  
6 officer. And I wanted your comments on whether YECL will be  
7 contributing these resources to the functioning of the DSM  
8 portfolio as noted in the plan.

9   **A. MR. REDDEN:**                   **Ms. Bentivegna, I think if I**  
10 **understand your question correctly, the roles that are**  
11 **outside of the DSM plan box that's shown, such as the Yukon**  
12 **Electrical communications coordinator, functions with respect**  
13 **to DSM -- I think we talked a little bit about that**  
14 **yesterday -- that there will be a level of coordination for**  
15 **communications with respect to DSM that that role will look**  
16 **after as part of the regular duties for that role.**

15:04

17                   For the Yukon Electrical billing department,  
18 we wouldn't be discerning within that what tasks are  
19 respective to the DSM plan and separating those out, so they  
20 would just be part of the billing department. And same with  
21 our front-end staff.

15:05

22   **Q.** The reason I was asking that was that in 24 -- in that  
23 YUB-YECL 24(b), there was only -- the only staff position  
24 that was submitted for DSM was the DSM coordinator for 2013,  
25 '14 and '15, and so it was confusing in that there were these

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Questioned by Ms. Bentivegna

1 positions and parts of the office, so that's why I wanted to  
2 clarify on the record what's included or which positions are  
3 included for the DSM.

4 **A. MR. REDDEN:** So the DSM supervisor on this  
5 diagram, which is our DSM coordinator, is directly related to  
6 demand side management, and then those two other positions  
7 within the DSM box, the customer engagement officer and back  
8 office coordinator --

9 **Q.** Yes.

10 **A. MR. REDDEN:** -- those would be positions,  
11 then, dedicated to demand side management are included within  
12 the plan.

15:06

13 **Q.** All right. And are the costs related to the FTEs that  
14 we've just talked about already accounted for in the benefits  
15 cost ratios?

16 **A. MR. REDDEN:** So the positions that are  
17 within the DSM box, then, those are all costs that are  
18 included within the benefits cost ratio calculations.

19 **Q.** All right. Thank you. Now, in the organizational chart  
20 provided on page 20 of your application -- it's pdf page 20,  
21 so if you've got the electronic...

15:07

22 **A. MR. REDDEN:** Yeah. I've got that here.

23 **Q.** All right. Now, it appears that YECL at the time of  
24 this application did not have a communication coordination  
25 role. Now, was the senior corporate communication advisor

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 added to support the DSM portfolio in this capacity?

2 A. MR. REDDEN: That existing position for  
3 senior corporate communications advisor that we had prior to  
4 undertaking the development of the DSM plan then contributed  
5 to the development of the plan.

6 Q. Thank you. And I'm not sure if we've already -- when I  
7 asked questions about the senior corporate communication  
8 advisor position -- do you have a breakdown of how much time  
9 the senior corporate advisor has spent on DSM-related  
10 activities in 2012-2013?

15:08

11 MS. SEARS: Noting, of course, that  
12 Ms. Carlson is that individual.

13 A. MR. REDDEN: And noting that Ms. Carlson  
14 does do time sheets. So I just was verifying there was a  
15 line item, which there is, that's related to demand side  
16 management.

17 Would you like an undertaking for that,  
18 Ms. Bentivegna?

19 Q. Certainly.

20 A. MR. REDDEN: We can provide that to you.

15:09

21 Q. Yes, that's fine.

22 UNDERTAKING - TO PROVIDE A BREAKDOWN OF  
23 HOW MUCH TIME THE SENIOR CORPORATE  
24 ADVISOR HAS SPENT ON DSM-RELATED  
25 ACTIVITIES IN 2012-2013

## YECL/YEC DSM PANEL

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1 MS. BENTIVEGNA: Mr. Chair, I have another half  
2 hour. I don't know if you wanted to take a break or you want  
3 me to push on. I can.

4 THE CHAIR: I think right now would be  
5 appropriate to take a little bit of a break, 15 minutes, and  
6 we'll return --

7 MS. BENTIVEGNA: All right.

8 THE CHAIR: -- at 25 after or thereabouts.

9 (ADJOURNMENT)

10 THE CHAIR: Thank you. Please be seated. 15:28

11 Ms. Bentivegna, you can continue.

12 Q. MS. BENTIVEGNA: All right. All right. Now  
13 going back to the Yukon five-year demand side management  
14 plan. That's Exhibit 5. And I'm looking at page 16 sorry,  
15 do you have that?

