



# ONTARIO ENERGY BOARD

**FILE NO.:** EB-2017-0224  
EB-2017-0255  
EB-2017-0275

**Enbridge Gas Distribution Inc.  
Union Gas Limited  
EPCOR Natural Gas Limited  
Partnership**

---

**VOLUME:** Technical Conference

**DATE:** April 10, 2018

EB-2017-0224  
EB-2017-0255  
EB-2017-0275

THE ONTARIO ENERGY BOARD

Enbridge Gas Distribution Inc.  
Union Gas Limited  
EPCOR Natural Gas Limited Partnership

Applications for approval of the cost consequences  
of 2018 cap and trade compliance plans

Hearing held at 2300 Yonge Street,  
25th Floor, Toronto, Ontario,  
on Tuesday, April 10, 2018,  
commencing at 9:29 a.m.

-----  
TECHNICAL CONFERENCE  
-----

A P P E A R A N C E S

LJUBA DJURDJEVIC LAUREN MURRAY	Board Counsel
JOSH WASYLYK LAURIE KLEIN	Board Staff
MYRIAM SEERS CAITLIN MOUN	Union Gas
DENNIS O'LEARY ANDREW MANDYAM CRAIG FERNANDEZ	Enbridge Gas
KEN POON	EPCOR
JOHN WOLNIK *	Association of Power Producers of Ontario (APPrO)
TOM BRETT	Building Owners and Managers Association, Toronto (BOMA)
JULIE GIRVAN	Consumers' Council of Canada (CCC)
ROGER HIGGIN BRADY YAUCH	Energy Probe Research Foundation
KENT ELSON	Environmental Defence (ED)
DWAYNE QUINN *	Federation of Rental-housing Providers of Ontario (FRPO)
DAVID POCH CHRIS NEME	Green Energy Coalition (GEC)
JAYA CHATTERJEE *	City of Kitchener

\*appearing by teleconference

A P P E A R A N C E S

RANDY AIKEN *	London Property Management Association (LPMA)
NICOLE PETERSON	Low-Income Energy Network (LIEN)
ROBERT WOON	Ontario Sustainable Energy Coalition (OSEA)
MARK RUBENSTEIN	School Energy Coalition (SEC)
SHELLEY GRICE	Vulnerable Energy Consumers' Coalition (VECC)

\*appearing by teleconference

I N D E X   O F   P R O C E E D I N G S

<u>Description</u>	<u>Page No.</u>
--- On commencing at 9:29 a.m.	1
Preliminary Matters	1
<b>ENBRIDGE GAS DISTRIBUTION - PANEL 1</b>	<b>2</b>
<b>R. Sigurdson, D. Johnson, F. Oliver-Glasford, J. Murphy, A. Chagani, A. Langstaff</b>	
Questions by Mr. Elson:	2
Questions by Mr. Wasylyk:	25
Follow-Up Questions by Mr. Brett:	36
Follow-Up Questions by Dr. Higgin:	38
Questions by Mr. Poch:	41
--- Recess taken at 11:22 a.m.	60
--- Upon resuming at 11:43 a.m.	60
Questions by Mr. Wolnik:	60
Questions by Ms. Girvan:	69
Questions by Dr. Higgin:	77
Questions by Ms. Grice:	91
--- Luncheon recess taken at 12:46 p.m.	97
--- On resuming at 1:49 p.m.	97
Questions by Mr. Brett:	97
Questions by Mr. Woon:	125
Questions by Ms. Peterson:	128
Questions by Mr. Rubenstein:	130
Questions by Mr. Quinn:	141
--- Recess taken at 3:16 p.m.	151
--- On resuming at 3:32 p.m.	151
<b>GREEN ENERGY COALITION - PANEL 1</b>	<b>152</b>
<b>C. Neme</b>	
Questions by Mr. Wasylyk:	152
Questions by Mr. O'Leary:	154
--- Whereupon the hearing adjourned at 3:45 p.m.	159

E X H I B I T S

<u>Description</u>	<u>Page No.</u>
EXHIBIT NO. KT2.1: CVS OF ENBRIDGE WITNESSES.	2

U N D E R T A K I N G S

<u>Description</u>	<u>Page No.</u>
UNDERTAKING NO. JT2.1: TO ADD A ROW TO THE TABLE ATTACHED TO ED24 ESTIMATING THE VALUE OF THE AVOIDED NATURAL GAS COSTS.	5
UNDERTAKING NO. JT2.2: TO ADD A ROW TO THE TABLE ATTACHED TO ED24 SHOWING THE PROGRAM ADMINISTRATOR COSTS, INCENTIVE COSTS, PROGRAMS COSTS, ADMINISTRATION COSTS.	5
UNDERTAKING NO. JT2.3: TO SPLIT THE CHART IN ED24 UP BETWEEN CAPPED AND UNCAPPED CUSTOMERS AND TO PROVIDE IT IN EXCEL FORMAT	7
UNDERTAKING NO. JT2.4: TO UPDATE ON A BEST-EFFORTS BASIS THE NET BENEFITS ACCORDING TO THE PROGRAM ADMINISTRATOR COST TEST AND THE TRC FOR 2018 DSM PROGRAMS, TO ADD THE LONG-TERM CARBON PRICE FORECAST	10
UNDERTAKING NO. JT2.5: FOR ATTACHMENT 1 OF STAFF IR 24, TO REDO THE ANALYSIS COMPARING THE 2018 POTENTIAL ACCORDING TO THE POTENTIAL STUDY VERSUS THE DSM PLAN FOR ALL THREE SCENARIOS	19
UNDERTAKING NO. JT2.6: TO PROVIDE EXAMPLE THAT SHOWS MECHANICS OF THE PGVA AND GHG DVA WITH RESPECT TO FORECAST VS ACTUAL COSTS OF GAS AND CARBON	40
UNDERTAKING NO. JT2.7: TO ADVISE WHETHER THE PROPOSALS TO GOVERNMENT AND PRESENTATIONS TO GOVERNMENT PRE-DATED THE COMMITMENT OF 100 MILLION.	44
UNDERTAKING NO. JT2.8: TO MAKE BEST EFFORTS TO PROVIDE THE NUMBER OF PARTICIPANTS BY MEASURE IN THE C&I AND PRESCRIPTIVE CUSTOMERS	49
UNDERTAKING NO. JT2.9: FOR THE UTILITY-SCALE PROJECT, TO ADVISE WHETHER ENBRIDGE ANTICIPATES THAT TO BE FUNDED BY THE IESO OR THROUGH THE LCIF.	64

U N D E R T A K I N G S

<u>Description</u>	<u>Page No.</u>
UNDERTAKING NO. JT2.10: TO PROVIDE AN EXAMPLE OF HOW ACTUALS VS VARIANCES WILL FLOW THROUGH THE PGVA AND GHG DVA.	85
UNDERTAKING NO. JT2.11: TO PROVIDE AN EXAMPLE OR UNDERSTANDING OF HOW BAD DEBT EXPENSE IS CALCULATING RESULTING FROM INCREASED BILLS DUE TO CAP AND TRADE COSTS	89
UNDERTAKING NO. JT2.12: TO ADVISE THE NUMBER OF FTES APPROVED FOR 2017 AND THEN HOW MANY WERE ACTUALLY FILLED.	92
UNDERTAKING NO. JT2.13: WHEN THE BIDS ARE IN, TO PROVIDE A RANGE; TAKEN UNDER ADVISEMENT.	148
UNDERTAKING NO. JT2.14: TO RECATEGORIZE THE NON-SALARY ITEMS INTO THE CATEGORIES OF WHAT ARE OVERHEADS AND WHAT'S COMPENSATION, AND SPECIFICALLY DOES ENBRIDGE HAVE AN INCENTIVE PROGRAM AS PART OF THE COMPENSATION.	151
UNDERTAKING NO. JT2.15: TO RERUN THE TABLE AT EXHIBIT GEC.ED.STAFF.3 USING THE SAVINGS THAT ARE INCLUDED WITHIN THE CONSERVATION POTENTIAL REPORT, AND AT THE THREE VARIOUS SCENARIOS, CONSTRAINED, SEMI-CONSTRAINED AND UNCONSTRAINED, FOR THE PERIOD 2018 TO 2020.	154

1 Tuesday, April 10, 2018

2 --- On commencing at 9:29 a.m.

3 MS. DJURDJEVIC: Good morning, everybody. Welcome to  
4 Day 2 of the technical conference in EB file number 2017-  
5 0224/0255/0275. My name is Ljuba Djurdjevic. I am legal  
6 counsel for OEB Staff. With me are Lauren Murray, also  
7 counsel for Staff, and Josh Wasylyk.

8 I am not going to take everybody's appearances, except  
9 -- well, we will get the Enbridge witnesses to introduce  
10 themselves, and then anybody who wasn't here yesterday, so  
11 we'll start with that side.

12 MS. SIGURDSON: Ravi Sigurdson.

13 MR. JOHNSON: Daniel Johnson.

14 MS. OLIVER-GLASFORD: Fiona Oliver-Glasford.

15 MS. MURPHY: Jennifer Murphy.

16 MR. CHAGANI: Abbas Chagani.

17 MR. LANGSTAFF: Andrew Langstaff.

18 MR. O'LEARY: And I should also introduce myself  
19 again. Dennis O'Leary, counsel for Enbridge, and I am also  
20 joined today by Andrew Mandyam from Enbridge, as well as  
21 Craig Fernandez, who was with us yesterday.

22 MS. DJURDJEVIC: And anybody else, or on the phone, do  
23 we have anybody joining us that wasn't with us yesterday?  
24 No? Okay.

25 **PRELIMINARY MATTERS:**

26 So as a preliminary issue we need to mark as an  
27 exhibit the CVs of the Enbridge witnesses. That will be  
28 Exhibit KT2.1.

1           **EXHIBIT NO. KT2.1: CVS OF ENBRIDGE WITNESSES.**

2           MS. DJURDJEVIC: And are there any other preliminary  
3 issues? Okay.

4           So we have a schedule, and we are going to dive right  
5 into it so that we make the best use of our time, and our  
6 first questioner is from Environmental Defence. So Mr.  
7 Elson, you're up.

8           **ENBRIDGE GAS DISTRIBUTION - PANEL 1**

9           **Ravi Sigurdson**

10          **Daniel Johnson**

11          **Fiona Oliver-Glasford**

12          **Jennifer Murphy**

13          **Abbas Chagani**

14          **Andrew Langstaff**

15          **QUESTIONS BY MR. ELSON:**

16          MR. ELSON: Thank you. Good morning, panel. I think  
17 you know what questions I am going to ask you beforehand,  
18 so I'll just dive right into it.

19          Could we turn up ED24, and the attachment to ED24, and  
20 if we could rotate that so people can see it. And this is  
21 the interrogatory where we asked you to estimate the value  
22 of the lifetime GHG emission reductions from Union's 2018  
23 DSM programs; do you see those there?

24          MR. JOHNSON: Yes.

25          MR. ELSON: And you have the forecast gas savings.  
26 I'm just looking at the bottom table that is summing it up.  
27 The forecast gas savings, the GHG reductions, and then the  
28 carbon price, and then from those you value the gas

1 reduction in the bottom line there?

2 MR. JOHNSON: Yes.

3 MR. ELSON: And if you could just focus on the bottom  
4 right-hand cell, the value of the program over the lifetime  
5 in terms of just the carbon costs would be \$97 million.

6 MR. JOHNSON: Yes. Of note, this includes the large  
7 final emitters.

8 MR. ELSON: Of course. And from 2028 onward you have  
9 a carbon price that is continuing to rise. Could you file  
10 the basis for that carbon price?

11 MR. JOHNSON: We've indicated the assumptions we've  
12 made there in the note 5 at the bottom of that table.

13 MR. ELSON: So you've taken the value for 2028 from  
14 the long-term carbon price forecast and then had a  
15 5 percent annual growth plus 1.8 percent inflation? And  
16 that's your best estimate, I guess you'd say, of what the  
17 carbon price will be from that day forward?

18 [Witness panel confers]

19 MS. OLIVER-GLASFORD: That was one way of producing an  
20 assumption. There could have been others, but that was the  
21 way we chose, so that it would stay consistent with how the  
22 price was escalated in the long-term carbon price forecast.

23 MR. ELSON: And if that isn't your best estimate, I  
24 guess, could you undertake to provide what your best  
25 estimate would be of the carbon price from 2028 onward?

26 MS. OLIVER-GLASFORD: Any forecast would be a guess,  
27 so this was our best estimate.

28 MR. ELSON: Okay. That's helpful. Thank you.

1           So this table only includes the value of carbon  
2 reductions, not other costs or benefits; right?

3           MS. OLIVER-GLASFORD: Sorry, can you repeat your  
4 question?

5           MR. ELSON: The table here, what it is summing up is  
6 just the value of the carbon reductions from your 2018  
7 program. It doesn't have the other costs or benefits  
8 included in it.

9           MS. OLIVER-GLASFORD: The chart was filled out as per  
10 the template.

11          MR. ELSON: Oh, I know, I'm not saying that was a  
12 problem. I am just trying to move forward with some  
13 questions about --

14          MS. OLIVER-GLASFORD: Yes, there is the forecast  
15 annual gas savings, but the total was in GHG.

16          MR. ELSON: Okay. Got it. Thank you.

17          And I'd just like to ask you about some of the other  
18 costs and benefits, so first, could you undertake to add a  
19 row to this table estimating the value of the avoided  
20 natural gas costs? I'm assuming it's possible, because  
21 Union undertook to do the same thing in JT1.2, and it would  
22 be helpful to have consistent evidence across the two  
23 utilities.

24          MR. JOHNSON: Yes, we can do that, but I do just want  
25 to draw attention to the fact that both that and the  
26 dollars that are presently here are nominal dollars.

27          MS. DJURDJEVIC: Sorry, do we have the undertaking,  
28 JT2.1?

1           **UNDERTAKING NO. JT2.1: TO ADD A ROW TO THE TABLE**  
2           **ATTACHED TO ED24 ESTIMATING THE VALUE OF THE AVOIDED**  
3           **NATURAL GAS COSTS.**

4           MR. ELSON: Okay, thank you. Could you undertake --  
5 again, this was the equivalent of JT1.3 -- could you  
6 undertake to add a row showing the program administrator  
7 costs, incentive costs, programs costs, administration  
8 costs?

9           MR. JOHNSON: So you are referring to -- for which  
10 year?

11          MR. ELSON: Well, presumably it would all be in 2018,  
12 but if you could just add that to this table.

13          MR. JOHNSON: Okay, so just so I understand correctly,  
14 it would be a single value, and then everything would be  
15 blank from then on?

16          MR. ELSON: Until the total amount, I guess, yes.

17          MR. JOHNSON: Yes, we can do that.

18          MR. ELSON: That would be JT2.2?

19          MS. DJURDJEVIC: It will be -- yes, JT2.2.

20           **UNDERTAKING NO. JT2.2: TO ADD A ROW TO THE TABLE**  
21           **ATTACHED TO ED24 SHOWING THE PROGRAM ADMINISTRATOR**  
22           **COSTS, INCENTIVE COSTS, PROGRAMS COSTS, ADMINISTRATION**  
23           **COSTS.**

24          MR. ELSON: And thirdly, could you undertake to make  
25 best efforts to add a row to show the cost to customers  
26 over time as if those program administrator costs were  
27 added to rate base in 2018? And this would be the  
28 equivalent to Undertaking JT1.4 that Union provided.

1 MR. O'LEARY: Mr. Elson, could you please point to me  
2 the issue on the issues list that involves potentially  
3 rate-basing O&M expenses that are incurred from DSM or  
4 abatement?

5 MR. ELSON: I can point to two issues. The issue  
6 numbers elude me at the moment, but one is optimization and  
7 the choice between conservation and purchasing allowances,  
8 and the second one is the stand-alone issue about whether  
9 the abatement plan is appropriate.

10 And the question relates to the issue that you  
11 probably heard the discussion of yesterday, of the 2018  
12 costs having benefits that spread out over many years. And  
13 so providing an example of those costs being financed in  
14 this example, through something equivalent to rate basing,  
15 just gives an illustration of another way to do that and  
16 it's in response to a criticism that may sometimes be  
17 levied against conservation, that the benefits come at a  
18 different time than the costs.

19 So again, that was something that Union was able to  
20 provide for JT1.4. So it would be helpful, on a best  
21 efforts basis, to have consistent evidence from both  
22 utilities.

23 MR. O'LEARY: Thank you, Mr. Elson. Just to be clear,  
24 I did hear the discussion yesterday. It is our view that  
25 any proposal that would involve rate-basing and what in  
26 effect are expenses is a fundamental change to the whole  
27 rate regulation compact.

28 It is not a proposal currently put to this -- to the

1 Board Panel in this proceeding and therefore, we view it is  
2 a being out of scope.

3 Enbridge will respond to the question, but it's my  
4 view it is out of scope.

5 MS. SEERS: If I may clarify? It is Miriam Seers,  
6 counsel for Union.

7 Based on the transcript that we have, JT1.4 is to  
8 discuss options available to Union to finance conservation  
9 funding over time, which has been taken under advisement.  
10 So I think the reference is possibly incorrect. We don't  
11 have a record of having given the undertaking that Mr.  
12 Elson is suggesting.

13 MR. ELSON: That's fair. It was taken under  
14 advisement, and perhaps Enbridge could take this under  
15 advisement as well.

16 MR. O'LEARY: No, we're just going to object to it.

17 MR. ELSON: Okay. Lastly, and this is equivalent to  
18 JT1.16, could you split this chart up between the capped  
19 and the uncapped customers. In response, Union said that  
20 they would have to be done with some assumptions, and on  
21 that basis would be fine for us.

22 MR. JOHNSON: Just for the final table?

23 MR. ELSON: Yes.

24 MR. JOHNSON: So with the same caveat, we could do  
25 that as well.

26 MS. DJURDJEVIC: That is JT2.3.

27 **UNDERTAKING NO. JT2.3: TO SPLIT THE CHART IN ED24 UP**  
28 **BETWEEN CAPPED AND UNCAPPED CUSTOMERS AND TO PROVIDE**

1           **IT IN EXCEL FORMAT**

2           MR. ELSON: Could you provide all of that in an  
3 electronic spreadsheet, an Excel spreadsheet? That doesn't  
4 need a separate undertaking number, but just...

5           MR. JOHNSON: We can provide that.

6           MR. ELSON: Thank you. Moving to ED IR 29; I don't  
7 actually need to pull this up, but we had asked for the  
8 proportion of Ontario's GHG emissions that is are currently  
9 attributable to natural gas.

10           And I'd like to ask a follow up to that, which is  
11 whether you could undertake to provide the proportion of  
12 Ontario's GHG emissions that are regulated under the cap-  
13 and-trade plan, that are under capped under the cap-and-  
14 trade plan, that are attributable to natural gas.

15           [Witness panel confers]

16           MS. OLIVER-GLASFORD: Mr. Elson, I believe that that  
17 number, subject to check, is roughly 38 to 40 percent.

18           MR. ELSON: Thank you. If we could turn to ED 32,  
19 please. Have you calculated the TRC net benefits or the  
20 TRC ratio for the Green Investment Fund program that you  
21 are administering?

22           MR. JOHNSON: No, we have not.

23           MR. ELSON: Thank you. If we could turn to --  
24 actually, we don't need to turn to this because it is a  
25 Union interrogatory, so it might take a minute.

26           But if you were here yesterday, there was a discussion  
27 about a potential proposal to update the assumptions  
28 regarding avoided cost to reflect the long-term carbon

1 price forecast. I am wondering if you can recalculate the  
2 PAC and the TRC net benefits for your 2018 programs, adding  
3 the long-term carbon price forecast to ensure that the  
4 benefits and the avoided cost of carbon is captured  
5 properly.

6 So that would be the equivalent of JT1.10 for Union,  
7 and it would be helpful to have an equivalent figure for  
8 Enbridge.

9 MR. JOHNSON: Sorry, you are going to have to repeat  
10 that. Was that in reference to -- so you are saying not in  
11 reference to ED 30; in reference to which table?

12 MR. ELSON: Let me take a step back. This is in  
13 reference to an interrogatory response provided by Union to  
14 the GEC, and that is B.GEC.22. We don't necessarily need  
15 to turn it up, but one of the comments was that in Union's  
16 view, the cap-and-trade driven conservation should be  
17 incorporated or implemented via the DSM Framework. And an  
18 additional comment that they made was that were that to  
19 occur, the tests should be updated to account for the long-  
20 term carbon price forecast.

21 I see you are nodding, Ms. Glasford.

22 MS. GLASFORD: That would seem a reasonable approach,  
23 but something that would be discussed in a future DSM  
24 proceeding.

25 MR. ELSON: So for illustrative purposes, I asked  
26 Union to update their net benefits according to the program  
27 administrator cost test and the TRC for their 2018 DSM  
28 programs, to do what they had suggested should be done,

1 which is to add the long-term carbon price forecast.

2 I should also add one thing. I believe that was to be  
3 done on a best efforts basis, to go back and look at the  
4 numbers and see how doable that was.

5 MR. JOHNSON: So one of the challenges that we foresee  
6 for that is that the TRC test is really a TRC plus test  
7 that includes environmental attributes among other things.

8 We don't have insight in terms of what component, or  
9 potentially all of that component, was intended to capture  
10 carbon. So we could, as an example, subtract the 15  
11 percent and then re-add the carbon price. That could be on  
12 a best efforts basis.

13 MR. ELSON: Thank you.

14 MS. DJURDJEVIC: Undertaking JT2.4.

15 **UNDERTAKING NO. JT2.4: TO UPDATE ON A BEST-EFFORTS**  
16 **BASIS THE NET BENEFITS ACCORDING TO THE PROGRAM**  
17 **ADMINISTRATOR COST TEST AND THE TRC FOR 2018 DSM**  
18 **PROGRAMS, TO ADD THE LONG-TERM CARBON PRICE FORECAST**

19 MR. ELSON: If, as you go back, you decide to do it in  
20 a different way, if you just state your assumptions. You  
21 know, if you wanted to include a portion of that for non-  
22 environmental benefits, for example, I don't know. But as  
23 long as the assumptions are stated, then we have the  
24 appropriate caveats.

25 MR. JOHNSON: Sorry, one additional point of  
26 clarification; that's for 2018?

27 MR. ELSON: Yes. I think we have -- okay. Could we  
28 turn to Union's interrogatory 37? Are those available? If

1 not, I can just summarize the --

2 MR. O'LEARY: We don't have any of Union's  
3 interrogatories loaded up on the --

4 MR. ELSON: That's fine.

5 MR. O'LEARY: -- computer here.

6 MR. ELSON: We don't need to pull it up then.

7 So this was an interrogatory that we had asked to  
8 Union and to Enbridge about the potential ramping up of  
9 incremental DSM starting in 2019.

10 So if you actually turn to Enbridge's interrogatory  
11 37, it's the same numbering. And I am just going to read  
12 to you the first three sentences from Union's response.  
13 Union said:

14 "Once Union receives OEB approval of the  
15 incremental offerings and their corresponding  
16 budgets as proposed by Union within its DSM  
17 midterm review submissions, Union will include  
18 these offerings within the next available DSM  
19 program year. This is expected to be as soon as  
20 Q1 of Union's 2019 DSM program year, since the  
21 OEB's report of the Board on the DSM midterm  
22 review is not expected to be released until  
23 December 2018."

24 So Union is suggesting that the soonest that they  
25 might be able to do a ramp-up is Q1 of 2019 in the event  
26 that there is an increase in incremental Cap-and-Trade-  
27 driven conservation.

28 Would Q1 of 2019 be possible for Enbridge as well?

1 MR. JOHNSON: So I'm not familiar with the specific  
2 programs that Union was proposing as part of that, but I  
3 suspect if they had done a significant amount of pre-  
4 planning as part of their filing of evidence, that's  
5 something that would make sense in terms of, they could  
6 ramp up.

7 As we indicated in our evidence, the same would be  
8 true. It would be a function of what the program was and  
9 how far along we were in the development stage of it, so if  
10 it's something that was a program that we had already done  
11 a lot of work on, I could see us being able to execute on  
12 that very quickly.

13 If it's something that was fairly new and needed a  
14 fair bit of design and development, it could take quite a  
15 while, and it would also depend on the size of the budget.

16 MR. ELSON: So I guess maybe then what proportion do  
17 you think could be ramped up in Q1?

18 MR. JOHNSON: So we had not actually proposed any  
19 additional programs as part of our -- we proposed some  
20 modifications and increased budget or -- but hadn't  
21 proposed any modifications, so we don't have anything that  
22 is, you know, ready to go, per se, in Q1.

23 MR. ELSON: And your modifications that increased  
24 budget, did those have attached increased savings to them,  
25 increased gas savings?

26 MR. JOHNSON: They did not.

27 MR. ELSON: And what steps would be needed, were you  
28 to propose changes to increase the gas savings?

1 MR. JOHNSON: I apologize. Can you repeat the  
2 question?

3 MR. ELSON: What would you need to do in order to be  
4 proposing increased gas savings that could be implemented  
5 starting in Q1 of 2019?

6 [Witness panel confers]

7 MS. OLIVER-GLASFORD: I'll start to provide some  
8 thoughts, and Mr. Johnson may add in.

9 I think it's very tough that the DSM group had put  
10 forward a midterm submission on what they would do to  
11 change their portfolio based on the DSM Framework and the  
12 decisions by the Board on the initial plan, but I think  
13 it's difficult to make assumptions, because the starting  
14 point of the plans for Union Gas and Enbridge were  
15 different in the first place. So it is different what each  
16 utility could have put forward as differences for the  
17 midterm, so the DSM group would have taken the original  
18 plan and done the assessment on what needed to change for  
19 the midterm, and they have done that.

20 MR. ELSON: How much could you increase the gas  
21 savings starting in 2019? Do you have an estimate of that?  
22 Assuming, of course, you had the budget to pay for it.

23 MR. JOHNSON: So we believe that we're doing  
24 everything that we can do within the context of the DSM  
25 Framework in terms of how much we could ramp up by 2019  
26 would depend on a number of variables, including changes to  
27 the DSM Framework.

28 MR. ELSON: No, and that's fair. I mean, you can't do

1 more without more budget. No, assuming that there are  
2 changes to unlock, I guess, more potential through  
3 increased budget or otherwise, how much do you think you  
4 could do?

5 MR. JOHNSON: So as you'll see elsewhere in our  
6 evidence, in terms of incremental, what we'll call DSM for  
7 this context, we've been looking towards things like  
8 GreenON and potentially increased funding sources from  
9 there in order to drive incremental results. We haven't  
10 really done an analysis of incremental in the context of  
11 DSM, knowing that there is a very vast sum of additional  
12 dollars to be spent in that area.

13 MR. ELSON: And, you know, maybe that's a terminology  
14 issue but, you know, regardless of who's paying for it or  
15 what framework it's coming under, how much of an increase  
16 do you think you could achieve in terms of gas savings from  
17 conservation starting in 2019?

18 MR. JOHNSON: So we haven't done an analysis looking  
19 at that overall. It's been really focused on an  
20 opportunity, opportunity because, again, we are not in  
21 charge of the GreenON dollars. We don't get to say how  
22 much there is or who is going to spend it or how it's going  
23 to be spent, so we've really focused on, you know,  
24 responding to individual RFPs or looking at an individual  
25 area that we think might add value.

26 MS. OLIVER-GLASFORD: And if I could just add, the DSM  
27 portfolio, the way it's designed is flexible for us to  
28 modify and, you know, further saturate markets that were in

1 already to take those programs into the market. So I think  
2 the group is doing what they can do with the budget they've  
3 got.

4 MR. ELSON: So I think that's fair, if you haven't  
5 done the analysis. And perhaps you could undertake to  
6 provide a rough estimate of how much you think you could  
7 increase conservation from a gas savings perspective in  
8 2019, assuming that you have those changes that you would  
9 need to unlock that potential. Is that something that you  
10 could undertake to look into on a best-efforts basis?

11 MR. O'LEARY: Mr. Elson, it appears to me you are  
12 asking a question that there are no parameters or  
13 assumptions that have been given, so it's entirely and  
14 utterly speculative as to what we would be doing. I don't  
15 know how we could respond to that.

16 MR. ELSON: I mean, I would hope that your witnesses  
17 would be able to decide what's doable and what's not  
18 doable. The question would be on a best-efforts basis, and  
19 the parameters would be within what Enbridge believes would  
20 need to change as part of the midterm review or as part of  
21 whatever barriers might exist right now to unlock that  
22 potential. So, I mean, I wouldn't presume to make all  
23 those assumptions for the sake of your client. I would  
24 hope that they would make -- state those as part of a  
25 response.

26 MR. O'LEARY: Well, I reiterate that I don't see a  
27 question that the company is capable of answering, and I  
28 remind you that this is a proceeding that deals with the

1 2018 cap-and-trade compliance plan. I don't see how a  
2 response that might take a great deal of time and would  
3 require a great detail in terms of the assumptions and  
4 thought that goes into it, how it would be of any value to  
5 the Board Panel in this proceeding. So we don't believe  
6 it's an appropriate question.

7 MR. ELSON: The issue came up in the last cap-and-  
8 trade hearing in 2017 that to the extent that the reasons  
9 for not implementing incremental conservation would be  
10 applicable in all of the future years of the cap-and-trade  
11 plan, is a factor that suggests that those reasons are,  
12 frankly, not reasonable, and there was some discussion of  
13 future years on that basis.

14 I guess what I am trying to get at is you haven't  
15 suggested incremental conservation for 2018, and does that  
16 mean that the same will be true for 2019 and 2020? The  
17 best way, I think, to get at that is to have Enbridge look  
18 at 2019 and say, well, what could we do for that year, and  
19 give it some insight as to whether the reasons for not  
20 implementing incremental conservation now will persist  
21 throughout the life of this four-year plan.

22 Maybe if your witnesses can speak to that at a high-  
23 level, we can have a bit more insight from the technical  
24 folks as to what their constraints might be.

25 MR. O'LEARY: I just thought I would remind you, Mr.  
26 Elson, that the 2019/2020 multi-year cap-and-trade  
27 compliance plan will not be filed until August 1st. So I  
28 would suggest that that would be the time to question -- to

1 raise the very question that you've just raised now.

2 MR. ELSON: Mr. O'Leary, are you objecting to your  
3 witnesses providing any sort of high-level answer to this  
4 right now?

5 MR. O'LEARY: I've objected to the first specific  
6 question you asked for calculations and estimates that I  
7 think are undoable.

8 If you have some high-level questions that are  
9 relevant, please proceed.

10 MR. ELSON: I think we are going to have to move on,  
11 and I am going to have to address that at the hearing.

12 Let's move to Staff 24, if you would, please.

13 Actually before we get here -- no, I'll just go  
14 straight to Staff 24 in the lack of time.

15 If you could turn to attachment 1, please, this  
16 analysis is comparing the MACC potential versus the DSM  
17 plans. Do you see that there?

18 Can you re-do this analysis comparing the potential  
19 according to the potential study versus the DSM plan?  
20 Would you undertake to do that?

21 MR. JOHNSON: I'm a little confused by the question  
22 for two reasons. One, the MACC was based on the potential  
23 study, as I understand it. And two, we did do our own  
24 separate analysis again with different assumptions for  
25 different purposes, or the same purpose but in different  
26 ways, on the potential study. So I'm not sure I understand  
27 what you're asking for.

28 MR. ELSON: I'm asking for you to compare the

1 potential, as outlined in the potential study, with your  
2 DSM plans in accordance with -- by redoing this attachment.

3 I guess you could do it as a fresh analysis, if you  
4 prefer, but just to have a table comparing what the  
5 potential study says the potential is and what your DSM is  
6 plan is intending to achieve -- in 2018, of course. I

7 And particularly, we'd be looking at that for all  
8 three scenarios in the potential study.

9 MR. JOHNSON: I was just going to say -- so are you  
10 saying regardless of the spend?

11 MR. ELSON: We would look at it for all three  
12 scenarios in the potential study.

13 MR. JOHNSON: So you'd really like the results from  
14 the second attachment overlaid with this, because that is  
15 there?

16 MR. ELSON: I don't think the second attachment does  
17 that, and I was looking at it previously.

18 What I am looking for is a comparison of the annual  
19 savings in the achievable potential study, the three  
20 scenarios versus what Enbridge is planning to achieve in  
21 its 2018 plan.

22 MR. JOHNSON: So I guess my only concern is the CPS  
23 was done for the purposes of the DSM Framework, and so  
24 I -- whereas the MACC was intended for the cap-and-trade  
25 framework. So I really see that as a question that's  
26 probably more appropriate for the DSM Framework.

27 MR. ELSON: Well, with respect, what's relevant here  
28 is, you know, how much potential is available, and that is

1 one of the items that I believe the utility is entitled to  
2 look at. And it would be helpful to have a comparison  
3 between what is being achieved in 2018 and what the  
4 potential study says can be achieved in 2018 under the  
5 three scenarios.

6 I think it's -- I'm definitely hearing from a couple  
7 of other intervenors that it would be helpful for them,  
8 too.

9 MR. JOHNSON: I think that is something that we can  
10 provide -- we can certainly do the calculation, but we'd  
11 want we'd want to add the clarification, as we have in the  
12 second attachment, just in terms of the spend that would be  
13 required for that.

14 MR. ELSON: Of course, caveats as necessary. Thank  
15 you.

16 MS. DJURDJEVIC: JT2.5.

17 **UNDERTAKING NO. JT2.5: FOR ATTACHMENT 1 OF STAFF IR**  
18 **24, TO REDO THE ANALYSIS COMPARING THE 2018 POTENTIAL**  
19 **ACCORDING TO THE POTENTIAL STUDY VERSUS THE DSM PLAN**  
20 **FOR ALL THREE SCENARIOS**

21 MR. ELSON: Okay, if we could turn to OSEA 11, am I to  
22 understand that Enbridge's position is that additional cap-  
23 and-trade driven conservation should be implemented through  
24 the DSM Framework?

25 MS. OLIVER-GLASFORD: Yes, that is our position.

26 MR. ELSON: So if you were to do that, how much would  
27 you be looking for under the DSM Framework?

28 MS. OLIVER-GLASFORD: I think, going back to the

1 earlier conversation, it would be tough to know without  
2 looking at all of the different variables at play. But  
3 certainly I think it would do energy efficiency a service  
4 to have it dealt with in one hearing where all parties can  
5 comment on all aspects, and an appropriate update or  
6 framework can be developed.

7 MR. ELSON: So what would be involved in an analysis  
8 to determine that amount, just at a high level? How long  
9 would that take?

10 MR. JOHNSON: I think, similar to our earlier  
11 response, one of the challenges is that within the DSM  
12 Framework, there is the restriction in terms of the Board  
13 had given guidance on budgets and restrictions around  
14 budgets due to potential impacts for things like cross  
15 subsidization.

16 So, you know, again one of the reasons that we haven't  
17 proposed anything incremental within the DSM mid-term is  
18 respecting the guidance from the Board. And the reason  
19 that again we haven't proposed anything incremental within  
20 the cap-and-trade was there was nothing cost-effective  
21 within the cap-and-trade framework.

22 MR. ELSON: I am just trying to see a path forward on  
23 this and see what the steps would be that Enbridge would  
24 have to take.

25 At what point would you undertake that analysis if the  
26 ramp-up were to occur in the first quarter of 2019? I  
27 mean, you would have to be doing that in this year; right?

28 Maybe I can ask a ballpark figure. Would you need to

1 start that analysis in the third quarter of 2018 to be  
2 planning the ramp-up to start in 2019?

3 MS. OLIVER-GLASFORD: The ramp-up times for energy  
4 efficiency programs are highly dependent on the type of  
5 programs, to be sure, and, you know, as mentioned, it --  
6 from a practical point of view, having energy efficiency in  
7 one framework where all of the activity can be reviewed in  
8 totality and assessed in totality is beneficial, especially  
9 when we need to look at the other variables at play in the  
10 market right now, the \$1.3-billion that's being injected in  
11 energy efficiency from GreenON Fund, the additional  
12 hundreds of millions of dollars coming from the federal  
13 government that's also going towards energy efficiency. I  
14 think it's prudent for the company to take stock of all of  
15 the pieces in order to do an ample assessment.

16 MR. ELSON: Well, let me ask you this question. How  
17 do we avoid the scenario where Enbridge sort of gets what  
18 it wants with respect to cap-and-trade-driven conservation  
19 in that it's going to be implemented via the DSM Framework,  
20 and that comes via the midterm review decision which is in  
21 December. How do we avoid the situation where there is  
22 then another delay of six months or a year before you can  
23 actually implement that? What sort of pre-planning would  
24 you need to do over this year to stop that from happening?

25 MS. DJURDJEVIC: Sorry to interrupt just again,  
26 minding the time, Mr. Elson. You are in your last five  
27 minutes. Do we maybe want to get the -- if maybe this  
28 could be dealt with by way of undertakings or...

1 MR. ELSON: I believe I have seven minutes, according  
2 to my calculations.

3 MS. DJURDJEVIC: Okay. All right, the introductions  
4 took a few minutes.

5 MS. OLIVER-GLASFORD: So at this time we just don't  
6 feel that it's prudent for ratepayers -- for us to  
7 undertake that review when we don't have a clear signal  
8 from the Board that they are keen to have us go over the \$2  
9 a month threshold for monthly costs on energy efficiency.  
10 So I think that's really the first piece that, you know,  
11 that we need direction from the Board on that particular  
12 aspect.

13 MR. ELSON: And in terms of prudence, is that just a  
14 question of how much it would cost you to do the planning,  
15 sort of administratively?

16 MR. JOHNSON: Again, I think the other challenge is,  
17 without guidance on what -- you know, we wouldn't know  
18 where to start. Do we start with an extra million dollars,  
19 an extra hundred million dollars, or something in between,  
20 so, you know, the analysis could be, you know, an infinite  
21 number of variables.

22 The other thing I just wanted to add, though, is again  
23 within the cap-and-trade framework we have, as indicated,  
24 also done the analysis to see if there is anything cost-  
25 effective within that framework, so it is not that we are  
26 not looking for those opportunities in either framework,  
27 and again, within the DSM, pursuing anything that we can  
28 within the budgets that we have.

1 MS. OLIVER-GLASFORD: And just as an additional point  
2 of note is that this is a 2018 compliance plan, and  
3 certainly, you know, down the road it seems that there will  
4 be an opportunity to develop longer-term plans, but we are  
5 watching a lot of movement in the marketplace, and it is  
6 prudent for many reasons for us to wait until all those  
7 pieces are known, especially given the magnitude of them.  
8 If it was small numbers, it might be a different matter.