16 A. MR. REDDEN: I think we're there.

17 Q. Now, from my reading of it, can you confirm -- it  
18 appears that the entire DSM portfolio non-incentive costs are  
19 4.2 million and the incentive cost are 2 million. Now, can  
20 you confirm -- it appears that more than 60 percent of the 15:29  
21 costs projected for the DSM plan will be going to  
22 administration, and less than 40 percent will be going to  
23 provide rebates and incentives to ratepayers.

24 A. MR. ROBILLARD: I'll jump in. The 4.1 million  
25 includes all of the costs for the engagement, the education,

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1 promotion, the capacity development for the supply players  
2 here in the Yukon, as well as the other staff costs and other  
3 O&M, but that's a substantial piece of the monies.

4 I believe there's -- without flipping through  
5 it exactly, there was approximately \$1 million that was  
6 identified in the procurement plan, and that a part of that  
7 was for the engagement of the third party EM&V contractor.  
8 Part of that was for the engagement of the launch contractor  
9 who will play a role in getting the programs up and running,  
10 and then will exist. And the third piece, remind me --  
11 was -- the third piece was for ongoing sort of technical  
12 expertise.

15:30

13 Q. In your opinion, would the consumption reduction or the  
14 success of the program -- would it be driven by rebates and  
15 incentives, or would it be the education component? I guess  
16 I'd want your opinion on what the -- what would drive success  
17 for the program?

18 A. MR. ROBILLARD: Right.

19 Q. If rebates and incentives would be a large part of it or  
20 not.

15:31

21 A. MR. ROBILLARD: What we've tried to put  
22 together here is an optimum combination of the two, the  
23 incentives on and the non-incentives, but the capacity, the  
24 training elements of it.

25 The market here in the Yukon provides a couple

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1 of challenges. One, it's small. And so the transaction cost  
2 for a smaller building is not that much different than the  
3 transaction cost for a larger building. So there's a bit of  
4 a skewing there that says engagement -- the average  
5 engagement cost here because of the market is probably a  
6 little bit higher than in other jurisdictions.

7 The other part is the isolation -- it's an  
8 isolated market. So combined with its size, so some of the  
9 specialized expertise, like, you know, state-of-the-art  
10 refrigeration know-how and systems, some of the  
11 state-of-the-art advanced lighting systems.

15:32

12 When we did the market characterization we  
13 went out and talked to the capabilities that were here. In a  
14 number of those areas we found that there would be great  
15 benefit in bringing that skill capability here to the market.  
16 Those are all the kinds of costs that are in that category.

17 In terms of your question, when -- there's  
18 very clear evidence that money in the form of incentive is  
19 one way to help focus everybody's attention, but that alone  
20 is not typically the only constraint. And so even if I have  
21 the incentive and you're motivated, if the wherewithal in  
22 terms of the product, the expertise to install it or service  
23 it isn't here, then we're not going to get the results.

15:33

24 So what we've attempted to do, to the best of  
25 our knowledge, is to combine those two in an optimum fashion

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1 that respects the special considerations that you've got  
2 here. Yukon is a different place than Ontario, which you  
3 were saying this morning. And that's what we've tried to  
4 accomplish.

5 Q. Thank you. Now, if I can refer you to YUB-YECL 28(b)  
6 and (c) -- no, no, I don't want to refer you to that one.

7 Now, have any of the program elements proposed  
8 in the Yukon five-year demand side management plan been used  
9 in other jurisdictions; and if so, if you can identify which  
10 ones and the jurisdictions?

15:34

11 A. MR. ROBILLARD: I'm sorry. Which is the  
12 reference?

13 Q. It's --

14 A. MR. ROBILLARD: Oh.

15 Q. No, I'm just talking about the program elements, a  
16 general question.

17 A. MR. ROBILLARD: A general question.

18 Q. Yes.

19 A. MR. ROBILLARD: By and large, what we've  
20 started off with are proven program concepts that have  
21 certainly been implemented in other jurisdictions. We  
22 purposely tried to pick a mix so that we could have a high  
23 degree of confidence that when we rolled them out they're  
24 going to work. We're not going to encounter glitches that,  
25 because we tried to make them too complicated or too fancy.