9 MR. ELSON: I guess it seems to me that you are the  
10 experts in this, and it's Enbridge that has the most  
11 information, the most data, that it would be you that could  
12 propose a path forward, rather than look for the Board to  
13 develop something from scratch. Would that not be an  
14 approach that's consistent with the way that DSM is  
15 regulated, that a proposal comes forth from the utility?

16 MS. OLIVER-GLASFORD: So I just want to point out that  
17 we are trying to create a path forward. We have developed  
18 an abatement construct in order to help all of us create a  
19 common set of language and a path towards planning around  
20 low-carbon initiatives. We are actively putting in  
21 proposals and having discussions in order to advance  
22 incremental energy efficiency that would leverage the  
23 funding that is going through the greenhouse gas reduction  
24 account, and so we're also putting forward a geothermal and  
25 RNG upgrading application, you know, through a separate  
26 proceeding.

27 So I think we are trying to develop a path forward.  
28 We have used the tools provided by the Board. The MACC

1 indicates that there is not any cost-effective energy  
2 efficiency at this time. So we have looked at all the  
3 pieces available to us at the current time.

4 MR. ELSON: So this is my last question, I think, and  
5 I just am trying to see if I have a proper grasp of the  
6 overall picture.

7 So we have a four-year cap-and-trade framework which  
8 is '17, '18, '19, '20, and in 2017 there is no incremental  
9 ratepayer-funded conservation, and 2018, again, the same,  
10 and I think now what you're saying is for 2019 you don't  
11 think it's prudent to do the pre-planning work now to have  
12 that proposal ready to go for January 1st of 2019, so that  
13 would be then the third of the fourth year where we  
14 wouldn't have incremental conservation. Am I understanding  
15 that correctly?

16 MS. OLIVER-GLASFORD: I don't think that is quite  
17 correct. I am pleased that you noted that it was ratepayer  
18 DSM, so we do have incremental energy efficiency,  
19 significant amounts. We were granted \$100 million to  
20 implement additional residential retrofit programming in  
21 the province. There is, as you know, programmable  
22 thermostat program, to the tune of \$40 million, that is  
23 being rolled out.

24 So in the context of the DSM Framework, which was, you  
25 know, a lengthy and fulsome review of all of the  
26 stakeholders' opinions and a decision by the Board around  
27 what was the appropriate bill impacts, we have not gone  
28 beyond that direction at this time, and then in terms of

1 incremental for energy efficiency, the Board provided a  
2 tool. That tool was the marginal abatement cost curve, and  
3 it shows that there is no incremental energy efficiency at  
4 this time within the ratepayer context.

5 MR. ELSON: I'll pick up those strands at the hearing.  
6 Thank you.

7 MS. DJURDJEVIC: Thank you, Mr. Elson.

8 We now go to OEB Staff's questions. That'll be you,  
9 Mr. Wasylyk.

10 **QUESTIONS BY MR. WASYLYK:**

11 MR. WASYLYK: Thank you, witness panel. So I've got a  
12 couple of questions as I hope to focus into only two  
13 particular areas. And I had sent some questions in  
14 advance. I might not address all of those, but at least it  
15 got you hopefully thinking along the lines as to where  
16 we're going to be looking into.

17 Maybe just before we get into my questions, I was  
18 hoping to add a small follow-up to, I think it was the last  
19 undertaking that Mr. Elson had asked for, and that is to  
20 redo that table from Staff 24, attachment 1 with the CPS  
21 potential.

22 When you do so, could you do -- could you do that  
23 without applying any sort of additional adjustment factors  
24 to the potential, other than -- sorry, other than the  
25 adjustment factors that you would need to apply to get it  
26 to be applicable to just Enbridge's service territory, so  
27 no adjustment factors for net to gross or spillover.

28 MR. JOHNSON: So you are asking for it on a agrees

1 basis instead of a net bases?

2 MR. WASYLYK: I guess we'll get into that. I'm asking  
3 on the basis that it was outlined in the potential study  
4 itself, which I think there may be a differing of opinions  
5 on what that basis is.

6 MR. JOHNSON: So if you want it on the basis of the  
7 potential study, then we would have to apply the factor.  
8 If you'd like it on a gross basis, we can do that.

9 MR. WASYLYK: Sorry, can you just explain? I don't  
10 understand. You'll have to apply which factor?

11 MR. O'LEARY: If I could just ask a question? Are you  
12 asking the company to provide an answer that includes an  
13 assumption that it doesn't agree with? Because if that's  
14 the case, then I would suggest that the appropriate way is  
15 to allow the company to provide the answer, and then you  
16 can make whatever adjustments that you think are  
17 appropriate to it, if that is part of your -- the case.

18 MR. WASYLYK: No, I'm not asking the company to -- I  
19 think you will need to do one adjustment to make it  
20 specific to Enbridge's service territory.

21 MR. O'LEARY: I think the company is going to make the  
22 adjustments it considers appropriate, and you did refer to  
23 the net to gross adjustment. Are you saying that Board  
24 Staff is going to take the position that the CPS is a gross  
25 or a net number, meaning it is net of the net to gross  
26 ratio?

27 MR. WASYLYK: Are we in a position to be taking  
28 positions right now? I'm not sure of the order of

1 proceeding here.

2 MR. O'LEARY: Well, I think we need to know if you are  
3 asking the panel to provide an answer to you, but we don't  
4 agree with the premise upon which you are making the  
5 question.

6 MR. WASYLYK: So are you objecting to provide...

7 MR. ELSON: Can I interject here?

8 MR. WASYLYK: Yes, please.

9 MR. ELSON: Perhaps it would be helpful if the utility  
10 were to provide both options and then, at the proceeding,  
11 we can have a debate about which is the accurate one. I  
12 don't think that undertaking responses have to be limited  
13 to what Enbridge's position is. So if you provide both,  
14 then we can leave the discussion to the hearing.

15 MR. O'LEARY: With the greatest of respect, it is  
16 Enbridge's evidence that is being produced here, and if the  
17 company doesn't agree with something then -- and an  
18 assumption, I don't believe it's appropriate.

19 So I'm going to suggest we'll respond with the  
20 appropriate assumptions and adjustments that the company  
21 believes are appropriate for the undertaking.

22 MR. POCH: Dennis, I'd like to go on the record here.  
23 I think it is really unhelpful to the parties and the Board  
24 and how long this process takes if Enbridge can't lay out  
25 the simple numbers for people.

26 Put the caveat on that you'd like, by all means. We  
27 appreciate there is a live issue here as to the  
28 interpretation of the MACC and whether they did net to

1 gross in a manner that reflects net to gross as Enbridge  
2 sees it, or as others see it.

3 That's fine. Let's highlight that issue for the Board  
4 and let them see the consequence of the two views.

5 But what I can't -- I don't see how you can object to  
6 simply putting the numbers on the record. Otherwise, we  
7 will just end up with delay and debate at the hearing, you  
8 know, which is just going to prolong things.

9 So I would really urge you, in answering that, to lay  
10 it out and by all means, of course, protect your client  
11 with the appropriate caveats.

12 MR. O'LEARY: Maybe this is an issue that we need to  
13 raise with the Board Panel, and allow it to make a  
14 determination as to whether or not net to gross should be  
15 an adjustment or not.

16 MR. POCH: Clearly, that is going to be an issue that  
17 the Board --

18 MS. DJURDJEVIC: Is this going to be a refusal? And  
19 then we'll -- or do you want to take it under advisement?  
20 It is not going to benefit to debate this.

21 MR. O'LEARY: A part refusal. We've given the  
22 undertaking, and that will come. We're just not prepared  
23 to produce an undertaking response which we don't agree  
24 with.

25 MS. DJURDJEVIC: With all due respect, the question  
26 was a question and if your client is not prepared to give  
27 the answer, then it's just a refusal. We haven't asked for  
28 what their interpretation is. I mean, that's -- everybody

1 has the opportunity to make that case.

2 But just to be clear on the record, the question was  
3 asked and it's being refused.

4 MR. O'LEARY: Yes.

5 MR. WASYLYK: Thank you. So my questions are going to  
6 then -- actually, I've got one follow-up question to that.

7 Could you please let me know if you agree that free  
8 ridership and spillover are a product of program design?

9 MR. JOHNSON: What I would say is that program design  
10 can influence both of those factors.

11 MR. WASYLYK: Thank you. So we have a couple of  
12 follow-ups to -- I think it's Board Staff 24 and Board  
13 Staff 28.

14 It appears as though Enbridge has made some  
15 adjustments, as we've just discussed, to bring the  
16 potential which has been identified in the MACC down to  
17 what it claims is a net savings number.

18 I'm just wondering if -- can you please confirm the  
19 manner in which Enbridge has done this, and if there has  
20 been any additional net to gross adjustments outside of  
21 what adjustments are within its DSM plan that have been  
22 made to the MACC potential to account for any CCAP  
23 programs?

24 MS. OLIVER-GLASFORD: I can speak to the CCAP piece.  
25 There have been no adjustments to the MACC to address the  
26 CCAP funding because at the time of the MACC development,  
27 that was not known and it is still not fully transparent to  
28 us. So no adjustments were made, other than those of the

1 net to gross ratios being applied.

2 MR. WASYLYK: Okay. And then the net to gross  
3 adjustments -- I think it states here, but maybe just so  
4 you can clarify and I know for one hundred percent  
5 certainty that those have been the ones what that have been  
6 historically used and applied by Enbridge through its  
7 DSM -- I guess, DSM planned programs?

8 MR. JOHNSON: Yes, that's correct, the last several  
9 years.

10 MR. WASYLYK: All right. Thank you. Now I'd like to  
11 just touch on cost-effectiveness.

12 Enbridge noted, I think in response to Staff 24, that  
13 it had concluded that additional DSM programs would not be  
14 cost-effective.

15 And so I just wanted to follow-up on that and just  
16 gain a bit of a better understanding as to how Enbridge  
17 determined cost-effectiveness for its potential customer  
18 abatement programs compared to potential RNG opportunities.

19 Can you please describe the manner in which you went  
20 about assessing cost-effectiveness for your potential  
21 customer abatement programs, as well as for potential RNG  
22 opportunities?

23 MR. JOHNSON: I think as we've indicated, the MACC was  
24 our primary tool for assessing within the context of what  
25 I'll refer to as DSM, but really are energy efficiency  
26 programs. So that was the primary tool that we used and  
27 you can refer to the analysis that you were talking about  
28 on attachment 1, where we compared the opportunities

1 identified in the MACC versus the opportunities -- or  
2 versus the projected or the forecasted savings that we were  
3 expecting to get.

4 We did that comparison and that's what's outlined  
5 there.

6 So that was in the context of DSM; the MACC was our  
7 primary tool.

8 MR. WASYLYK: And then for RNG, what was the, sort of,  
9 undertaking analysis that you went through to determine  
10 that that was cost-effective?

11 MR. CHAGANI: For RNG, the main, I guess, cost  
12 analysis was that it is not expected to cost ratepayers any  
13 incremental amounts, as the government funding will cover  
14 the premium between the all-in cost of natural gas and the  
15 cost -- sorry, all-in cost of natural gas or the  
16 conventional natural gas costs plus associated carbon cost,  
17 as per the long-term carbon forecast in the actual cost of  
18 the RNG procured.

19 MR. WASYLYK: So you relied essentially on the MACC  
20 for the two sets of analysis, but then you need to layer in  
21 the additional government funding to come up with the RNG  
22 figure. Is that correct?

23 MR. CHAGANI: Yes.

24 MR. WASYLYK: Thank you. So I'm just going to pause  
25 on this just for one second. So I'm just taking a look at  
26 the marginal abatement cost curve study and I'm looking at  
27 Exhibit 3, and there is a handy chart there that outlines  
28 all the various opportunities, and the potential and the

1 cost-effectiveness for those.

2 MR. O'LEARY: A page number, Mr. Wasylyk?

3 MR. WASYLYK: I think it's page...

4 MR. O'LEARY: Exhibit KT 1.2.

5 MR. WASYLYK: Page 14, Exhibit 3. And we might be  
6 spending more time getting to it than the question or the  
7 answer will take.

8 But I -- so when I take a look at this and I see all  
9 the various bars that go downward, so that indicates, I  
10 think, that they're cost-effective, so through Enbridge's  
11 analysis you -- can you please tell me if you then looked  
12 at all of these bars and bands which appear to be cost-  
13 effective and compared those to what you currently had in  
14 place through your DSM program to come up with your  
15 determination that there is no incremental abatement  
16 opportunities?

17 MR. JOHNSON: So the first thing to draw attention to  
18 is that these are actually average, not incremental  
19 abatement opportunities, and so, again, back to our  
20 analysis. The key, as you've sort of indicated, is to  
21 compare that to our existing programs, because our existing  
22 programs will include a lot of the existing.

23 One of the challenges, our programs, of course, are  
24 not broken down in exactly the same way that the MACC was  
25 laid out, so we did look at a high level, using -- I'll use  
26 sort of the two extremes. Industrial. We have a custom  
27 program. The key opportunities identified in industrial  
28 HVAC direct heating and steam hot water systems are all

1 areas that we would target with our technical support in  
2 terms of identifying the opportunities, and then all of  
3 them could be captured as part of our custom program.

4 On the flip side, down to residential, similar  
5 concept, our HEC program is a whole home program, targets  
6 many of the opportunities that are identified here. Space  
7 heating, insulation, things like that are all covered as  
8 part of our program. Again, we don't have the breakdown by  
9 individual component because it's a -- the savings are done  
10 on a whole home basis.

11 So can we say for certain that each individual  
12 component of that lines up with our program? We don't have  
13 that analysis.

14 There are a couple that we identified that we don't --  
15 are not included in our whole home program, so one example  
16 would be fireplaces and another example would be pool  
17 heaters. Pool heaters was a very, very small opportunity.  
18 We didn't see the value of again creating a whole program  
19 to go after something that was, you know, on the order of a  
20 handful of tonnes.

21 Fireplaces were an interesting one. That's again not  
22 part of our whole home program. It is part of GIF, so  
23 opportunities -- or customers that have those  
24 opportunities, our attribution agreement will direct those  
25 to GIF as part of that.

26 We've heard rumblings there might be a GreenON  
27 targeted program for that as well again. We don't have the  
28 insight to say that for sure by any means. So again, we

1 didn't the value in creating a duplicate program -- or a  
2 program that has partial duplication and may have full  
3 duplication at some point in the future, especially given  
4 the size of those opportunities.

5 MR. WASYLYK: Okay. Thank you for that. And you may  
6 have just addressed this, but the particular end uses  
7 within there -- and you mentioned a couple of the big  
8 potential ones, industrial HVAC, industrial direct heating,  
9 and industrial steam hot water system. So is it correct or  
10 did I hear you correctly that you aren't able to go into  
11 your current DSM suite of programs and take a look to see  
12 what you're achieving there or what you project to achieve  
13 in 2018 and beyond with respect to the specific end uses?

14 MR. JOHNSON: So in terms of for past results, I mean,  
15 the only results that I would have comprehensive results  
16 for would be 2015, and again, they wouldn't line up exactly  
17 with these categories. In addition, in terms of 2018, we  
18 certainly don't forecast in terms of our custom programs by  
19 these areas, because the mix of results between using those  
20 three examples varies tremendously year to year. You know,  
21 again, when you're looking at things like direct heating  
22 you can have very large projects that will skew things from  
23 one year to the next, so that's why we have never  
24 forecasted, you know, things like our industrial programs  
25 on that breakdown.

26 MR. WASYLYK: Okay. In the interests of time I'm  
27 going to stop there. Thank you very much. But I did have  
28 one other topic area that I wanted to ask you a couple

1 questions on, and that is with respect to issue number 4,  
2 deferral and variance accounts.

3 We had some discussion with Enbridge yesterday on the  
4 treatment of -- sorry, of its variance accounts and how  
5 actual costs related to RNG procurement may differ across  
6 the two utilities.

7 So I just was hoping for you to be able to provide  
8 some clarity on how Enbridge intends to reflect gas cost  
9 variances in the PGVA and the allowance cost variances in  
10 the GHG customer variance account?

11 MR. CHAGANI: So after -- I guess after the RNG's  
12 procured, on an annual basis or on a quarterly basis, the  
13 PGVA reference price will be updated to include the RNG  
14 component. So it will be actually in the reference price,  
15 so you will not see price variances in the PGVA after each  
16 quarter.

17 MR. WASYLYK: Okay. So if there are any differences  
18 between a forecast cost and an actual cost will Enbridge  
19 seek recovery of that difference?

20 MR. CHAGANI: The actual cost will be fixed for a ten-  
21 year period, and that actual cost will be based on the  
22 current forecast, which will be built into the reference  
23 price itself. So the customers will pay the procured cost  
24 of RNG, which will be fixed on Day 1.

25 MR. WASYLYK: Okay, so then essentially there are --  
26 there is no forecast cost?

27 [Witness panel confers]

28 MR. CHAGANI: Could you repeat your question again?

1 MR. WASYLYK: Sorry, maybe I'll ask it in a different  
2 way. When you said it -- when you procure your contracts  
3 and that cost is then known to you, it will be then set out  
4 for ten years; is that right?

5 MR. CHAGANI: That's correct, yes.

6 MR. WASYLYK: Within those two ten years there will be  
7 no change in the cost or the price that you pay; is that  
8 correct?

9 MR. CHAGANI: Yes.

10 MR. WASYLYK: And then at the end of the ten years you  
11 will go ahead and procure a new price? Assuming --

12 MR. CHAGANI: Assuming there is additional government  
13 funding.

14 MR. WASYLYK: Sorry. Okay.

15 **FOLLOW-UP QUESTIONS BY MR. BRETT:**

16 MR. BRETT: Can I just have a follow-up there? If the  
17 -- you are saying that the -- I didn't quite get what you  
18 said. You are saying that there is a price that -- that  
19 you have a fixed ten-year price for natural gas in the  
20 contract, in the gas contract, right? It's a fixed  
21 contract price for ten years. It doesn't matter what the  
22 actual price of gas you pay is, that the cost to the  
23 consumer is the fixed price in the contract for the ten  
24 years. Is that correct? In other words, there is no true-  
25 up at any time over the ten-year period?

26 [Witness panel confers]

27 MS. MURPHY: I'm going to try to clarify what probably  
28 Mr. Chagani was saying. So the price we would pay to the

1 producer of the R&D would be fixed for the term of the  
2 contract. We would be using the long-term carbon price  
3 forecast to forecast the carbon price, and we would be  
4 fixing that price, and we would be using the forecast cost  
5 of gas and fixing that price. Then depending on where the  
6 RFP comes back, the proposals come back from the producer,  
7 we would basically be figuring out that price, subtract the  
8 carbon price and the cost of gas, come up with what the  
9 subsidy is from the government.

10 Those amounts then would be set; however, recognizing  
11 that the cost of carbon could go up or down, you know,  
12 there could be -- we could have put a rate in for carbon  
13 that's too high even, not just too low, then any variance  
14 from the gas cost and from the carbon price would be  
15 reflected in what the customers would pay.

16 MR. BRETT: So there is effectively a true-up. In  
17 other words -- there is a true-up in the sense that the  
18 government's subsidy or the government's contribution isn't  
19 adjusted annually to reflect any change in the gas cost, or  
20 the carbon price forecast -- or a change in the carbon  
21 price forecast, right?