15:35

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Questioned by Ms. Bentivegna

1                   So there's time, as we've being saying on a  
2 number of occasions, to try as appropriate to modify and  
3 build and go for some of the more sophisticated, if you want.

4                   In terms of being able to do cite certain  
5 jurisdictions, I'd be a little -- I mean, some of my staff  
6 who worked this I'm sure could do that by program. But in  
7 terms of being able to today line this up to specific  
8 utilities in other jurisdictions, I think I'd need to, you  
9 know, give that a little more time other than to say the  
10 basic structure here is widespread throughout the utility  
11 programming that we're offering in the rest of Canada. But  
12 to do a precise match and name of a precise program, I don't  
13 think I'd want to try to do that off the top of my head right  
14 now.

15:36

15 Q. Well, what would be a jurisdiction of a similar size in  
16 Canada and that might be comparable circumstances? So that  
17 might then reduce it to Northern Canada. But would that be  
18 possible?

19 A. MR. ROBILLARD:                   My experience, it was -- the  
20 jurisdictions are all considerably larger than here, so the  
21 only other experience, I guess, would be -- I don't have -- I  
22 don't have the NWT or Nunavut as a -- among my client group,  
23 so those would be the only close counterparts that I can  
24 think of for the Yukon. I don't --

15:36

25 Q. And was I correct in understanding that your

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1 statement -- and correct me if I misunderstood it -- that the  
2 program elements that are being proposed in the DSM plan here  
3 have been tested in other jurisdictions?

4 A. MR. ROBILLARD: They have been tested, yes.  
5 And then what I added in addition to that as part of this  
6 plan development, we also engaged with the sample of the  
7 potential customers, users, and with the main players that  
8 are responsible for delivering either the equipment, the  
9 technology, or the services required to implement and operate  
10 them.

15:38

11 And so essentially we've taken proven  
12 concepts, and we've adapted them for this market. And what  
13 does that adaption look like? It looks we've added more of  
14 where you just were at moment an ago, more of the capacity  
15 more of the training, because there is less of that resident  
16 here on its own right now.

17 One of the objectives of this program over  
18 time would be a technology transfer to the suppliers and the  
19 industry that's here so that there's an overall increased  
20 capacity on their part to deliver more efficiency in the  
21 market here.

15:38

22 Q. Now, Mr. Robillard, from your experience where these  
23 program elements have been implemented in other  
24 jurisdictions, have they achieved their reduction targets, as  
25 far as you're aware -- or are you aware whether they have?

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Questioned by Ms. Bentivegna

1 A. MR. ROBILLARD: The jurisdictions where I've  
2 worked most recently in British Columbia, for example, with  
3 both B.C. Hydro and with Fortis as well as our work in  
4 Ontario and in Saskatchewan, these kinds of initiatives have  
5 been -- as long as they're implemented well, have been  
6 working, yes.

7 It's again in the -- in any cases where, you  
8 know, if there are major glitches -- it's like building any  
9 relationship. It takes a long time to build trust, and once  
10 you have trust, things really work well, but you have to make 15:39  
11 sure that you don't break that trust by basically messing up  
12 along the way.

13 Q. Are you aware whether they've been able, the  
14 jurisdictions you've just mentioned, to quantify actual  
15 consumption reductions arising from their DSM programs?

16 A. MR. ROBILLARD: In all Canadian jurisdictions  
17 which are operating under the auspices of a regulated  
18 environment like this, it's a recurring part of their ongoing  
19 planning process that there's independent verified impacts  
20 calculated as the programs progress. 15:40

21 So in every jurisdiction, that is the case.  
22 And that is precisely the objective of the EM&V plan -- or  
23 framework that we've outlined here for the Yukon.

24 Q. And have they shown reductions?

25 A. Yes. I should say they've not only shown reductions,

## YECL/YEC DSM PANEL

Questioned by Ms. Bentivegna

1 but they have consistently shown reductions at costs that are  
2 considerably cheaper than new supply.

3 Q. And are these deemed savings or quantified actual  
4 savings?

5 A. In all jurisdictions, it's a combination. And deemed  
6 saving -- again, if we have a dollar to spend, we can choose  
7 between how much we allocate to verify in the savings and how  
8 much we allocate to going and getting the savings in the  
9 first place.

10 By and large, there's a whole host of  
11 prescriptive products for which there is a very  
12 well-established regime of measuring and reporting on what  
13 the attached savings are. So entities like Natural Resources  
14 Canada, Canadian Energy Efficiency Alliance, Energy Star  
15 program, Energuide, all of those produce annual consumption  
16 for a wide, wide -- huge range of products that we would be  
17 using here.

15:41

18 So for -- in that attempt to balance where we  
19 get the most money for our dollar, we would use deemed  
20 savings in those cases where it's very reliable.

15:42

21 Where we used the measured is when we have --  
22 and we would pick a sample -- again, that's included as part  
23 of the EM&V plan, we would tend to pick a sample of some of  
24 the large custom projects and do our EM&V there and verify  
25 that the savings estimated are, indeed, being realized.

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1 Q. Thank you. Now, this is for YECL, whether it has  
2 postponed or curtailed any supply side investments on the  
3 basis of the consumption reduction projection that will be  
4 driven by a DSM program in this -- in these test years.  
5 That's what I'm referring to.

6 A. MR. REDDEN: Could you just clarify what you  
7 mean by "supply side"?

8 Q. To any generation projects that you anticipate or  
9 have -- that you would have -- that you have not proposed.  
10 Any capital projects, if I can put it that way, based on the 15:43  
11 anticipation that the DSM program would be implemented.

12 A. MR. REDDEN: There hasn't been an impact in  
13 what we've forecast in the test periods from a generation  
14 perspective, and we've talked about units that are  
15 end-of-life and replacement of such units.

16 We've accounted for the expected reduction in  
17 sales in our forecasts for the success of demand side  
18 management, but we have not had any impact on our generation  
19 plans.

20 Q. Thank you. Now, in response to YUB-YECL 24(b), again, 15:44  
21 YECL provided schedules for DSM-related costs for 2011 to  
22 2015, and there didn't appear to be any line items for EM&V.

23 Are EM&V costs allocated among the different  
24 residential and general service program elements or will no  
25 evaluation be made until after 2015 and that's why there

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1 would be no line costs?

2 A. MR. ROBILLARD: I can take a stab at that. The  
3 vision is that the EM&V would be conducted by a third-party  
4 contractor. And the price -- the estimated price of that  
5 contract is included in the plan itself. And in fact, it's  
6 in those non-incentive -- it's one of the items in the  
7 non-incentive category that you referred to earlier.

8 Q. Okay. Thank you. Now, if the plan were to be approved,  
9 when would the first evaluation be completed?

10 A. MR. ROBILLARD: Well, again, there are two  
11 types of evaluation: One is the process. And so the process  
12 evaluation, we need to wait until we have enough activity so  
13 that we have a body of data to draw from and a body of  
14 experience.

15:46

15 So I believe that we have suggested that it's  
16 somewhere in year two, middle of year two that we should have  
17 a sufficient body of experience, that we would begin the  
18 process of collecting the process data. Because what we want  
19 to do is we want to be able to pick out any lessons learned  
20 and integrate them into the refinement of the program before  
21 the five years has expired.

15:46

22 The second part is the impacted evaluation.  
23 What we envision is that that third-party evaluator would be  
24 retained through a competitive process early on because we  
25 want them to have -- what we've provided here is a framework

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1 but, ultimately, it's the third-party evaluator who gets  
2 hired that needs to finalize it in conjunction with the  
3 program personnel. And we would expect that those final  
4 impacts in terms of total kilowatt hours saved, the average  
5 cost saved, the breakdown by individual program, that would  
6 be ready by the end of -- basically not ready until the end  
7 of -- the final few quarters of year five.

8 And the idea being that when it comes time to  
9 renew this cycle, rather than having forecast, we would have  
10 actual data plus our forecast for the future, but we would be  
11 building a body of experience and actual data. 15:47

12 Q. So would the utilities have any way before that third  
13 quarter of the final -- of year five to be able to tell  
14 whether the programs are working or there's enough uptake in  
15 order to continue them or will they just continue without  
16 being able to evaluate?

17 A. MR. ROBILLARD: Again, the plan, as it's laid  
18 out, is that those kinds of KPIs are going generated on a  
19 quarterly basis from the get-go. So it's not like we're  
20 waiting to the end of the year for a grand answer. Those  
21 KPIs are being accumulated. It's part of what that back  
22 office function is doing. It's accumulating those  
23 statistics. They're going to be -- the plan is that they are  
24 -- are brought -- or summarized each quarter. Each quarter  
25 there's a review process, any tweaking that's evident, any 15:48

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1 change of allocation of resources in accordance would be  
2 identified.