22 In other words, I think what I heard you saying, and  
23 maybe -- I don't want to confuse the matters further with  
24 this question, but what you've said is there will be --  
25 there could be situations where the consumer is asked to  
26 pay more for gas, or in respect of the carbon price over  
27 the ten-year period. It could be more or it could be less,  
28 I guess is what you're saying, right?

1 That's what I think I just heard you say.

2 MR. MURRAY: Yes, that's correct.

3 **FOLLOW-UP QUESTIONS BY DR. HIGGIN:**

4 DR. HIGGIN: Thank you. It's Roger Higgin here today  
5 on behalf of Energy Probe.

6 So we need to ask this question in the context of the  
7 PGVA and how the PGVA works. I see you have outlined, am I  
8 correct, that there is a reference price. But then the  
9 PGVA deals with differences to gas costs and now, added to  
10 that, the carbon price and other things will affect the  
11 price of the RNG as it's registered as part of the  
12 reference price. Am I wrong that the differences will flow  
13 through the PGVA?

14 [Witness panel confers]

15 MR. CHAGANI: So I think you're partially right. The  
16 gas cost component will be reflected in the PGVA reference  
17 price, and the carbon cost component will be reflected in  
18 the cost of -- let me just see here.

19 MS. OLIVER-GLASFORD: Greenhouse account.

20 MR. CHAGANI: That's right, in the greenhouse gas  
21 deferral account. Sorry, it's the GHG customer variance  
22 account.

23 DR. HIGGIN: Yes. We understand the difference, and  
24 thank you for that clarification. But the actual commodity  
25 cost, which will be different for the gas, for the system,  
26 will flow through, as well as the reference price for that  
27 portion -- the 1 percent, I'll call it -- of the RNG will  
28 also flow through the mechanics of the PGVA; every quarter

1 that will flow through to ratepayers?

2 MS. DJURDJEVIC: Sorry to interrupt, just because  
3 again we're getting tight on time and also this is a topic  
4 that may -- we're going to ask for an undertaking to  
5 explain this, because you will read the transcript from  
6 yesterday and I am just going to quote from it, just so you  
7 understand the context for the confusion.

8 So the question from Ms. Klein was, you know,  
9 there -- "so there is a true-up between actual and the  
10 forecasted costs", and the answer from Ms. Newbury was yes  
11 to the question.

12 "So there is a true-up for gas cost and you are going  
13 to be doing a true-up for carbon costs?" And the answer  
14 was "correct."

15 So that's our understanding and we are again in some  
16 fuzzy area, so we would just like the undertaking to  
17 explain the cost that -- we understand the forecast costs  
18 that are being used for the ten-year period to procure the  
19 RNG. But what is going to happen with the differences, if  
20 the cost of carbon is higher or lower than the forecast and  
21 similarly, with the price of gas. Either there is going to  
22 be a shortfall. Will that then be collected from  
23 ratepayers? Or maybe there is an over-recovery; will that  
24 be returned to ratepayers?

25 I see nodding, so I guess that is an undertaking  
26 and...

27 MS. OLIVER-GLASFORD: Sorry, I was just going to --  
28 thank you, Ms. Djurdjevic, I appreciate hearing Ms.

1 Newbury's response from yesterday. And yes, that is an  
2 accurate portrayal, and I think it's nicely outlined in CCC  
3 interrogatory 10, which does kind of outline how those two  
4 separate components, the gas piece and the carbon piece,  
5 will be cleared.

6 MR. BRETT: I still want your undertaking.

7 MR. O'LEARY: There seems to be some uncertainty.

8 MS. DJURDJEVIC: And we will...

9 MR. O'LEARY: We will give that undertaking, yes.

10 MS. SEERS: It's Miriam Seers, counsel for Union  
11 again. For the record to be completely clear, I just  
12 wanted to note that Ms. Newbury did provide an additional  
13 answer to that question after the lunch break yesterday,  
14 which will obviously be reflected in the transcript. But  
15 just so we're on the same page that the earlier answer  
16 wasn't necessarily the complete answer.

17 MS. DJURDJEVIC: Okay. Well anyways, the transcript  
18 is there. We can all review it and anyways, the  
19 undertaking we would still like the explanation.

20 MS. GIRVAN: Sorry, it is Julie Girvan here. Just to  
21 be clear, the only variance that will be reflected in that  
22 deferral account is the cost of carbon, not gas cost  
23 changes.

24 MS. OLIVER-GLASFORD: In the GHG variance account,  
25 correct.

26 MS. DJURDJEVIC: Okay, that will be undertaking JT2.6.

27 **UNDERTAKING NO. JT2.6: TO PROVIDE EXAMPLE THAT SHOWS**  
28 **MECHANICS OF THE PGVA AND GHG DVA WITH RESPECT TO**

1           **FORECAST VS ACTUAL COSTS OF GAS AND CARBON**

2           MS. DJURDJEVIC: And just once again, we have some  
3 people on the phone and I am going to kindly ask if you can  
4 mute. We had some -- it's very amplified in here, whatever  
5 is happening on the phone. And if you can enter and exit  
6 the conference during the breaks, because there's a lot of  
7 background beeping and stuff going on.

8           Okay. So moving on to the next questioner, which is  
9 Mr. Poch for GEC.

10           **QUESTIONS BY MR. POCH:**

11           MR. POCH: Thanks. Panel, I wanted to first ask about  
12 the forecast of gas use underlying your -- which sets out  
13 what your total plan commitment has to deal with, and I  
14 want -- specifically, can you point me to what information  
15 you've used to evaluate the cumulative gas savings from the  
16 various government energy efficiency programs you've  
17 referred to in the evidence, and then how you've used that  
18 in your volume forecast for this application.

19           MS. MURPHY: So the volume forecast -- and our  
20 methodology is laid out in Exhibit B, tab 2, schedule 1,  
21 and as outlined there, it is following the exact same  
22 forecasting methodology, and in fact we take the forecast  
23 from our rate adjustment application.

24           In developing that forecast, I understand -- and I'll  
25 caveat this that I'm not the person who develops that  
26 volume forecast. I am the person who adapts it to GHG  
27 numbers, but the actual volume forecasting methodology is  
28 done a bit upstream of me.

1           However, my understanding is that they do try to take  
2 into account any possible changes for building code  
3 changes, or that type of thing. And we have, in this  
4 year's forecast, tried to take into account the impact of  
5 the price increase that cap-and-trade has put on top of  
6 natural gas customers to forecast what that price change  
7 would take.

8           However, because those programs with the provincial  
9 government and with GreenON or federal programs for energy  
10 efficiency are really still being developed, and this  
11 forecast was put together some mid point of last year, for  
12 2018, we have not actually taken into account the impact of  
13 those programs.

14           MR. POCH: Okay, so -- well, thank you. Turning to  
15 RNG for a moment, can you just tell me a bit about the  
16 history of the RNG proposal? Was it initiated by the  
17 utilities, or did it come out of the blue at you from  
18 government?

19           I know, of course, you applied to the Board in the  
20 past and were turned down. Was this your initiative with  
21 government?

22           MS. OLIVER-GLASFORD: None of us on this panel were  
23 specifically involved in the development of this.

24           As you would recall, Enbridge has put forward an  
25 application around renewable natural gas. It is something  
26 that we have been interested in pursuing and have been  
27 watching. And broadly speaking, the Climate Change Action  
28 Plan which was put forward by the government did earmark a

1 specific amount of funds. I believe it was \$100 million  
2 that they had in their Climate Change Action Plan towards  
3 investing in renewable natural gas specifically.

4 So I'm not sure exactly where the discussion started,  
5 but certainly with that signal we started to look at how  
6 the market could get started in the province.

7 MR. POCH: I appreciate that rejuvenated your effort,  
8 but I was asking for the history, you know, what brought  
9 that about? Was it an initiative by the utilities that  
10 brought about the government's commitment that circled back  
11 here? I take it you are not the person that can answer  
12 that, so can I just ask for an undertaking that we can get  
13 the -- an answer to that question?

14 MR. O'LEARY: Sorry, Mr. Poch, what is the question  
15 specifically? You want the name of the people that --

16 MR. POCH: No, I want to know -- I want to know -- I  
17 thought I didn't get an answer. Maybe from what you're  
18 saying I did -- whether the -- it was the utilities that  
19 initiated discussions with the government about pursuing  
20 RNG, or the other way around?

21 MR. O'LEARY: As opposed to the government coming to  
22 Enbridge and --

23 MR. POCH: Without prompting from --

24 MR. O'LEARY: -- or reading the directive from the  
25 Minister that all these things -- I mean --

26 MR. POCH: Well, the Minister's directive is part of  
27 the government's initiative. I'm asking whether that was a  
28 result of the utilities reaching out to government and

1 asking for a go-ahead.

2 MS. OLIVER-GLASFORD: All of the communications that  
3 we have been able to track down are located in the Board  
4 Staff 5 response, where we did identify each of the  
5 conversations and presentations that were made with  
6 government.

7 MR. POCH: Okay. I guess I'm still wondering who  
8 initiated it on RNG specifically.

9 MS. OLIVER-GLASFORD: Truly I think that would be  
10 really difficult, because there are other jurisdictions  
11 that are actively pursuing renewable natural gas, and it is  
12 kind of a bit of a chicken-and-an-egg discussion. Are they  
13 looking at B.C.? Are they looking at California? I don't  
14 know.

15 MR. POCH: Yeah, I guess maybe let's boil it down.  
16 Your proposals to government, your presentations to  
17 government, did they pre-date the commitment of 100 million  
18 or follow up -- did the --

19 MS. OLIVER-GLASFORD: Can we take a best-efforts --

20 MR. POCH: Thank you. That would be great. Let's  
21 shorten it up.

22 MS. DJURDJEVIC: That's JT2.7.

23 **UNDERTAKING NO. JT2.7: TO ADVISE WHETHER THE**  
24 **PROPOSALS TO GOVERNMENT AND PRESENTATIONS TO**  
25 **GOVERNMENT PRE-DATED THE COMMITMENT OF 100 MILLION.**

26 MR. POCH: If you turn up GEC 9B, we proposed some  
27 scenarios here to try to understand which test you prefer  
28 and you were using. And you indicate you prefer that --

1 the strategy C, even though in that scenario there was a  
2 higher societal cost, but a lower utility cost.

3 Am I right that in effect that's the approach you've  
4 taken with RNG? It has a high societal cost, but you've  
5 controlled the utility cost and, in effect, what you're  
6 saying is you are using a UCT test in the -- in selecting  
7 that compliance option?

8 MS. OLIVER-GLASFORD: Sorry, I'm not sure that I would  
9 agree that it is a UCT test. However, certainly we are  
10 looking at the tools available to us. This was, of course,  
11 a hypothetical scenario. We know that there are funds that  
12 have been collected and that are 100 percent allocated to  
13 low- and no-carbon initiatives through the government, so  
14 it seemed prudent for us to note and to pursue the  
15 hundred million dollars that was identified in the Climate  
16 Change Action Plan towards mitigating that cost.

17 MR. POCH: All right, but you've limited your RNG  
18 proposal before this Board as part of this plan to the  
19 level where, given the government funding availability,  
20 you're committing it's not going to have -- it is not going  
21 to triple for the one under the -- what -- effectively one  
22 on a utility cost test. You are making it so it has no net  
23 increase in utility -- the cost utilities will face and  
24 pass on to customers; at least that's what you are  
25 purporting to do, correct?

26 MS. OLIVER-GLASFORD: Yes, that seems about accurate.

27 MR. POCH: Okay. Now, if you turn to GEC 6B, we asked  
28 about, you know, what's the best test if you are looking at

1 DSM options or energy efficiency options. The answer  
2 isn't, you know, really fully responsive to our question,  
3 so let me just ask you: If we're looking at energy  
4 efficiency which involves utility spending, which test do  
5 you think is -- leaving aside right now the question of  
6 inconsistency between the different frameworks, the DSM  
7 Framework and this framework, if we could -- if we are just  
8 doing this for carbon abatement, would you similarly agree  
9 that we should look at it from a -- the same perspective  
10 that we look at other options like RNG? Apply the same  
11 test or approach?

12 I understand you feel you can't do that because you  
13 are constrained by the DSM Framework, so let's pretend  
14 there is no DSM Framework.

15 MS. OLIVER-GLASFORD: I'm just going to start, and  
16 then my colleague, Mr. Johnson, has -- would like to add  
17 in.

18 I just want to make sure that it is clear kind of as a  
19 starting point that the opportunity is unique with RNG, you  
20 know. That opportunity, there is not a market in place.  
21 We are looking at, you know, a model for making sure that  
22 the ratepayers are left harmless with -- with RNG being  
23 brought into the system, you know, with a demand side  
24 management and energy efficiency again. It is a different  
25 case.

26 So I just want to be clear on that from the start, but  
27 Mr. Johnson, I think you have some things you'd like to  
28 add.

1 MR. JOHNSON: Yeah, I think a couple of things that I  
2 would add. I mean, it is very hard to make the statement  
3 without the context of a DSM Framework, because that  
4 exists, and within the DSM Framework we have a TRC test,  
5 which also includes the cost to the customers, and again,  
6 we view the case of DSM versus, as my colleagues indicated,  
7 the RNG case as different. It is sort of an apples-and-  
8 oranges comparison, because the costs in that RNG case, you  
9 know, for that upgrading is upstream, as opposed to  
10 downstream, and again, this government dollars have helped  
11 make sure that we keep that cost to our ratepayers zero.

12 So in the case that you are referring to with RNG,  
13 there is no incremental cost that ratepayers need to bear  
14 in order to implement that. It is all done by the utility  
15 or upstream of them, if you will --

16 MR. POCH: Just let me interrupt you and make sure I  
17 understand. When you say there is no incremental cost that  
18 ratepayers have to bear, you mean they don't have to bear  
19 in rates although they are going to bear them through taxes  
20 and through the carbon fees that they are paying in rates?

21 MR. JOHNSON: Fair enough, but they are not -- they do  
22 not need to spend any money on equipment in their home or  
23 their business --

24 MR. POCH: Okay.

25 MR. JOHNSON: -- for example, whereas in DSM those  
26 program dollars that are spent by the utility, the  
27 ratepayers, in addition to funding those programs, would  
28 also need to spend to maybe upgrade capital equipment in

1 their facility or in their home.

2 MR. POCH: Mm-hmm. Okay. I can see I'm not going to  
3 get a simple answer here. Maybe I'm going to stop there.

4 If you turn up GEC 27, we asked you for the 2016 and  
5 2017 DSM results, and you've responded they are just not  
6 finalized yet.

7 Can I -- I've asked -- can I get your estimated  
8 results -- they may just be forecasts -- for 2016 or 2017  
9 at the measure level and broken out between capped and  
10 uncapped? And I appreciate you are going to put caveats on  
11 that, because they still have to go through evaluation and  
12 what have you. That's fine; there is no problem with that.

13 MR. JOHNSON: I don't know that I'd be comfortable  
14 sharing 2016 numbers and certainly not 2017, given that  
15 they are going through a process in which, as you've  
16 indicated, a number of adjustments could be made and, in  
17 some cases, very material adjustments for things like free  
18 ridership.

19 So, you know, any results that we put out there when  
20 they haven't gone through the process -- and my  
21 understanding is again, we are in the process of trying to  
22 finalize those numbers. So I think rather than go through  
23 a whole bunch of effort to try and create, as you  
24 indicated, to the forecasted numbers, that we wait for the  
25 formal process to give those results.

26 MR. POCH: I understand your reticence. Maybe we can  
27 narrow this, just to make it easier and try to avoid the  
28 areas where there still may be big shifts.

1           Maybe just the -- let's just get, if we can, the  
2 participant numbers, the customer numbers for the -- well,  
3 let's start with the C&I prescriptive. We just want an  
4 example that we can look at. Participation by measure in  
5 the C&I and the prescriptive customers. Is that -- I  
6 assume that's not going to change very much, if at all.

7           MR. JOHNSON: So you want just the participant of --

8           MR. POCH: By measure in the C&I prescriptive  
9 programs, participation by measure. That should all be  
10 readily available, I trust.

11          MR. JOHNSON: I think we could take that on a best  
12 efforts basis.

13          MS. DJURDJEVIC: That is JT2.8.

14          **UNDERTAKING NO. JT2.8: TO MAKE BEST EFFORTS TO**  
15          **PROVIDE THE NUMBER OF PARTICIPANTS BY MEASURE IN THE**  
16          **C&I AND PRESCRIPTIVE CUSTOMERS**

17          MR. POCH: I'm just going to give you a few cites, and  
18 I don't think you have to turn any of them up, because they  
19 are all -- I'm just taking a snippet from each.

20          But in Staff 1, attachment 1, at page 6 you refer to  
21 Enbridge's proposals to partner with GreenON. And in Staff  
22 24, you talk about Enbridge is in discussion with GreenON  
23 to look at additional funds for new or enhanced programs.  
24 And in GEC 8, you talk about numerous presentations and  
25 then you say:

26                 "To the extent these discussions have led to  
27 programs that the company proposes to implement,  
28 they've been presented as part of your compliance

1           plan."

2           I took from that that we are not seeing all of the  
3 things that you have spoken to government about.

4           And then in GEC 13, we asked you to provide proposals,  
5 and your response just says, "In addition to the proposals  
6 made in this proceeding," which, I take it, are only the  
7 ones that are the private -- as the previous interrogatory  
8 tells us, only the ones that are moving ahead, and in past  
9 proceedings you simply say you are monitoring things.

10          So I'd just like to get the details of all the  
11 proposals you've made to government in this relevant  
12 period, not just the ones that have made it, you know,  
13 lower down on your -- in your abatement construct.

14          Can we get that answer responsive to the question as  
15 it was asked?

16          MR. O'LEARY: If I could just remind Mr. Poch that --  
17 and I don't know the answer, but there may be a  
18 confidentiality issue with respect to the details of any of  
19 the RFP processes. So that qualification I would like to  
20 make.

21          MR. POCH: Sure. Well, yes, I'm assuming that some of  
22 these proposals will have been responses to RFPs and there  
23 may be confidentiality; I appreciate that.

24          But I'm assuming, correct me if I'm wrong, that you've  
25 been making proposals, unsolicited proposals, if you will,  
26 to government, not just responding to RFPs. You've been  
27 approaching government with suggestions and ideas and if we  
28 could get that, then I think that would be helpful.

1 MS. OLIVER-GLASFORD: I believe you noted it yourself,  
2 but that presentation that is provided as an attachment to  
3 Board Staff 1 is an overview of the areas that we have been  
4 discussing with the government, including geothermal and  
5 RNG.

6 MR. POCH: Are there no more specifics than that? You  
7 didn't have specific proposals, other specific proposals  
8 that aren't moving forward?

9 You've been basically -- it suggests they've said yes  
10 to everything you've proposed.

11 MS. OLIVER-GLASFORD: Not that I'm aware of.

12 MR. POCH: Is that right then? They are moving  
13 forward with those, with geothermal and RNG. So am I right  
14 that thus far, you're batting a thousand. Everything that  
15 you've proposed, the government has said yes, we'll go with  
16 that?

17 MS. OLIVER-GLASFORD: Again, I think it's a bit of a  
18 chicken and egg because we are watching for cues as well,  
19 and watching the market in order to leverage the best  
20 outcome for our ratepayers in terms of where the interests  
21 lie via the current policy.

22 MR. POCH: So I take it, though, you haven't made a  
23 proposal -- sorry, I'll let you finish conferring. Go  
24 ahead.