3 Those quarterly results would be enhanced and  
4 there would be an annual reporting and, again -- so we're  
5 tracking those KPIs all the way through and reporting  
6 internally by quarter and externally annually is the  
7 proposal.

8 Q. Now a question, then, for YEC and YECL. When would the  
9 utilities consider discontinuing a DSM program if it did not  
10 appear that there was enough uptake or that it didn't appear  
11 to be working as projected? Would you wait until year five?  
12 Would you --

15:49

13 I guess, I'm asking for what you believe would  
14 be a reasonable time to allow the program to run and whether  
15 you would discontinue it or whether you wouldn't if you  
16 believed it wasn't achieving and wouldn't be able to achieve  
17 the results that you anticipated.

18 A. MS. CARLSON: So the measures within each of  
19 the programs would be evaluated on an annual basis against  
20 some cost-effectiveness testing as well as the KPI, or key  
21 performance indicators.

15:50

22 This process will help us highlight any of the  
23 weaknesses that are within the program and determine if those  
24 weaknesses can be overcome, and, if they can, can we correct  
25 them and then adjust that performance of that particular

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1 program.

2                   Should we not be able to overcome the barrier  
3 that we have discovered, we would then look to modify our  
4 portfolio and either shift to another technology that has  
5 been previously identified in the CPR. We would, again, look  
6 at a suite of measure options and run them through the same  
7 seven-step evaluation process that's identified in our  
8 program portfolio before we integrate them into the current  
9 suite of measures that would be offered.

10 Q. So is the answer that it would just run its course, the  
11 five years, or is the answer if it's not working, that the  
12 utility would terminate it and not continue to incur costs?

15:51

13 A. MS. CARLSON:                   I think the challenge is that  
14 we have to understand why it wasn't working. So by  
15 evaluating those program measures on an annual basis by  
16 looking at them through the key performance indicators, as  
17 well as looking at the cost effectiveness test of each one,  
18 we really need to find out what that rationale is, and can we  
19 overcome it before we make a decision to just discontinue a  
20 program all together.

15:51

21                   If the barrier that has come up that is  
22 creating an impediment to a program being successful that we  
23 can not overcome, then we would look to discontinue that at  
24 that time. So it really becomes a process of evaluation and  
25 not necessarily a start-finish on a particular date. And

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1 again, we will look at these measures on an annual basis, so  
2 would not be through the whole five-year program, that we  
3 would wait before we made changes and/or modifications to  
4 those program measures.

5 Q. Thank you. Now, in response to YUB-YECL 26 -- now, YECL  
6 submitted the DSM evaluation measurement and evaluation plan.  
7 And referring to page 5 of this report, as you mentioned,  
8 there are key performance indicators, and I'm looking at key  
9 performance indicator number 4.

10 A. MS. CARLSON: Okay.

15:53

11 Q. And that's the kilowatt hours and kilowatt savings. Can  
12 you describe in any further detail how the utilities or the  
13 contractor will track the kilowatt hours or kilowatt savings?

14 A. MR. ROBILLARD: I think if you think of the  
15 approach this is at, each time there's an engagement with a  
16 customer, there will be a set of technologies that will be  
17 identified. There will be a -- there will be a profile built  
18 around what that engagement is, and that will be defined in  
19 terms of a baseline, in terms of, you know -- what's the  
20 baseline technology in annual consumption? What's the  
21 upgrade? What did we just help that customer replace that  
22 with? And there's very well-established engineering  
23 principles for then determining what the difference is going  
24 to be on an annual basis in terms of the savings.

15:53

25 If it's -- if it's one of the deemed savings

## YECL/YEC DSM PANEL

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1 technologies, then that would be -- that would be where we  
2 would go to determine that in this application we would  
3 expect that changing technology 'A' with technology 'B,' this  
4 would be the resulting -- resulting savings, and that would  
5 be tracked forward.

6           If it's a larger project, then we would  
7 normally use building energy use simulation models to do a  
8 simulation with the baseline technology and with the new  
9 technology. A lighting retrofit would be a good example. In  
10 a lighting retrofit, when you do building energy use  
11 simulation, it would do the calculation using Whitehorse  
12 weather data, so it would also take into consideration things  
13 like interactive effects that, if I am reducing my lighting  
14 load, I'm also reducing some of my waste heat. So I might  
15 actually be increasing my heat load or, conversely my  
16 cooling, with going in the other direction.

15:54

17           So -- and these models have been developed  
18 by -- they're widely developed. Natural Resource Canada has  
19 been in the process or been in the business of keeping these  
20 models -- we use a number of the models on a very regular  
21 basis to model. And so we would use that as a first way of  
22 attaching a particular project baseline, new technology, and  
23 what the resulting savings were.

15:55

24           Then if it were a larger project, we would  
25 pick a sample of those, and we would come back. And we would

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1 do the verification by checking utility bills. We'd need to  
2 accommodate in some cases if there had been a change of --  
3 we'd normalize for weather at a minimum. And sometimes the  
4 adjustments are even more sophisticated if it should be a  
5 hotel that historically had a 50 percent capacity or  
6 utilization and suddenly in the last period it had been 80  
7 percent or 30 percent, those kinds of adjustments would be  
8 considered. And so again, that project would have a savings  
9 attached to it that could either be, in the case of the first  
10 one, the deemed, or in the second one, the case of a verified 15:56  
11 measured one on site.

12 And what I would -- people are just reminding  
13 me, and I keep forgetting about this stuff. This is the  
14 standard practice that I'm describing to you throughout North  
15 America, so this has been a -- this is the same approach that  
16 all the major utilities adhere to. And it's something that,  
17 you know, has been subject to a lot of scrutiny, and it's  
18 ongoing refinement, as well, over time. And so what we try  
19 to bring as a starting point here is the state of the art  
20 where that resides right now. 15:56

21 Yes, I'm just reminded that -- so if you think  
22 of just -- we're back to our Excel spreadsheet, and each  
23 engagement is line in that. We are tracking these results,  
24 and we're tracking -- once they're in place and operational,  
25 we're tracking and reporting those on a monthly basis.

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1                   So what we're also normally doing is, for our  
2 projects as we're going forward, we're calculating the  
3 savings on a monthly basis, we're calculating what our cost  
4 of -- our equivalent cost of conserved energy is, and we're  
5 tracking that cluster of projects against what our target was  
6 for that program.

7                   If there's divergence, then on a monthly basis  
8 we're looking at why. And this is going back to the  
9 conversation we had a moment ago that Laura was espousing.  
10 We certainly wouldn't let something miss target for more than  
11 a short period of time without spending increasing amount of  
12 time trying to figure out what and why and what we should do  
13 about it. And only in that rare case where we suddenly come  
14 across something and we said, there's something totally  
15 unforeseen barrier that we totally missed that would be  
16 grounds to be a major re-change. But other than that, we  
17 would assume -- which is in the majority of the cases -- that  
18 it's more a case of refining to make it work better is more  
19 what's more likely to actually occur.

20 Q. Thank you. Thank you, panel. Those are my questions.

21 THE CHAIR:   Thank you very much,  
22 Ms. Bentivegna. Does the Board have any questions for the  
23 panel?

24                   Ms. Sears, do you have any re-direct?

25 MS. SEARS:   No, sir, I don't.

15:57

15:58

1 THE CHAIR: All right. So I guess just --  
2 well, I guess we can dismiss the panel. There's no further  
3 questions.

4 (PANEL STANDS DOWN)

5 THE CHAIR: Oh, sorry. Thank you.

6 MS. WRIGHT: I just wanted to ask if I can  
7 make, as a member of the public, a comment to the  
8 proceedings.

9 I noted in the Yukon Utilities Board Rule of  
10 Practice under Presentation, it's the Board's discretion  
11 to -- that you can schedule a portion of the hearing to hear  
12 comments from the -- under Presentation 25-2.

15:59

13 THE CHAIR: Yeah. There's two provisions  
14 under The Act or under the Rules that allow public input.  
15 One is through letters. We've done that in terms of the rule  
16 practice. And there is opportunity for the public. But  
17 doesn't anticipate -- that usually anticipates something that  
18 might occur before the hearing occurs, not something where  
19 the public would just come up at the mic in the middle of the  
20 proceedings or at the end of the proceedings to make a  
21 statement or a presentation.