25 MR. JOHNSON: If I can just add in? I think  
26 there's -- in addition, there has been conversations and  
27 perhaps to your point, that's why the success rate appears  
28 high. There has certainly been conversations about ideas

1 and then based on that feedback is where I think maybe  
2 proposals come in, which may be why it appears that we've  
3 been so successful.

4 So it's not to say that there is nothing incremental  
5 that we've talked to government about in those terms of  
6 ideas, but those -- I think that's it.

7 MR. POCH: Well, that's what I was asking. What have  
8 you proposed to them, even informally?

9 MR. JOHNSON: That's probably the list of things where  
10 we've given more formal proposals.

11 MR. POCH: All right. And in general, is it fair to  
12 say that your proposals have been fairly warmly greeted, at  
13 least on the energy efficiency side of things?

14 [Witness panel confers]

15 MR. JOHNSON: I think there have been discussions in a  
16 number of cases.

17 What we're seeing is GreenON, as an example, is  
18 tending to focus on an RFP process. So their direction has  
19 more been where there's been ideas, they think it's best to  
20 have an RFP process for those and then again, that's where  
21 we've been actively monitoring and bidding on those as they  
22 align with our business.

23 MR. POCH: All right, let's move on then. In EGD  
24 Staff 1, you say -- on page 3, there's a quote where you  
25 say to government:

26 "Enbridge's conservation teams at Enbridge Gas  
27 and Union Gas" -- excuse me -- "conservation  
28 teams at Enbridge Gas and Union Gas can ensure

1 alignment with government, participation from  
2 market players, and can be in the market  
3 quickly."

4 I wanted to get a sense of how quickly you can do  
5 these things in that context.

6 These would be things, I'd say, where you don't feel  
7 encumbered by the DSM Framework, where you're suggesting to  
8 government --

9 MS. OLIVER-GLASFORD: I think there is an assumption  
10 perhaps that this is all incremental. I mean, over the  
11 past number of months and years, there's been lots of  
12 discussion.

13 So part of what Enbridge has done has talked to and  
14 educated the Ministry of Environment and Climate Change  
15 and, you know, more recently GreenON, about the cost-  
16 effectiveness and the success that the natural gas  
17 utilities have had in delivering conservation.

18 So when we talk about they're quick to market, we are  
19 really trying to say a lot of programs have already been  
20 invested in in the marketplace. And so instead of trying  
21 to develop a new program that is the same as what's already  
22 in place, we've been trying to educate them as to what  
23 we're doing and that those channels and infrastructure is  
24 already in place, and that the cost efficiency has been  
25 proven out now with a track record of over, I guess,  
26 thirteen years now on energy efficiency.

27 MR. POCH: All right. In response to Staff 24, and  
28 you've said it today, you want -- you'd like -- I think the

1 words you used are, you want to -- an indication is  
2 required from the Board as to whether additional ratepayer  
3 funding should be directed at DSM.

4 Now, you haven't proposed that, any such funding in  
5 the midterm review, so is my interpretation correct that at  
6 this point you are seeing the earliest that that might  
7 happen would be the DSM Framework review, which I take it  
8 is slated for 2020-ish, and so we wouldn't see any  
9 incremental DSM response to the cap-and-trade imperatives  
10 before 2021; is that correct?

11 MR. JOHNSON: Certainly there is a very clear  
12 opportunity at that point in time to expand or look at  
13 changes to DSM. I think the DSM midterm does not  
14 explicitly look to that, and so we certainly didn't propose  
15 anything beyond the Board's guidance on the midterm.

16 I would argue that there is an opportunity, at least,  
17 and that the Board asked for comments on overlap between  
18 DSM and cap-and-trade, for example, and certainly our  
19 submission as part of the midterm was that it made sense  
20 for this all to be done in the DSM Framework.

21 To me, that would give an opportunity for the Board if  
22 they felt as a result of that, of putting cap-and-trade  
23 within DSM as part of that discussion, they could take that  
24 opportunity to say, and as a result they feel that other  
25 changes need to be made.

26 MR. POCH: All right. So you're open to the  
27 possibility that even in the midterm review, if the Board,  
28 as a result of this hearing, for example, recognizes the

1 need to adjust the framework to bring these -- bring more  
2 coherence between these two frameworks, you are open to  
3 that and ready to respond, in your view?

4 MR. JOHNSON: Certainly, if the Board so directed.

5 Can I just add, though, that I don't think the Board  
6 as part of the midterm did direct that. It is more in  
7 terms of our response of --

8 MR. POCH: No, so far, clearly, the Board hasn't yet  
9 directed that, and you've just been responsive to what the  
10 Board asked you to file. I'm just saying if things change  
11 between now and then your -- that doesn't alarm you.

12 MR. JOHNSON: Correct.

13 MR. POCH: Okay. All right. I'd like to just ask you  
14 -- in GEC 20, part A, you say you investigated "to some  
15 extent" the differences between the MACC and the CPS and  
16 the utilities' plans.

17 Can I understand what the -- can you explain to me  
18 what the nature of that investigation was?

19 MR. JOHNSON: I believe it was brought up yesterday  
20 that, in terms of the CPS, the CPS had multiple levels of  
21 opportunity identified, if you will, and the MACC used one  
22 of those or some combination of those, in terms of deriving  
23 the potential opportunity from the MACC, so we did try to  
24 understand, but again, we didn't have access to the  
25 underlying spreadsheet, so we don't know the exact  
26 mechanics. We are relying on what was written in the MACC  
27 in terms of how they applied that.

28 MR. POCH: Okay. We just looked at the constrained

1 scenario in the CPS and at the MACC, and there's -- there's  
2 quite a difference between what they find -- this is  
3 obviously just all province-wide, but there is quite a big  
4 difference between them. Did you note that?

5 MR. JOHNSON: Between the constrained and the MACC?

6 MR. POCH: Yes.

7 MR. JOHNSON: Or the unconstrained?

8 MR. POCH: No, between the constrained.

9 MR. JOHNSON: I'd have to go back and check. I don't  
10 know that off the top of my head. Certainly what, again,  
11 part of the additional analysis that we referred to in our  
12 evidence is we then compared the constrained to the semi-  
13 constrained and compared that to the price of carbon.

14 So what -- I guess what I would say is we looked at  
15 the MACC, we saw that there was no -- you know, based on  
16 the Board's tool, and that was the direction, to use that  
17 as a key piece of our analysis, we didn't see any cost-  
18 effective opportunity using that tool for incremental.

19 We then did our own analysis with the CPS, and they  
20 generally aligned in terms of, there was no cost-effective  
21 under that framework.

22 MR. POCH: Right. And in that analysis when you used  
23 the CPS comparing the constrained to the non-constrained,  
24 am I correct that you did not count the benefit of the --  
25 of what a gas purchase -- you just looked at the program  
26 cost versus carbon reduction value.

27 MR. JOHNSON: The --

28 MR. POCH: That was a very simple -- just constrained

1 to that, that analysis.

2 MR. JOHNSON: The cost of gas is embedded in the -- in  
3 identifying the opportunities for those measures in the TRC  
4 test.

5 MR. POCH: Sure, it's a first -- it is a screen on  
6 what passes the TRC, but then in looking at what the  
7 difference between those scenarios was, you just took the  
8 difference in program costs, utility cost --

9 MR. JOHNSON: For analysis in the CPS; that's correct.

10 MR. POCH: Right. And compared it to the Board's  
11 projection of the cost of carbon. You didn't include in  
12 that comparison an adjustment for the benefit of avoiding  
13 gas purchases.

14 MR. JOHNSON: That's correct.

15 MR. POCH: Okay.

16 MR. JOHNSON: In the way that we did the analysis for  
17 the CPS, you know, we viewed that the test needs to be  
18 symmetrical, so we either looked at it as using the TRC  
19 test, which is what the CPS did, or when we were doing our  
20 own analysis on the CPS we were -- to keep it symmetrical,  
21 we were looking at the cost of programs to abate carbon  
22 versus the cost of carbon.

23 MR. POCH: We asked you in GEC 11 how you interpret  
24 the 2017 long-term energy plan statement that we, being  
25 Ontario, must use natural gas as efficiently as possible.  
26 And we asked you what you -- how you interpreted "as  
27 efficiently as possible", and your response, if I can  
28 paraphrase, talks about the other clean energy technologies

1 that need to get pursued, and I didn't think we were asking  
2 about those, and I don't see how that's responsive to the  
3 question.

4 It was really -- the question is, if you would be so  
5 kind, does "as efficiently as possible" mean all cost-  
6 effective efficiency? I mean, one interpretation would be  
7 it would be all technically available efficiency, but I  
8 don't think anybody interprets it that way.

9 MS. OLIVER-GLASFORD: As we discussed before, the  
10 company has developed an abatement construct, which we  
11 recognize to be a necessary complement to the Board's  
12 guiding principles in their cap-and-trade framework in  
13 order to assess abatement opportunities.

14 So in that abatement construct there are a number of  
15 considerations that we take and that we believe that are,  
16 you know, important to look at in assessing abatement  
17 opportunities.

18 MR. POCH: I understand you like to look at lots of  
19 things and -- in looking at your construct, but I'm just  
20 asking you how you interpreted the government's policy  
21 which says "as efficiently as possible". Do you agree it  
22 means all cost-effective efficiency or do you not?

23 MS. OLIVER-GLASFORD: In terms of clarifying facts I  
24 can take you to Exhibit C, tab 1, schedule 1, and efficient  
25 can be cost-effective or cost-efficient.

26 It can be efficient in rationale development, as is  
27 stated there. There is a number of ways that efficient  
28 could be considered.

1 MR. POCH: And I take ...

2 MS. OLIVER-GLASFORD: Effectiveness is of course one,  
3 and likely the most important.

4 MR. POCH: All right. I just wanted to suggest a --  
5 you were looking, I think it was with Mr. Elson, at ED22,  
6 where there was the table and you project out the carbon  
7 value of the DSM plan. I know there were a number of  
8 undertakings to -- I think that was the table. Have I got  
9 the reference correct?

10 MS. DJURJEVIC: Sorry to interrupt. I was kind of  
11 looking at the time, and we are a bit delayed.

12 MR. POCH: This is my last item.

13 MS. DJURDJEVIC: Okay, we'll wrap that up and break.

14 MR. POCH: I just noted that you had said that it was  
15 -- you added the caveat. Just note it is in nominal  
16 dollars and we just looked at the footnote, and it seems to  
17 escalate it for inflation as well.

18 So I would just suggest, if you would, in answering  
19 those interrogatories, if you could just have another look  
20 at that because I think the 2018 to -- the 2018 to 2028  
21 numbers are in constant dollars, according to the -- in the  
22 MACC and in the long-term carbon price forecast.

23 So I think there just might be an error there in terms  
24 of -- it might be over-stating the carbon price.

25 If you could just check that when you are doing that.

26 MS. OLIVER-GLASFORD: We'll undertake to do that.

27 MR. POCH: Those are my questions. Thank you.

28 MS. DJURDJEVIC: Thank you, Mr. Poch. Why don't we

1 take a 15-minute break and come back at twenty to.

2 --- Recess taken at 11:22 a.m.

3 --- Upon resuming at 11:43 a.m.

4 MS. DJURDJEVIC: Welcome back, everyone. So next on  
5 the schedule for questioning is APPrO, and I believe  
6 they're on the phone.

7 MR. WOLNIK: Yes, I'm here.

8 MS. DJURDJEVIC: All right.

9 MR. WOLNIK: Thank you --

10 MR. DJURDJEVIC: No, that's not Mr. Aiken. Sorry,  
11 again, the name?

12 MR. WOLNIK: John Wolnik.

13 MS. DJURDJEVIC: Oh, John Wolnik. Welcome back, Mr.  
14 Wolnik.

15 **QUESTIONS BY MR. WOLNIK:**

16 MR. WOLNIK: Yes. Thank you. Good morning, panel.  
17 I've got a few areas of clarification that I'd like to  
18 pursue. The first one is APPrO 4. And maybe while you're  
19 just pulling that up, I have a general question with  
20 respect to these plans. As I understand it, these  
21 compliance plans between Union and Enbridge were prepared  
22 independently; is that correct?

23 MS. OLIVER-GLASFORD: Yes, that is correct, except for  
24 the public element of the abatement construct and the RNG  
25 procurement.

26 MR. WOLNIK: Okay, thank you. And in APPrO 4B I had  
27 asked about -- it appeared that there were -- many of the  
28 initiatives that you were both pursuing were similar, if

1 not identical, and you indicated that you're proposing  
2 similar technologies. However, they anticipate separate --  
3 pursuing separate projects.

4 What does that really mean, "separate projects"? And  
5 maybe just by way of example, maybe we can talk about  
6 micro-generation. I understand you are proposing -- I  
7 think you are proposing pilot projects, and I know Union  
8 is. What does that mean and what do you hope to learn from  
9 those projects?

10 MS. SIGURDSON: So for micro-generation we are looking  
11 at micro-generation within net zero homes, and so is Union,  
12 and Enbridge is looking at a different type of mix of those  
13 technologies, and so is Union, so we have been having  
14 conversation with Union to ensure that we are not  
15 duplicating in this case. We are looking at two different  
16 type of approaches towards net zero that encompass micro-  
17 generation.

18 MR. WOLNIK: And can you just expand on those  
19 differences?

20 MS. SIGURDSON: So for example, last -- so we have  
21 been working with an LDC, Electra, as well as Markham  
22 District Energy, and we are looking at one scenario that  
23 could encompass perhaps PV, battery storage, and micro-  
24 generation. Union Gas may be looking at a different  
25 scenario that is looking at -- perhaps it is excluding an  
26 air handler and it is looking at PV as well as micro-  
27 generation.

28 MR. WOLNIK: So is it fair to say that you would each

1 incur the cost of sort of getting up to speed if I can call  
2 it that on what it's all about, making contacts with the  
3 various LDCs?

4 MS. SIGURDSON: We would anticipate as we have done in  
5 the past to continue sharing any of the learnings that we  
6 have and, like I said before, ensure that there is not  
7 duplication.

8 MR. WOLNIK: You indicate where there is overlap  
9 identified utilities just, well, intend to collaborate.  
10 That doesn't mean you are going to stop with that overlap,  
11 though; is that correct?

12 MS. SIGURDSON: So from what I've seen now and in the  
13 conversations we've have, I don't see an overlap, but what  
14 I see is different scenarios that we are trying to move  
15 forward in the net zero concept and testing those out, so  
16 if Enbridge was -- you know, for example, if we've got a  
17 different pilot and we are anticipating a set of five  
18 different technologies, we would share that approach with  
19 Union, see if that is something we wanted to collaborate  
20 with together, or perhaps Union would take a different  
21 approach and do another scenario with four different  
22 technologies.

23 MR. WOLNIK: Thank you.

24 MS. SIGURDSON: You're welcome.

25 MR. WOLNIK: I'd like to move now to APPrO 6. And  
26 this is dealing with hydrogen, your hydrogen project. You  
27 indicate in A that Enbridge is in the process of  
28 commissioning utility scale power to gas plant to produce

1 hydrogen. Can you expand on exactly -- could you provide  
2 more information on what that is? And maybe by way of  
3 example, what's the size of this? What does a utility  
4 scale project mean?

5 MR. CHAGANI: Our current plant is a two-megawatt  
6 plant, and what it does is it takes excess electricity or  
7 surplus electricity and converts it into hydrogen. The  
8 hydrogen is then stored into fuel cells, which can be put  
9 back into our -- converted back into electricity, I guess,  
10 based on the needs of the grid.

11 MR. WOLNIK: When you say surplus or excess  
12 electricity, is this -- how would you define that? For  
13 instance, are you taking -- are you taking -- when the  
14 pricing is negative are you -- is that when the plant would  
15 be operating, or are you operating it below a particular  
16 cost or...

17 MR. CHAGANI: So just to clarify, I'm not the power to  
18 gas expert. The actual project was in response to an IESO  
19 initiative related to battery or electricity storage, and  
20 that's what the two-megawatt plant is actually designed to  
21 do.

22 MR. WOLNIK: And you would sell -- so if this was an  
23 IESO initiative, are they funding it?

24 MR. CHAGANI: The funding mechanisms are not -- like,  
25 I guess we're not sure of the funding mechanisms.

26 MR. WOLNIK: Well, you've identified this as one of  
27 your projects for the LCIF, so it appears to me that you  
28 are looking for ratepayers to fund this project; is that

1 correct?

2 MS. SIGURDSON: So in the LCIF we've allocated a bit  
3 of funding, and that's for the next stage from the  
4 learnings that we have had with the current power to gas  
5 project. That is for hydrogen blending specifically.

6 MR. WOLNIK: So this utility-scale project then, do  
7 you anticipate that to be funded by the IESO or through the  
8 LCIF?

9 [Witness panel confers]

10 MS. SIGURDSON: Hi, sorry for that delay. I'm not  
11 closely related to -- with the detail for this project, but  
12 I could undertake to provide you with a more fulsome  
13 answer.

14 MR. WOLNIK: That would be great. Thank you.

15 MS. DJURDJEVIC: That's Undertaking JT2.9.

16 **UNDERTAKING NO. JT2.9: FOR THE UTILITY-SCALE PROJECT,**  
17 **TO ADVISE WHETHER ENBRIDGE ANTICIPATES THAT TO BE**  
18 **FUNDED BY THE IESO OR THROUGH THE LCIF.**

19 MR. WOLNIK: Okay, and I'd like to now go to Staff 23.  
20 And on page 4 of 6 you have some breakdown of some of the  
21 projects. And by the way, it included in here is \$500,000  
22 for your hydrogen project itself, so I presume you will --  
23 in that last undertaking you will also deal -- or could you  
24 deal with how that \$500,000 is going to be spent?

25 MS. SIGURDSON: Yes, that \$500,000 is mostly around  
26 technical due diligence and planning, specifically around  
27 understanding applicable codes and standards and defining  
28 elements of safety.

1 MR. WOLNIK: That seems like a lot to spend for  
2 technical due diligence.

3 MS. SIGURDSON: Well, that's an allocated amount, and  
4 as we move forward with those steps we could adjust those  
5 amounts, and the only amounts that we are going to be  
6 claiming in the GGEIDA are those that are actually spent.

7 MR. WOLNIK: Further down on that table you talk about  
8 the extended NGV program, and specifically demonstration  
9 projects with small fleets, and presumably that's to  
10 attract these large fleets to consume natural gas, and you  
11 are looking to spend \$300,000 on that.

12 Can you explain to me what the benefits are to  
13 ratepayers? Will they get the carbon credits, for  
14 instance, for this work?

15 MS. OLIVER-GLASFORD: So with respect to natural gas  
16 vehicles, it does not translate to any kind of carbon  
17 credits in particular for natural gas ratepayers. However,  
18 the framework has been developed with longer-term in mind,  
19 and as we look forward we are anticipating that there may  
20 be other carbon policies, such as clean fuel standards,  
21 which would provide value to ratepayers.

22 MR. WOLNIK: Can you just expand on that a bit? Let  
23 me know what that means. I guess I'm not clear.

24 MS. MURPHY: So currently, the federal government is  
25 working to develop a clean fuel standard, which would  
26 put -- as they've proposed currently, would put an  
27 obligation on the natural gas distributors. And under that  
28 mechanism, natural gas vehicles, it appears at this point

1 in time, would be able to create credits under this clean  
2 fuel standard or the CFS framework or policy.

3 At this time, though, in Ontario under cap-and-trade,  
4 there is not a credit per se for switching fleets off of  
5 other fuels onto natural gas vehicles. However, any of  
6 those savings would contribute to the provincial goals and  
7 objectives around hitting the GHG targets.