15:59

22 So I don't know. I'm not inclined to permit  
23 that.

24 MS. WRIGHT: Well, in this document here  
25 that I was -- it says "may schedule a portion" --

1 THE CHAIR: But, Ms. Wright, we did not  
2 schedule a portion of that. That would normally be done as  
3 part of the overall proceedings. It would be done with the  
4 interveners' input and agreement about doing something along  
5 those lines. We have not followed that process or that  
6 procedure. So to come up at the end of the proceeding and  
7 ask to make a statement -- I mean, what I'll let you do, if  
8 you like, is I'd like to finish business --

9 Well, go ahead, Ms. Sears, if you...

10 MS. SEARS: Yeah, I just would make one  
11 comment, as well.

16:00

12 Of course, at the beginning of the hearing  
13 there was an opportunity for anyone to register, including  
14 the question ask to the public if there was anyone else who  
15 wanted to be involved.

16 THE CHAIR: Yes.

17 MS. SEARS: And, you know, in my submission  
18 if we were going to be hearing from the public, it's at that  
19 point that that would have been noted so that the panel has  
20 an opportunity to provide response, if appropriate,  
21 throughout the proceeding.

16:01

22 THE CHAIR: Yes. And, actually, I was  
23 remiss in not mentioning that. There was a opportunity at  
24 the very beginning of the proceedings where Ms. Bentivegna  
25 made that comment or made that request before we apply to the

1 panel.

2                   So frankly, I'm not going to allow your  
3 request. I'm going to deny it.

4 MS. WRIGHT:                   Okay.

5 THE CHAIR:                   You know, the process --

6 MS. WRIGHT:                   Well, actually --

7 THE CHAIR:                   -- next time you can follow  
8 that process.

9 MS. WRIGHT:                   May I just ask a question?

10 Because I've been involved --

16:01

11 THE CHAIR:                   Well, I'd like to finish these  
12 proceedings, and if you have a question, you could approach  
13 Ms. Bentivegna afterwards and ask that question.

14 MS. WRIGHT:                   So this isn't a public meeting,  
15 then.

16 THE CHAIR:                   Well, it's a public hearing,  
17 but it's quite a different thing than a public meeting where  
18 we -- you know, where we open the floor for the public to  
19 come up. That is a possibility through the process, but  
20 that's not what we -- that's not what was done this time.

16:02

21                   So I'm going to deny your request. So if you  
22 have questions, I would point you to Board staff, and they  
23 can help you out in terms of discussion.

24                   And in future hearings, you're more than  
25 welcome, when that request is made at the beginning of the

1 hearing, to present your name forward as somebody who wants  
2 to be an intervener.

3 MS. WRIGHT: No, I wasn't being an  
4 intervener. Just a general comment.

5 THE CHAIR: Well...

6 MS. WRIGHT: I thought it was the Board's  
7 discretion. I didn't think it was something...

8 THE CHAIR: Go ahead. Sure.

9 MR. FORTIN: I guess the danger here is that  
10 you could be telling us information that might colour our  
11 judgment that the applicant won't have a chance to defend or  
12 talk to. So that's why the process is, as Ms. Sears pointed  
13 out, if you do it at the beginning, then the interveners can  
14 pick up on it, but the applicant has a chance to speak to it.  
15 Right now, really, even if we wanted, it would be unfair to  
16 the applicant.

17 MS. WRIGHT: Though it does say in here at  
18 the board's discretion --

19 THE CHAIR: Yeah, but I explained --

20 MS. WRIGHT: -- at the Board's discretion.

21 THE CHAIR: Our discretion is to say no.

22 MS. WRIGHT: Thank you.

23 THE CHAIR: So before we wind up here there  
24 is some business that we have to finish. So before we wind  
25 up here there is some business that we've do finish. If the

1 first item of business, I guess, is to get an understanding  
2 from Ms. Sears -- there's a number of undertakings that are  
3 still outstanding. Do you have a timeline in terms of when  
4 you would be getting back on those?