8 MR. WOLNIK: So that takes me back to APPrO 4(a),  
9 where I had asked about whether Enbridge has been in  
10 discussions with the government regarding them funding any  
11 of these initiatives.

12 It seems to me that this would be one in particular  
13 that would be more appropriately funded by the government  
14 rather than ratepayers. Can you comment on that?

15 MS. OLIVER-GLASFORD: Perhaps that is the case.  
16 Certainly we have developed this Low Carbon Initiative Fund  
17 with the longer term in mind, in terms of being -- you  
18 know, moving towards low and no carbon solutions to create  
19 a reliable and stable source of funding for us to engage in  
20 those initiatives.

21 MR. WOLNIK: Enbridge and Union have both been  
22 involved in NGV programs at least back into the '80s, if  
23 not the '70s. What would these demonstration projects do  
24 for you?

25 MS. SIGURDSON: So for these demonstration projects,  
26 the idea is to evolve into the large transport truck  
27 market. We want to understand what some of the barriers to  
28 adoption might be. Perhaps it might be some technology

1 advancement that's required. So the idea here is to, you  
2 know, allow further customer abatement opportunities is one  
3 area that we see within NGV.

4 MR. WOLNIK: Is this going to be appreciably different  
5 than the projects, or at least the station that currently  
6 exists for bus fleets?

7 I'm trying to understand what you are going to spend  
8 the \$300.000 on. Can you expand on that?

9 MS. SIGURDSON: This is trying to understand what --  
10 do we need to take a different approach to the large  
11 transport truck market? For example, if you've got a small  
12 fleet and you want to enter into that area, what are the  
13 barriers?

14 If the barrier is adding on a station, is there  
15 another approach to that, perhaps a new product that can  
16 actually deliver to the fleet and thereby actually allowing  
17 the customer to understand the benefits of NGV.

18 So it's a different approach. It is not something  
19 that we were doing within NGV prior, so that's why this is  
20 part of the LCIF.

21 MR. WOLNIK: When you say demonstration projects, are  
22 these physical pipes that you're going to be -- or stations  
23 that you are going to be developing and installing in  
24 locations, or is this more of a paper exercise,  
25 consultation with fleet owners, et cetera?

26 MS. SIGURDSON: We anticipate it will -- for the first  
27 stage, it would be around understanding from the customer's  
28 point of view what the barriers are.

1           So we've heard through our NGV team what some of those  
2 barriers may be; for example, the upfront cost and other  
3 ways around that. So what we want to do is investigate  
4 that further. The actual work plan and next steps beyond  
5 that to understand what needs to be taken, that work needs  
6 to be undertaken.

7           MR. WOLNIK: So this \$300,000 then is strictly a  
8 guesstimate of things that may happen town the road.

9           MS. SIGURDSON: It is a 2018 estimate of funding that  
10 we could spend at this point, as illustrated in Staff 23.

11          MR. WOLNIK: Thank you.

12          MS. SIGURDSON: You're welcome.

13          MR. WOLNIK: I'd like to move to Staff 24, if I could,  
14 page 2 of 3, B in that response. The second paragraph  
15 talks about -- this is sort of dealing with sort of  
16 customer abatement and whatnot, and Enbridge says it's  
17 important to first recognize that are billions of dollars  
18 entering the market for low carbon abatement initiatives.

19          Can you tell me what that means, or what you intended  
20 to portray here?

21          MS. OLIVER-GLASFORD: This was a recognition that the  
22 way that the cap-and-trade program is structured in Ontario  
23 is that the procurement of the allowances would create  
24 revenues for the government that they have committed to  
25 being fully re-invested back into low and no carbon  
26 initiatives, including energy efficiency, RNG, and other  
27 types of GHG abatement initiatives.

28          MR. WOLNIK: So it's not sort of new money coming --

1 it is private money coming in, I guess, to invest in these  
2 initiatives, is it? Is it strictly just the government,  
3 sort of cap-and-trade dollars?

4 MS. OLIVER-GLASFORD: It is the cap-and-trade dollars  
5 have been collected from our ratepayers, from when you go  
6 to the gas pump, anywhere where you are paying in the cost  
7 of carbon for fuel.

8 MR. WOLNIK: Okay, thank you. Those are my questions.

9 MS. DJURDJEVIC: Thank you, Mr. Wolnik. Next is  
10 Consumers' Council.

11 **QUESTIONS BY MS. GIRVAN:**

12 MS. GIRVAN: Thank you. Good afternoon.

13 If you could please turn to Board Staff 12; this sets  
14 out the administrative costs for 2018. So you plan to hire  
15 two FTEs at a cost of \$350,000. Have these been hired yet?  
16 These positions have been filled?

17 MS. OLIVER-GLASFORD: The two incremental FTEs related  
18 to the Low Carbon Initiative Fund have not been hired at  
19 this time.

20 MS. GIRVAN: When are your expectations that they will  
21 be hired?

22 MS. OLIVER-GLASFORD: Upon a decision that the plan is  
23 just and reasonable.

24 MS. GIRVAN: Okay. Will these be contract staff, or  
25 full-time permanent staff?

26 MS. OLIVER-GLASFORD: I wouldn't have insight into  
27 that at this moment. I can't confirm.

28 MS. GIRVAN: I just want to confirm. With respect to

1 your 2016 costs, you are seeking recovery of those in this  
2 proceeding, is that correct?

3 MS. OLIVER-GLASFORD: Yes, that is correct.

4 MS. GIRVAN: Okay, what about with respect to your  
5 2017 costs?

6 MS. OLIVER-GLASFORD: Nothing is being sought for  
7 collection at this time against 2017 costs.

8 MS. GIRVAN: When do you expect to seek recovery of  
9 those?

10 MS. OLIVER-GLASFORD: Based on the cap-and-trade  
11 framework, I anticipate that we would be putting in an  
12 application to clear those with the August 1st annual  
13 filing.

14 MS. GIRVAN: So you are filing for the 2019 and '20  
15 compliance plan?

16 MS. OLIVER-GLASFORD: Correct. So it will have two  
17 components. What I would expect at this point is that on  
18 August 1st, we would be filing a 2019-2020 compliance plan  
19 and a 2017 annual report clearing the results from 2017.

20 MS. GIRVAN: What are you seeking from the Board with  
21 respect -- what kind of approval are you seeking from the  
22 Board with respect to the 2018 costs that we see here in  
23 this interrogatory?

24 MS. OLIVER-GLASFORD: We are seeking a decision that  
25 the 2018 compliance plan is reasonable and compliant with  
26 the Board's framework, and that it produces just and  
27 reasonable cost consequences for our customers including  
28 the Low Carbon Initiative Fund. And then separately, of

1 course, the 2016 clearance of the 2016 GGEIDA.

2 MS. GIRVAN: So you are seeking approval of these  
3 costs for 2018 in this proceeding?

4 MS. OLIVER-GLASFORD: The Board's framework indicates  
5 that we are not getting an approval on our plan, but we are  
6 looking for an assessment of reasonableness that, you know,  
7 we have planned prudently.

8 MS. GIRVAN: I was really looking for the 2018  
9 administrative cost. Aside from the LCIF fund, are you  
10 seeking approval in this case of those costs?

11 MS. OLIVER-GLASFORD: No, we are not seeking approval  
12 to clear those costs. Those clearance of those costs --  
13 approval for clearing those costs would be sought when we  
14 put in our 2018 annual report.

15 MS. GIRVAN: So -- but what are you -- are you asking  
16 the Board to comment on these at all?

17 MS. OLIVER-GLASFORD: We wanted to make sure that it  
18 was clear that these were new elements, so we simply  
19 outlined them for more clarity and transparency in our  
20 compliance plan. However, the complete compliance plan  
21 should be looked at, in sum.

22 MS. GIRVAN: Okay. So with respect to the 3.6 million  
23 that's in the 2018 forecast over and above the LCIF fund,  
24 how much have you spent of that to date?

25 MR. LANGSTAFF: Excluding bad debt we spent  
26 approximately \$265,000.

27 MS. GIRVAN: Okay. And in what areas have you been  
28 spending that?

1 MR. LANGSTAFF: Money's been spent in employee salary  
2 costs, legal, consulting, and then some minor other costs.

3 MS. GIRVAN: Okay. With respect to the \$400,000 in  
4 consulting costs, have these consultants been retained?

5 MS. OLIVER-GLASFORD: A small degree of that amount  
6 has been, by way of subscriptions to intelligence channels,  
7 for example, but the vast majority of that has not yet been  
8 retained.

9 MS. GIRVAN: Okay. So if you could turn to Staff 13,  
10 where these consulting costs, I think, are set out. Just a  
11 clarification back to the point about, you've spent  
12 265,000. That's as of what date?

13 MR. LANGSTAFF: That's as of March 31st.

14 MS. GIRVAN: Okay. Thank you. Okay. So of these,  
15 the first two, compliance plan consulting and offset market  
16 support, those are the ones that you haven't retained  
17 anyone yet for?

18 MS. OLIVER-GLASFORD: That is correct.

19 MS. GIRVAN: Okay. And are you coordinating with  
20 Union with respect to these items?

21 MS. OLIVER-GLASFORD: In response to Board Staff 16 we  
22 noted that at the current time we are still operating as  
23 separate affiliates, so it is prudent for us to wait until  
24 post the amalgamation decision to determine the course of  
25 action.

26 MS. GIRVAN: So the answer is, no, you are not  
27 coordinating with Union with respect to the consultants --

28 MS. OLIVER-GLASFORD: That's correct.

1 MS. GIRVAN: Okay. And just another point, you have  
2 the 500 -- or, sorry, the \$5.6 million of the 2018 cost. I  
3 think it's 5.6. Is that going to be your ongoing annual  
4 budget, sort of ballpark, for cap-and-trade compliance?

5 MS. OLIVER-GLASFORD: We still are in a learning mode  
6 with cap-and-trade. We've had some time under our belts at  
7 this point, but there have been already significant changes  
8 in the market that have required us to consider how our  
9 resourcing is structured.

10 I think, moving forward, it is tough to tell. I think  
11 this -- you know, we've been -- we've taken a cautious  
12 approach to how we are growing our resourcing, but, you  
13 know, certainly I couldn't commit that this would be the  
14 exact amount. I think we're really looking at, for  
15 example, how things like offsets, how those market  
16 opportunities change, develop, grow, clean fuel standard,  
17 what does that do, how does that impact things, so there  
18 are a number of new and different factors that we'll have  
19 to keep in mind as we develop our resourcing plan.

20 MS. GIRVAN: Okay. So you intend to file a 2019 and  
21 2020 compliance plan, August 1st; is that correct?

22 MS. OLIVER-GLASFORD: Yes.

23 MS. GIRVAN: And are you working with Union on that?

24 MS. OLIVER-GLASFORD: Not at this time, no.

25 MS. GIRVAN: Even though in 2019 it is very likely you  
26 will be one company?

27 MS. OLIVER-GLASFORD: The decision was made that the  
28 company is waiting (sic) the MAADS decision in order to

1 proceed with kind of a fulsome review of opportunities.

2 MS. GIRVAN: Okay. With respect to RNG, I just had a  
3 quick question. Wouldn't it be prudent to wait until  
4 you're an amalgamated company before you enter into long-  
5 term contracts with these suppliers?

6 MS. OLIVER-GLASFORD: I might not be able to give you  
7 a full answer, Ms. Girvan, but the government funding is  
8 available right now. We are also aware that renewable  
9 natural gas is in demand from a number of jurisdictions,  
10 and so in order to get that market going and ensure that we  
11 can use that product in Ontario it was necessary for us to  
12 move the steps forward.

13 MR. GINIS: Okay, thank you. If you could please turn  
14 to Staff 23, and we were looking at this earlier. This is  
15 the list of your LCIF budget for 2018 and the initiatives.  
16 If you could just scroll down to the chart where we have  
17 these things set out.

18 So with each of these initiatives can you briefly just  
19 go through and tell me how much of these dollars have been  
20 spent to date?

21 MS. SIGURDSON: So this is a high-level breakdown  
22 proposal, and at this point only perhaps nominal amounts  
23 are spent. These initiatives have not -- while the  
24 planning and that stage has happened, we haven't actually  
25 moved forward with pilots or demonstrations at this point.

26 MS. GIRVAN: Okay. And how did you develop these  
27 budgets?

28 MS. SIGURDSON: We used -- this is basically an

1 evolution of some experience given the limited resources  
2 that we had, so, for example, with smart metering we've put  
3 a budget of -- it is an estimate of 100,000, estimating,  
4 you know, that would be approximately ten homes, so we've  
5 taken a high-level approach in the initial estimates.

6 The work that would proceed post this would be project  
7 concepts to further delve into what those budget breakdowns  
8 would be.

9 MS. GIRVAN: So ten homes at \$100,000? That's your  
10 budget?

11 MS. SIGURDSON: Approximately 10,000 for monitoring as  
12 well, so it won't only just be for the actual technology,  
13 and also integration with other applications in the net  
14 zero concept.

15 MS. GIRVAN: Okay. Did you seek provincial or federal  
16 funding for any of these initiatives?

17 [Witness panel confers]

18 MS. SIGURDSON: So if all of these initiatives are  
19 absent of government funding, however, when we are looking  
20 at them we will be taking a look to see if there are any  
21 funds that could be leveraged to do more with the dollars  
22 that we have.

23 MS. GIRVAN: I think, as I recall, and Mr. Wolnik was  
24 talking about this, in the past both Enbridge and Union  
25 were involved in NGV development, and from what I remember  
26 it never became economic. Is that -- what's changed?

27 MS. SIGURDSON: Say with carbon pricing and clean fuel  
28 standards the environment has changed, so if there's other

1 ways that we could move forward with new abatement  
2 opportunities that were not looked or were not deemed to be  
3 feasible or cost-effective prior, then we can try to move  
4 the needle forward now.

5 MS. GIRVAN: What's changed with respect to NGV to  
6 make it something worth pursuing?

7 MS. SIGURDSON: So nothing specific with NGV right  
8 now. So the technology was there before, but now it's  
9 understanding how else can we move into perhaps other  
10 markets, what are the barriers for those markets, are  
11 product limitations perhaps the cause of some of those  
12 barriers, and can we help to overcome those.

13 MS. GIRVAN: Okay. And again, with respect to this,  
14 if you could scroll down to this hydrogen power to gas.  
15 How does this particular project benefit natural gas  
16 ratepayers?

17 MS. SIGURDSON: So this project is looking at the  
18 blending for hydrogen, and the idea here is that it would  
19 lower the GHG's associated. So if you are increasing the  
20 renewable content in the pipeline, then you have lower  
21 emissions.

22 MS. GIRVAN: Have you done any business cases with  
23 respect to these initiatives?

24 MS. SIGURDSON: Sorry, could you repeat that?

25 MS. GIRVAN: Have you done any business cases with  
26 respect to any of these initiatives?

27 MS. SIGURDSON: So as I was saying, this 2018 budget  
28 is a high-level initiative piece.

1           The next step here would be to flesh out further the  
2 details in terms of concepts, work plans, and next steps.

3           MS. GIRVAN: Could you please -- if you can scroll  
4 down to further in this answer, you talk about the  
5 collaboration and innovation fund, that I think was  
6 proposed in your DSM Framework. Can you explain to me what  
7 that is? It's in here somewhere. I can't -- I haven't  
8 pulled it up.

9           MS. OLIVER-GLASFORD: I'll start off, and Ms.  
10 Sigurdson can add on with more detail.

11           The collaboration and innovation fund was a fund that  
12 recognized that a lot of the electrical utilities were  
13 running pilots in the province, and we didn't have a way to  
14 partner with them with monies that were kind of not already  
15 earmarked for existing programs.

16           MS. GIRVAN: And what was the annual budget for that?

17           MS. OLIVER-GLASFORD: One million dollars.

18           MS. GIRVAN: And have you been spending that?

19           MS. SIGURDSON: Yes, we have been spending that. The  
20 total amount -- I'm not sure what the amount of spend was  
21 previously, but we have been leveraging the CIF as  
22 appropriate.

23           MS. GIRVAN: Okay, those are my questions.

24           MS. DJURDJEVIC: Thank you, Ms. Girvan. Next is  
25 Energy Probe, so over to you Mr. Higgins.

26           **QUESTIONS BY DR. HIGGIN:**

27           MR. HIGGIN: Thank you. Roger Higgin for Energy Probe  
28 today.

1 I just have a couple of contextual clarifications, and  
2 it is about the RNG component of the abatement strategy on  
3 this particular area.

4 In this application, am I correct that EGD is seeking  
5 approval of its RNG procurement model in this application?

6 MR. CHAGANI: Yes, that's correct.

7 DR. HIGGIN: Can you clarify to me how that relates to  
8 the other RNG application, where we are dealing, I believe,  
9 there with the cost consequences of what will happen if the  
10 model is approved -- if I could use that as a terminology.

11 What is the difference of the approvals that you are  
12 seeking here versus in the other application?

13 MR. CHAGANI: I believe you are referring to EB-2017-  
14 0319. That's the docket number.

15 DR. HIGGIN: That's correct, yes, that's the other  
16 application I am referring to.

17 MR. CHAGANI: That application is related to Enbridge  
18 being able to provide RNG services to producers.

19 The two services contemplated within that are RNG  
20 upgrading, so that's taking raw biogas and up grading it to  
21 pipeline grade. And the second service is injection of the  
22 RNG. Injection would include metering, odorant, et cetera.

23 DR. HIGGIN: So those are components of, we'll call it  
24 the landed cost of the RNG. So you are looking for  
25 approval of those particular cost components, but not the  
26 other components of the total procurement injection and so  
27 on?

28 You are not asking for that here, but you are asking

1 for those two components and the costs of that to be  
2 recovered from ratepayers in that application. Have I got  
3 that correct?

4 MR. CHAGANI: I don't fully understand your question  
5 in terms of the recovery of cost components. If you could  
6 maybe clarify.

7 DR. HIGGIN: Well, those services are going to have a  
8 cost to the company, all right, providing those. Or are  
9 you going to pass all of those costs to the producer?

10 MR. CHAGANI: The evidence outlines exactly how the  
11 service fees are built up. The service fees are built up  
12 to ensure that there's a profitability index greater or  
13 equal to 1 --

14 DR. HIGGIN: Yes.

15 MR. CHAGANI: -- meaning that the producers would be  
16 required to pay the costs of those facilities over the  
17 lifetime of those projects.

18 I will also suggest that the way that that entire  
19 service fee is built up, it's most likely -- or perhaps the  
20 best place to discuss it is within the context of that  
21 application.

22 DR. HIGGIN: Right. I'm just trying to clarify where  
23 the dividing line is in the whole process of your RNG  
24 procurement model, and which pieces are before us here and  
25 which pieces are before us over there.

26 That's all I'm trying to clarify.

27 MR. CHAGANI: Within the compliance plan, the 2018  
28 compliance plan, we are asking approval for the model for

1 the RNG procurement.

2 DR. HIGGIN: Yes.

3 MR. CHAGANI: Within EB-2017-0319, we are asking for  
4 approval of the service fees for the enabling program.

5 DR. HIGGIN: Okay, I understand now. Thank you. That  
6 will help us a bit in terms of the hearing that we will be  
7 facing in a couple of weeks, thank you.

8 Now I'd like to move on and I had an undertaking I was  
9 going to try to put to you. But I am going to try to avoid  
10 it, since I'll try to use existing evidence on the record.