5 MS. SEARS: Yes. Could I have just one  
6 second to speak with my client, please?

7 THE CHAIR: Sure.

8 MS. SEARS: Sorry, Mr. Chairman.

9 So what I was going to propose, sir, is there  
10 are a number of outstanding undertakings that arose both  
11 throughout the first two panels as well this panel. We were  
12 going to suggest Wednesday, November 13th, to provide our  
13 responses to undertakings at least with respect to everything  
14 other than DSM. I think what I would suggest is we could  
15 keep that date and -- for DSM as well.

16:04

16 But in the event that we find it's going to  
17 take a bit longer on these last questions, then I would write  
18 the Board to advise of perhaps a slight delay, recognizing,  
19 of course, that I think we need to deal with YEC and get a  
20 sense of their timeline as well. But for the balance of  
21 undertakings for both the depreciation and general panel,  
22 those would certainly be in by Wednesday, November 13th, if  
23 that's agreeable, sir.

16:05

24 THE CHAIR: Yeah, I would think we're  
25 agreeable. So, now, that would -- I think right now the

1 argument is due on November 20th -- sorry, argument's due two  
2 weeks from yesterday -- so yes, on November 20th. And then  
3 reply argument I think was due December 3rd. So I'm going to  
4 suggest that we push those off by two weeks respectively from  
5 that November 13th date, so that would then bring it to  
6 November 27th, and --

7 MS. BENTIVEGNA: Mr. Chair --

8 THE CHAIR: Sorry.

9 MS. BENTIVEGNA: -- not to have multiple sort  
10 of -- just in case the undertakings take a little bit longer, 16:06  
11 I was going to suggest that you might want to set the  
12 argument deadline for the 29th of November.

13 THE CHAIR: Sure.

14 MS. BENTIVEGNA: That's a Friday. Or the  
15 following Monday would be December 2nd.

16 THE CHAIR: Well, I'm not sure going to  
17 read it on the Friday.

18 MS. BENTIVEGNA: All right.

19 THE CHAIR: André will.

20 MS. BENTIVEGNA: All right. Why don't we set -- 16:06  
21 and this way everybody knows what they're aiming for;  
22 December 2nd.

23 THE CHAIR: So December 2nd and  
24 December 25th -- no, December 16th. Would that be for reply  
25 argument?

1 MS. BENTIVEGNA: Yes. Just going to check to  
2 make sure it's not a Saturday. The 14th is the Saturday.

3 THE CHAIR: Okay.

4 MS. BENTIVEGNA: So we'll make it the 16th,  
5 then.

6 THE CHAIR: Yes, sorry. Yes, 14th. So  
7 yes, 16th. Does that work for everybody?

8 MS. SEARS: It's rare that I request  
9 earlier dates, but whatever, we'll make it work on our end,  
10 sir.

16:07

11 THE CHAIR: Okay.

12 MS. BENTIVEGNA: Also it allows that if there's  
13 any questions on the undertaking --

14 MS. SEARS: Yeah, that's fair then, yeah.  
15 So, sorry, what were the final decisions,  
16 then? December...?

17 THE CHAIR: I think we said December --

18 MS. SEARS: 2nd.

19 THE CHAIR: -- and December 16th.

20 MS. SEARS: Thank you.

16:07

21 MS. BENTIVEGNA: Yeah.

22 THE CHAIR: So I don't think there's any  
23 other business that I'm aware of. And if there's not, I'd  
24 first of all like to thank the court reporters and the audio  
25 technician for their participation and their patience, and

1 also to Ms. Henry, who did a very good job. This is the  
2 first hearing that she's been at, and I congratulate her for  
3 her support.

4 And with that, I'll adjourn. I think I  
5 dismissed the panel already. And I'll adjourn this hearing.

6 MS. SEARS: Thank you, sir.

7 THE CHAIR: Thank you.

8 (Proceedings concluded at 4:08 p.m.)

9

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10 PROCEEDINGS CONCLUDED

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1 Certificate of Transcript

2

3 We, the undersigned, hereby certify that the foregoing pages  
4 598 to 827 are a complete and accurate transcript of the  
5 proceedings taken down by us in shorthand and transcribed  
6 from our shorthand notes to the best of our skill and  
7 ability.

8 Dated at the City of Whitehorse, Yukon, on  
9 November 7, 2013.

10

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12

\_\_\_\_\_  
"A. Jones"

13

A. Jones, CSR(A)

14

Official Court Reporter

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"S.J. Lea Dormer"

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S.J. Lea Dormer, CSR(A)

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Official Court Reporter

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