11 If you could turn up CCC 10, and if we could go to the  
12 table in there. Perhaps we could keep that, because I may  
13 switch to and from some IR responses that we've received  
14 and try to relate them to that table. So we won't lose  
15 that. We will be keeping it on the screen, or we may have  
16 to flip to some of our other IR responses, okay?

17 So what I'm going to do is go quickly through -- I  
18 hope quickly -- some of the assumptions that are in here.

19 First of all, can you verify that as it goes to the  
20 RNG volumes, cost and so on, that's the lines 1 and 2, they  
21 come from, as it says in note 1, the -- sorry, note 2,  
22 Exhibit C, tab 5, schedule 2 in the table 2 that's in that  
23 exhibit. Can you confirm that?

24 That's the table, yes. Just to look at particularly  
25 line 2, where would we find the numbers in CCC 10, line 2  
26 of CCC 10?

27 MR. CHAGANI: So could you clarify? In line 2 of CCC  
28 10, you would like to know where those numbers came from

1 and it if it is a reference --

2 DR. HIGGIN: Yes, and the note at the bottom seems to  
3 suggest that they came from schedule C, tab 5, schedule 2,  
4 table 2. The question is...

5 MR. CHAGANI: I believe it is an average of the 10  
6 years.

7 DR. HIGGIN: Thank you.

8 MR. CHAGANI: Okay.

9 DR. HIGGIN: So that's the first question. The volume  
10 amount, you say, is from another source which I believe is  
11 cited here as C.Staff.8; is that correct? Again, that's  
12 your note 1.

13 MR. CHAGANI: Subject to check, yes, I believe so.

14 DR. HIGGIN: Okay. I just want to make sure that we  
15 have these numbers correct.

16 So now I'd like to understand a bit better in line 2  
17 the cost of RNG. You've said it's an average cost, as well  
18 as the carbon cost. You said -- so confirm that those were  
19 the average of the outlook period that you used, okay?

20 Okay. So if you could turn up then one of the  
21 responses to one of our interrogatories, I have some  
22 clarifications I'd like. And let's let me find that. Yes,  
23 it is number 11, so Energy Probe 9-11 -- number 11, and I'm  
24 looking particularly here at part B and the response to  
25 part B. Do you see that? Sorry? I have a copy here you  
26 can look at if you like. Well, I will like it back, but...  
27 Do you see part B?

28 MR. CHAGANI: Yes, I have it in front of me, yes.

1 DR. HIGGIN: That says about the landed cost of RNG;  
2 correct? And perhaps you would try to tell me how that's  
3 costs that you have that is in that response is calculated.  
4 What is the landed cost of RNG?

5 MR. CHAGANI: The landed cost of RNG in this case is  
6 based on an illustrative example of \$16 per gJ.

7 DR. HIGGIN: Which is the same number you've cited in  
8 the evidence many times; correct?

9 MR. CHAGANI: Yes.

10 DR. HIGGIN: Thank you. So the question is then  
11 looking at line 2, going back to CCC 10 -- sorry to be so  
12 difficult -- I want to know whether the price of RNG is or  
13 not -- includes the landed cost or is it the contract  
14 price? That's the question, straightforward.

15 So the CDA is the delivery point, just to assist here,  
16 and I assume then there's a transportation and other  
17 considerations, compression, and all of those things.

18 MR. CHAGANI: Yes.

19 DR. HIGGIN: Okay. So I'm trying to say does the  
20 \$4.98 include those things in the -- or is that just the  
21 contract cost?

22 MR. CHAGANI: The \$4.98 in this example is absent of  
23 the subsidy.

24 DR. HIGGIN: Which subsidy, sorry? No, no, no, I'm  
25 just talking about the cost -- yes, I understand that, but  
26 what's the commodity costs? Let's go right back to this  
27 and say \$16. You just told me it was \$16 for the RNG,  
28 okay? So does the \$16 then include -- is that the landed

1 cost of RNG or is it the contract price?

2 MR. CHAGANI: The terminology of "landed cost" in this  
3 case -- I think there may be some nuances in that  
4 terminology. In this -- in the example, the \$16 is the  
5 contract price. That is for RNG delivered to, again, in  
6 this example, Enbridge CDA, so that includes all  
7 components. To get to the 4.98 --

8 DR. HIGGIN: Yes.

9 MR. CHAGANI: -- if you -- the government subsidy  
10 would be removed, and then you would remove -- sorry, from  
11 4.98 to \$1.37 represents the carbon component. The 3.61  
12 represents the equivalent natural gas cost in the CDA.

13 DR. HIGGIN: Both landed costs.

14 MR. CHAGANI: It is CDA cost.

15 DR. HIGGIN: Right. That was the clarification I was  
16 trying to understand, so you've explained it very well.  
17 Thank you for that.

18 So then my next question is, in terms of the variance  
19 line, line 4, you have a cost for the RNG, but in line 4  
20 you've used this number of 25 percent. Why did you decide  
21 to use 25 percent as an illustration? Was that just  
22 happenstance? You thought that was a good thing to show  
23 the change, or how did you choose 25 percent?

24 MR. CHAGANI: It was for illustrative purposes.

25 DR. HIGGIN: Okay. Thank you. So then we then come  
26 down to line 6. The question I have there is  
27 straightforward: Why is for gas 21 -- 2.1 million  
28 customers and for carbon is 2.2 million? Straightforward.

1 MR. CHAGANI: The 2.1 million -- or the 100,000  
2 customers differential is related to our direct purchase  
3 customers. We have approximately 100,000 direct purchase  
4 customers.

5 DR. HIGGIN: Okay. And they don't see any of this  
6 RNG, is what you were saying. It goes all to system gas;  
7 correct?

8 MR. CHAGANI: The cost component associated with the  
9 RNG purchases would be within the system gas price.

10 DR. HIGGIN: Thank you. So then you have a  
11 calculation, and this is where things got very complicated  
12 for me, is trying to understand the variance. I mean, you  
13 can do the math, but basically I'm trying to get more  
14 clarification, as you were, from previous discussions, as  
15 to how this all flows through the PGVA and the quarterly  
16 rate adjustment mechanism and so on. So can you try and  
17 help me understand how the difference in the RNG cost, such  
18 as, for example, you've got an annual amount here that  
19 shows 565,046 difference if it's a 25 percent change, net  
20 between the two, just how does all that flow through the  
21 purchase gas variation account? If you could try to  
22 explain this, please.

23 MR. CHAGANI: I believe JT2.6, the undertaking  
24 earlier --

25 DR. HIGGIN: Yes.

26 MR. CHAGANI: -- is to provide that clarification.

27 DR. HIGGIN: So you think that will deal with that?  
28 And so what I was going to ask you is, make sure when you

1 do that, please, to make sure there is a reconciliation to  
2 this evidence that is on the record, and if not -- and this  
3 is the undertaking -- please provide it with the same  
4 assumptions that went into CC10, please. So you need to  
5 see if that's -- if you are going to do it with, for  
6 example, zero variance, you would have to do an example,  
7 illustrative, with this same variance, so you would see the  
8 actual amounts flowing through the PGVA using the same  
9 assumptions. Could do you that, please?

10 MR. CHAGANI: We can use the same assumptions.

11 DR. HIGGIN: So I think maybe I should have an  
12 undertaking just to make sure that we understand that.

13 So that when they were explaining the undertaking they  
14 will provide the same assumptions and show how the variance  
15 in gas costs and carbon costs flows through, A, to the --  
16 obviously to the carbon account, and how much flows into  
17 the PGVA. That's what I would like to have. Thank you.

18 MS. DJURDJEVIC: That's JT2.10.

19 **UNDERTAKING NO. JT2.10: TO PROVIDE AN EXAMPLE OF HOW**  
20 **ACTUALS VS VARIANCES WILL FLOW THROUGH THE PGVA AND**  
21 **GHG DVA.**

22 DR. HIGGIN: Thank you. Thank you for your help on  
23 that.

24 I just have a couple of very small questions to follow  
25 up on. If we could look to our interrogatory, which is  
26 EP12, part C, the response says that you will be adding one  
27 to two FTEs for the -- related to RNG.

28 Can you just clarify exactly what the functionality of

1 what that is and so on, and how does that relate to, for  
2 example, the people that are in your gas supply area and so  
3 on? How would these people complement or add to your gas  
4 supply people that are already in place to provide the  
5 system gas procurement and so on?

6 MS. OLIVER-GLASFORD: We will be looking at the  
7 complement of staff. We don't have that person hired at  
8 the current time, and seeking to clear our costs so  
9 ratepayers would have an opportunity to have comment on the  
10 actual costs that are cleared at the end of the year  
11 through the GGEIDA clearance.

12 DR. HIGGIN: Sorry, throughout --

13 MS. OLIVER-GLASFORD: The clearance at the deferral  
14 account.

15 DR. HIGGIN: So this would be in the DSM-ESM  
16 proceeding?

17 MS. OLIVER-GLASFORD: It would be in the cap-and-trade  
18 specific clearance account. So we would be looking to  
19 manage within the administrative costs that we've put  
20 forward, but any variances from that would be cleared  
21 through the deferral account.

22 DR. HIGGIN: Thank you. One question I didn't ask,  
23 but I'd like just to put it on the record, is on EP 10, if  
24 you could look at part E to the response to EP.10.

25 So part E; it appears that you used the words "not  
26 anticipated". That's what I'm trying to clarify. It says:

27 "I is not anticipated that OEB approval will be  
28 required for each individual contract."

1           Could you just clarify why that procurement is  
2 different than any other gas supply contract that requires  
3 OEB approval?

4           MS. OLIVER-GLASFORD: We don't have a gas supply  
5 expert on this panel, so I think it would be...

6           DR. HIGGIN: I'm happy to have an undertaking. The  
7 undertaking is to clarify why RNG contracts do not appear  
8 -- may not need OEB approval, as opposed to regular gas  
9 supply contracts.

10          MR. O'LEARY: Mr. Higgin, maybe I could -- my green  
11 button is -- perhaps I could respond.

12          I believe that answer relates to the fact that  
13 Procedural Order No. 3 indicates that the Board does not  
14 believe that any approvals are required.

15          DR. HIGGIN: I can't speak to that. All I'm asking  
16 the company is -- that's your answer, that no approvals are  
17 required?

18          MR. O'LEARY: That's correct.

19          DR. HIGGIN: Thank you. My last question is about the  
20 cost, the administrative costs. You know we've been  
21 through this with Union, if you heard the exchange  
22 yesterday. And actually, you're in the driver's seat; you  
23 have the lowest cost, okay. So we're happy with that.

24          But that's the good news. The bad news is I really  
25 can't understand your provision for bad debt expense. I  
26 really cannot understand it. So I think I would ask you to  
27 say to me -- show me how it's calculated, number one. And  
28 number 2, what is the actuals for 2017 and what is the

1 year-to-date amount of bad debt expense that -- related to  
2 the compliance program?

3 MR. CHAGANI: So the year-to-date -- sorry, the 2017  
4 actual bad debt expenses was \$600,000 -- \$600,007. That is  
5 in Exhibit I.1.EGDI.Staff.12.

6 DR. HIGGIN: Okay, thank you.

7 MR. CHAGANI: With regards to the calculation of bad  
8 debt, we don't have a bad debt person on this panel. So if  
9 I could take that as an undertaking?

10 DR. HIGGIN: Yes, thank you. We would like to  
11 understand how it's calculated relative to the regular  
12 debt. In other words, why is there an incremental amount  
13 of bad debt here. Is it price related, et cetera?

14 MR. LANGSTAFF: Perhaps I could point you to one IR  
15 that we respond. In Exhibit I.4.EGDI SEC 20. On page 7  
16 of 8, it's the second last paragraph there.

17 DR. HIGGIN: This is a Union response.

18 MR. LANGSTAFF: No, this was the joint response  
19 between Enbridge and Union, and this second-last paragraph  
20 that starts out "as identified in paragraph 27", is further  
21 supported by our evidence, and it speaks to the calculation  
22 of bad debt.

23 DR. HIGGIN: Okay, well -- yes?

24 MS. OLIVER-GLASFORD: At a high-level, it was  
25 recognized when we started to undertake cap-and-trade that  
26 there would be incremental costs to our customers. And so  
27 the premise was that there would -- the size of that bill  
28 change would necessitate an additional amount for bad debt.

1 DR. HIGGIN: I understand the principle. So for  
2 example, if gas prices went up by a dollar, and other costs  
3 went up by a dollar, there would be less -- there would be  
4 more bad debt, correct?

5 MS. OLIVER-GLASFORD: That's correct. I think the  
6 only difference here is that at the start of the custom IR,  
7 cap-and-trade was not factored into what those bad debt  
8 numbers were.

9 DR. HIGGIN: So you are saying this was an  
10 incremental ...

11 MS. OLIVER-GLASFORD: Incremental.

12 DR. HIGGIN: Okay. Still, I would like to have the  
13 undertaking show exactly how it's calculated and how it's  
14 related to the overall bill, the change in the bill, for  
15 example, due to the cap-and-trade cost and so on. I'd like  
16 to understand that, please, if you could.

17 So the undertaking is to provide an example or  
18 understanding of how the bad debt expense is incremental --  
19 sorry, bad debt expense is calculated resulting from the  
20 increased bills due to cap-and-trade costs.

21 I'm interested in the residential more, but whatever.  
22 Thank you.

23 MS. DJURDJEVIC: That's JT2.11.

24 **UNDERTAKING NO. JT2.11: TO PROVIDE AN EXAMPLE OR**  
25 **UNDERSTANDING OF HOW BAD DEBT EXPENSE IS CALCULATING**  
26 **RESULTING FROM INCREASED BILLS DUE TO CAP AND TRADE**  
27 **COSTS**

28 DR. HIGGIN: My last question is simply the same

1 question that I posed to Union. Have you had discussions  
2 with -- and where are they, if there are some -- with  
3 regard to Green Ontario for a memorandum of understanding,  
4 since they are now the big player in the field?

5 MS. OLIVER-GLASFORD: We do not have a memorandum in  
6 place.

7 DR. HIGGIN: Nor any discussions towards one? That's  
8 the caveat.

9 MS. OLIVER-GLASFORD: Not that I'm aware of. I  
10 haven't been involved personally, but I'm not aware that a  
11 memorandum of understanding is in the works.

12 DR. HIGGIN: Thanks very much. Those are my  
13 questions.

14 MS. DJURDJEVIC: Thank you, Mr. Higgin. I want to go  
15 back to a comment made by Mr. O'Leary so we are clear on  
16 the record about what PO No. 2 said about RNG procurement  
17 and funding and it states:

18 "The OEB has determined that the RNG procurement  
19 and funding model does not require approval."

20 And just to be clear, the panel did not turn its mind  
21 to whether it would approve contracts. That was not one of  
22 the issues raised at the time.

23 So just to make sure, you know, that it is not a  
24 foregone conclusion that the OEB will not be approving  
25 them, because that's not explicit in the P.O., so, I mean,  
26 the panel will, you know, give us their views when we get  
27 before them in a couple of weeks, but I just wanted to make  
28 sure that that was not the intent, to say that the OEB is

1 not going to approve supply contracts as does with others,  
2 so...

3 MR. O'LEARY: Thank you for your --

4 MS. DJURDJEVIC: Thanks.

5 MR. O'LEARY: -- statement on that, and I appreciate  
6 being corrected. It is Procedural Order No. 2.

7 MS. DJURDJEVIC: It is, yes. Okay. So we now move on  
8 to questions from VECC. Ms. Grice, over to you.

9 **QUESTIONS BY MS. GRICE:**

10 MS. GRICE: Thank you. Good afternoon, panel, Shelley  
11 Grice representing VECC.

12 I just had some questions regarding your  
13 administrative costs, particularly around FTE, so I think  
14 the best place to take you to is Exhibit D, tab 1,  
15 schedule 1, page 5. Table 2 on page 5 shows the number of  
16 FTEs for cap-and-trade roles in 2018, and I just wanted to  
17 understand the evolution of this. Can you let me know how  
18 many FTEs were approved in 2017?

19 MS. OLIVER-GLASFORD: I am going to have to check what  
20 was specifically in the budget for 2017, but we have in SEC  
21 20, page 3 spoken about the 2017 average staffing  
22 requirements, so we were at just roughly 4.5 FTEs in 2017.

23 MS. GRICE: What that doesn't tell me, though, is how  
24 many vacancies you had in 2017. Are you -- I guess I just  
25 wanted to understand if all of the positions were filled or  
26 if there were vacancies.

27 MS. OLIVER-GLASFORD: I'll have to take an  
28 undertaking, because I don't have our 2017 budget number in

1 front of me.

2 MS. GRICE: Okay. So could I just, yeah, get the  
3 number of FTEs approved for 2017 and then how many were  
4 actually filled?

5 MS. OLIVER-GLASFORD: Yes.

6 MS. GRICE: Thank you.

7 MS. DJURDJEVIC: JT2.12.

8 **UNDERTAKING NO. JT2.12: TO ADVISE THE NUMBER OF FTES**  
9 **APPROVED FOR 2017 AND THEN HOW MANY WERE ACTUALLY**  
10 **FILLED.**

11 MS. GRICE: And then in 2018 it shows that you are  
12 going to have eight FTEs, and you've already clarified that  
13 the two new ones related to abatement initiative  
14 identification, that those two positions have not been  
15 filled yet, and in the chart there is another position that  
16 is new for 2018, which is a second carbon market financial  
17 specialist; has that position been filled?

18 MS. OLIVER-GLASFORD: No, it has not.

19 MS. GRICE: So then in terms of 2018 it's actually  
20 three new -- three FTEs that you are going to be filling?

21 MS. OLIVER-GLASFORD: Right now we are, I believe, at  
22 five FTEs, working on incremental cap-and-trade work.

23 MS. GRICE: And is the 2018 budget based on having the  
24 eight FTEs for the full year?

25 MS. OLIVER-GLASFORD: At the time the plan was  
26 initially put together mid last year and then refined and  
27 updated for ultimate filing, this was the plan that we felt  
28 that we needed for 2018.

1           There's been a lot of moving parts, so I think we are  
2 still hoping to have that complement, because that is what  
3 is needed. However, the current complement has been  
4 picking up the additional workload.

5           MS. GRICE: But your budget that you set for 2018 is  
6 based on these eight positions, full year?

7           MS. OLIVER-GLASFORD: That is correct, and when we put  
8 forward our deferral account at the end of the year it will  
9 reflect only the actuals of the people that were actually  
10 employed on cap-and-trade work incremental.

11          MS. GRICE: Okay. And then I just wanted to clarify,  
12 later on the page on page 5, under point 18 it says:

13                   "While Enbridge has reassessed the need for a  
14                   full-time communications lead..."

15          So that communications lead, was that a 2017 position  
16 that you did not fill, or was that a position that you  
17 contemplated for 2018 and then reconsidered?

18          MS. OLIVER-GLASFORD: That is a role that we needed at  
19 the outset of the cap-and-trade program, but which we do  
20 not currently have in place, because the work is not  
21 significant enough to need a communications lead at this  
22 time.

23          MS. GRICE: Was that position ever filled?

24          MS. OLIVER-GLASFORD: Yes, it was.

25          MS. GRICE: It was. Okay. And has it been now  
26 converted into the carbon market financial specialist?

27          MS. OLIVER-GLASFORD: There was no conversion of that  
28 role. That -- you know, the group has just been

1 restructured to reflect the actual activity that we need to  
2 undertake and the priorities that we have.

3 MS. GRICE: Okay. Thank you. If we can now please go  
4 to Staff 23. I'm looking at page 4, which is the table  
5 you've been taken to a couple of times. It has all of the  
6 customer-related abatement initiatives. And in most of  
7 these initiatives there's references to work such as  
8 pilots, research, demonstration projects, technical due  
9 diligence, field tests, and I wondered if you could just  
10 explain the extent to which you are now currently working  
11 with others on those types of activities, if that's  
12 something that's underway now?

13 MS. SIGURDSON: So as I stated earlier, the pilot  
14 demos for these specific initiatives for 2018 have not  
15 commenced.

16 MS. GRICE: And are you in any discussions with any  
17 other entities on those pilots, or is it just -- has it not  
18 evolved to that stage yet?

19 MS. SIGURDSON: Preliminary conversations, for  
20 example, if I take you to the line on carbon capture, we're  
21 investigating different carbon capture technologies and  
22 understanding that there's interest or applicability of a  
23 potential pilot for some of those products. So very  
24 preliminary stage.

25 The next piece will be to evolve this into the  
26 concepts to understand exactly what type of pilots, what  
27 are some of the parameters that we need to look at.

28 MS. GRICE: And how much of the future work do you

1 feel is going to involve some external parties to assist  
2 with some of these demonstration projects and pilots?

3 MS. SIGURDSON: I think at this stage that's difficult  
4 to estimate, but I do see this as an evolution. This is --  
5 the concept here is to be able to provide customers with  
6 abatement opportunities, and as we move this forward -- and  
7 I think we do think this is a critical step here -- we  
8 would evolve with technology scans and have this be a lot  
9 more for full moving forward, but I think right now this is  
10 an excellent starting point which we look to evolve.

11 MS. GRICE: Have you done -- had any discussions with  
12 MaRS on any of these projects?

13 MS. SIGURDSON: So MaRS, with respect to net -- sorry,  
14 net zero homes, we alluded before that we had had a project  
15 with Electra and City of Markham, and with MaRS we are  
16 doing a bit of work -- they have got the advanced energy  
17 centre, and they are looking at the future of homes, so  
18 again we would look at that as an input when we are  
19 contemplating the different technology mixes that might be  
20 beneficial for customers moving forward.

21 MS. GRICE: Thank you. I have just a quick question  
22 on your customer outreach. If I could please -- oh, jeez,  
23 I had my pen marking this spot. I'm sorry. I apologize.  
24 I know it's Exhibit E, tab 1, schedule 1, appendix A, page  
25 5. So Appendix A outlines your 2018 customer outreach and  
26 communication plan.

27 And I just wanted to ask a general question, if  
28 Enbridge has done any follow-up to assess the success rate

1 of its cap-and-trade communications and outreach to  
2 establish if customers were absorbing cap-and-trade info.

3 So I'm just wondering generally. Have you done any  
4 follow-up surveys, and specifically with respect to low  
5 income customers?

6 MS. OLIVER-GLASFORD: So the only follow-up that we  
7 would have undertaken was an assessment of how many people  
8 are calling into our customer call centre with questions,  
9 or accessing our calculator to understand their costs.

10 And beyond that, I'm not aware of any specific  
11 analysis.

12 MS. GRICE: Are there any plans in 2018 to undertake  
13 that type of analysis, or a similar type of analysis? Is  
14 that part of your outreach plan?

15 MS. OLIVER-GLASFORD: We don't have any formal plans  
16 to do any analysis. Through our DSM program, we are  
17 regularly in touch with the low income community. And so,  
18 through those channels, we would seek feedback and we have  
19 been seeking feedback.

20 But beyond that, we don't have any formal research.

21 MS. GRICE: Great, thank you. Just one last question.  
22 I just wanted to clarify, with all of the discussion that  
23 we've been having regarding the GreenON funds and the  
24 potential for new abatement initiatives, I just wanted to  
25 understand how much of a risk Enbridge thinks that is in  
26 relation to its existing DSM offerings.

27 MR. JOHNSON: So I think a lot of our conversations  
28 with GreenON have been focussed on ensuring that -- you

1 know, our understanding of GreenON's mandate is to identify  
2 new incremental opportunities, sort of fill gaps that  
3 utility programming doesn't fit today. So a lot of our  
4 conversations have been focussed on ensuring that that  
5 occurs, and again, as my colleague referred to earlier,  
6 that they're aware of the programs and how effective our  
7 programs are, so that they don't cause any duplication.

8 MS. GRICE: Okay, thank you. Those are my questions.

9 MS. DJURDJEVIC: Thank you, Ms. Grice.

10 I'm going to suggest that we break for lunch now, and  
11 then Mr. Brett is up. So can we come back 12 -- sorry,  
12 1:45 or maybe a little earlier.

13 --- Luncheon recess taken at 12:46 p.m.

14 --- On resuming at 1:49 p.m.

15 MS. DJURDJEVIC: Welcome back, everyone. Let's  
16 continue with the next questioner, which is Mr. Brett on  
17 behalf of BOMA. Go ahead.

18 **QUESTIONS BY MR. BRETT:**

19 MR. BRETT: Thank you, counsel. Good afternoon,  
20 panel. I just, I want to start with a few general  
21 questions on the framework, and I won't repeat my questions  
22 of yesterday, but there's a couple of things I didn't get  
23 to.

24 I want to talk a short -- a little bit about offsets  
25 here. And my first question is, the -- Ontario had an  
26 offset -- were working on an offset regulation for Ontario,  
27 as I understand it. Is that in place now?

28 MS. MURPHY: Yes, the Ontario offset regulation, along

1 with the first protocol, came into effect January 1st,  
2 2018.

3 MR. BRETT: January 1st?

4 MS. MURPHY: Yes.

5 MR. BRETT: And there were some protocols were going  
6 to be developed under that regulation. How many protocols  
7 have been developed? Is it still one, only one?

8 MS. MURPHY: That's correct, so the landfill gas  
9 protocol was published along with the regulation. We've  
10 seen two others that have been published on the EBR website  
11 for comments --

12 MR. BRETT: Yes.

13 MS. MURPHY: -- in a draft format, and then there are  
14 -- were to be 13 all together they were developing --

15 MR. BRETT: Sixteen?

16 MS. MURPHY: Thirteen.

17 MR. BRETT: Thirteen. And so the only one that's been  
18 approved, that's had the comments where they've made a  
19 final decision, is the landfill gas, eh, or is there a  
20 second one?

21 MS. MURPHY: No, you're correct. It is just the  
22 landfill gas --

23 MR. BRETT: Just the one. And the list of offsets or  
24 draft offsets or offset works in progress, I take it is on  
25 their website, eh, it's accessible?

26 MS. MURPHY: Yes, I believe so.

27 MR. BRETT: Now, the -- this is a -- just to clarify,  
28 the offset -- let's take the gas, the -- take the one that

1 they have, landfill. It's not a -- it's not an abatement  
2 project; it's different. It's -- an offset is not the same  
3 as an abatement project; right?

4 MS. MURPHY: So offsets are -- can only be undertaken  
5 or offset credits can only be generated on projects that  
6 are outside of cap-and-trade.

7 MR. BRETT: Right.

8 MS. MURPHY: So landfills and waste and agriculture  
9 basically are the two bigger categories that are outside of  
10 the cap-and-trade program, so that --

11 MR. BRETT: As opposed to biogas, for example, as  
12 opposed to --

13 MS. MURPHY: That's right.

14 MR. BRETT: -- renewable energy -- renewable natural  
15 gas.

16 MS. MURPHY: That's right. And so in the case of  
17 renewable natural gas the avoided emissions from a landfill  
18 could be part of the landfill gas protocol, but there is a  
19 benefit as well from replacing traditional natural gas, and  
20 that's not captured under the offset protocol because it is  
21 under cap-and-trade.

22 MR. BRETT: Okay. So just maybe to get that straight,  
23 what you're saying, so I understand, you are saying that  
24 the utility could propose to -- could propose as part of  
25 its renewable natural gas portfolio gas coming from a  
26 landfill site, but if they did that it wouldn't also be  
27 available as an offset; is that right?

28 MS. MURPHY: Putting that gas into our pipeline

1 doesn't create the offset, but the methane that would have  
2 been generated and put into the atmosphere, the avoidance  
3 of those emissions could also generate an offset.

4 MR. BRETT: There are two different offsets?

5 MS. MURPHY: So --

6 MR. BRETT: Sorry, I didn't -- I just didn't quite get  
7 that distinction. Is the methane -- I know what you mean,  
8 I mean, I get the technical distinction, but the treatment  
9 about it I didn't quite get. And this is not a trick or  
10 anything. I just -- this is just getting my framework  
11 right.

12 MS. MURPHY: Just give us one second, Mr. Brett.  
13 We're just trying to see if we had those in evidence  
14 in a --

15 MR. BRETT: You can do an undertaking if you want.

16 MS. MURPHY: I would prefer not to. I think we may  
17 have something here as an example that we're looking for.  
18 So we're just taking a look for that.

19 I'll try to elaborate again, and hopefully my  
20 colleague, Ms. Oliver-Glasford, will find the example that  
21 we can pull up on the screen.

22 So with the -- with landfill gas there is two  
23 environmental benefits. So there's methane that would have  
24 gone into the atmosphere from the landfill, and that  
25 methane, once its captured -- and it can either be  
26 destroyed by a flare, or there's many different things that  
27 you can do under the offset protocol, or you can put it  
28 into the natural gas system, so that avoided methane would

1 generate an offset credit in an applicable landfill,  
2 because there are some --

3 MR. BRETT: I see. That is the offset project --

4 MS. MURPHY: That's the offset --

5 MR. BRETT: -- the avoided methane.

6 MS. MURPHY: Yes, and then the second environmental  
7 benefit is that if we are taking a cubic metre of renewable  
8 natural gas we are now displacing or we are avoiding a  
9 cubic metre of traditional or fossil-fuel natural gas, so  
10 that avoided natural gas, there is no offset benefit to  
11 that, but we are able to capture that value by putting RNG  
12 in our pipe and then excluding that from our GHG reporting.

13 MR. BRETT: I have it. Thank you. That's helpful.

14 Now, that said, the -- is there -- well, is there a  
15 schedule for release of the remaining offsets that need to  
16 be finalized? Is there any -- do you have any sense of  
17 when these are going to -- say the ones that are now under  
18 "comment", are they expected to be in place in the next few  
19 months or...

20 MS. MURPHY: There was a 45-day comment period, and I  
21 believe that ended April 2nd.

22 MR. BRETT: Right.

23 MS. MURPHY: So I would expect the government would  
24 have some turnaround time to finalizing --

25 MR. BRETT: The end of the year?

26 MS. MURPHY: -- that, but I would hope that it would  
27 be the end of the year, but I'm not sure --

28 MR. BRETT: That was meant to be a joke, actually.

1 MS. MURPHY: Yes --

2 MR. BRETT: It takes that long, does it?

3 MS. MURPHY: Well, I think it -- I'm not sure, you  
4 know, on their side, but they would have to look at the  
5 volume of comments they received and --

6 MR. BRETT: Right.

7 MS. MURPHY: -- you know, evaluate each one on its  
8 merit and whether they need to change the wording or not,  
9 so --

10 MR. BRETT: Understood. Okay.

11 MS. MURPHY: -- it could take sometime. There was a  
12 schedule put out for the 13, but I believe there has maybe  
13 been some time changes on that.

14 MR. BRETT: Okay. And just so I -- I think we sort of  
15 answered this partially, but aside from, perhaps, the  
16 landfill gas, offsets are -- well, even with the landfill  
17 gas, I guess, offsets are not something you pick off the  
18 shelf; correct? They are projects that take time to  
19 design, construct, finance, verify, so that if a, say, a  
20 capped party wished to purchase an -- develop an offset it  
21 wouldn't be like taking an allowance, it would be a -- it  
22 would take a while for it to materialize, a year, two  
23 years, three years, depending on the complexity of it; is  
24 that fair?

25 MS. MURPHY: So I think that's fair. There is  
26 basically two ways that a capped participant could get  
27 offsets. So one would be, as you suggested, that projects  
28 do take time, so you could buy directly from a developer

1 who is just starting a project, and it would take some time  
2 before they have the --

3 MR. BRETT: Right.

4 MS. MURPHY: -- reporting and verification done.

5 MR. BRETT: Right.

6 MS. MURPHY: But there are offset projects, for  
7 example, in California, that are existing, and basically  
8 there's -- it would be like a secondary market where you  
9 can go and buy offset credits.

10 MR. BRETT: Okay. So there is a secondary market on  
11 offsets in -- not here, but in California. And that was  
12 another one of my questions. And the -- the next question  
13 is: Are you, as an Ontario -- is an Ontario capped  
14 participant entitled to purchase -- to take credit for  
15 offsets purchased anywhere in the WCI now, or there any  
16 distinction between buying an Ontario-based offset --  
17 geographically, I'm talking now -- and a California-based  
18 offset, geographically?

19 MS. MURPHY: So with the linkage of Ontario with  
20 Quebec and California through the WCI, the offsets and  
21 allowances are accepted in all three jurisdictions. So as  
22 an Ontario entity we could purchase allowances or offsets  
23 from California --

24 MR. BRETT: So there is no distinction.

25 MS. MURPHY: There is no distinction.

26 MR. BRETT: There is, though, a limitation, as I  
27 recall, under the statute or the regulations, that the  
28 percentage of total emissions credits that you can garner

1 from offsets, right, 8 percent, something in that order?

2 MS. MURPHY: That's correct.

3 MR. BRETT: And California is still 8 percent, or is  
4 it -- that's a California restriction, so it doesn't apply  
5 to Ontario. California changed it, did it not, from 8 to  
6 4, something like that?

7 MS. MURPHY: So in Ontario it is 8 percent. That's  
8 what's in the --

9 MR. BRETT: Six?

10 MS. MURPHY: Eight percent.

11 MR. BRETT: Eight.

12 MS. MURPHY: That's what's in the regulation, and in  
13 California they -- I believe they are having discussions on  
14 what to do with that offset percentage after 2020.

15 MR. BRETT: Could you turn up Exhibit B of your  
16 evidence, tab 2, schedule 1, page 1 -- page 2, I'm sorry,  
17 under volume forecast. Do you have that?

18 MS. MURPHY: Yes.

19 MR. BRETT: Looking at paragraph number 7, the volume  
20 -- I will just read this:

21 "The volume in the 2018 rate application is after  
22 DSM volume reductions. The total customer-  
23 related volumes..., " et cetera, et cetera, "is  
24 shown on Table 1 of this exhibit."

25 This is the sentence I am interested in:

26 "To provide transparency, DSM volumes have been  
27 shown separately in this application and  
28 constitute a partially effective volumetric

1 reduction."

2 I want to understand what that means, "partially  
3 effective volumetric reduction."

4 MS. OLIVER-GLASFORD: I'll start while my colleague is  
5 looking for -- there is an IR that articulates it, but it's  
6 to reference the fact that volumes don't all start in  
7 energy efficiency programs at the start of the year. So  
8 you are trying to recognize that you don't have a fulsome  
9 year of energy efficiency reductions as of January 1st.

10 MR. BRETT: Yes, so this is the -- is there an IR  
11 number for that that you have? I'll find it or -- it's  
12 okay. I can find it.

13 So what it's saying here then is that you have your  
14 forecast for 2018 and these things, you always -- you  
15 calculate these savings going out, lifetime savings. But  
16 in the first year, you're saying that the DSM will come in  
17 over the course of the year. Is that right?

18 MR. JOHNSON: That's correct.

19 MR. BRETT: And what do you do? Is it 1/12th all the  
20 way through? Is it monthly, monthly averages sort of?

21 MR. JOHNSON: So it is in Staff interrogatory 14.

22 MR. BRETT: Staff 14?

23 MR. JOHNSON: Staff 14.

24 MR. BRETT: All right, I can look at that. And just  
25 staying with the same paragraph for a moment -- well, maybe  
26 that's all I have here. So the partially effective  
27 volumetric reduction and the number there is the number for  
28 2018 savings, and the IR you referred me to explains that,

1 how you got that number?

2 MR. JOHNSON: That's correct.

3 MR. BRETT: Okay. Now, just a slight digression here.  
4 A capped participant, let's say one of the large volume  
5 customers or a voluntary participant that becomes a capped  
6 participant, they have -- am I right in understanding that  
7 they have to report their emissions reductions pursuant to  
8 this July 17 guideline, Ontario guideline for  
9 quantification of greenhouse gas emissions, effective July  
10 2017? Is that what they report under at the end of the  
11 year?

12 MS. MURPHY: Yes. So all capped participants,  
13 including Enbridge Gas, have to report their emissions by  
14 June 1st for the previous year using that guideline.

15 MR. BRETT: Using that guideline, using that  
16 methodology?

17 MS. MURPHY: That's correct.

18 MR. BRETT: Okay. Now, in your case as a capped  
19 participant for the remainder of your customers, you -- how  
20 does your reporting regime compare with that? You have to  
21 report -- do you report pursuant to that same guideline?

22 MS. MURPHY: Yes, we do. There's various sections in  
23 that guideline, and we do report under the distribution of  
24 natural gas.

25 MR. BRETT: Your report is due at the same time under  
26 that guideline as the other capped participants?

27 MS. MURPHY: That's correct.

28 MR. BRETT: So if a capped participant -- this is just

1 a question on the mechanics. I'm not clear on this. I may  
2 be the only person in the room that isn't, but I just want  
3 to get this off my plate.

4 A capped participant, like a large customer, he would  
5 -- and I'll give you a scenario. He undertakes a large  
6 project, a DSM project, in '18 and he makes an energy  
7 saving. Perhaps he makes part of an energy savings in '18  
8 and more in '19, and so on and so on. But he makes a gas  
9 savings, but he also accrues credits by doing this DSM  
10 project. This is my scenario.

11 Now he then -- he reports the -- among other things,  
12 he reports his emissions reductions that he gets from doing  
13 this DSM project in the following -- the following June is  
14 what you've told me. What's the month that he has to  
15 report?

16 MS. MURPHY: So they would not report their emission  
17 reductions. They would report their actual emissions by  
18 June 1st.

19 MR. BRETT: I'm sorry, the remaining emissions and the  
20 regulator, the ministry would have its starting point, and  
21 they would effectively be able to see what emissions he has  
22 -- what emissions he has reduced by doing this project,  
23 right?

24 MS. MURPHY: Correct. It might not be so  
25 straightforward. They might have increase in other ...

26 MR. BRETT: It would depend on more than one thing?

27 MS. MURPHY: Yes.

28 MR. BRETT: All right. But subject to that, those

1 reporting requirements are pretty stringent, as I recall.  
2 They're quite detailed, those regimes, guidelines under  
3 this regulation?

4 MS. MURPHY: Yes.

5 MR. BRETT: Now, I just want to make -- in the case of  
6 your reporting -- let me step back half a step.

7 You produce a forecast for your -- the customers for  
8 which you are responsible, and you include -- as I  
9 understand it, you forecast -- going back to the paragraph  
10 on the page that we talked about a moment ago, you forecast  
11 the reduction you expect to get over the next year. Is  
12 that right?

13 Let me go back half a step. When you put together  
14 your forecast for volumes for the year, you incorporate, as  
15 I understand it, the results of the DSM from the previous  
16 Year. Is that right?

17 MS. OLIVER-GLASFORD: I think perhaps the struggle  
18 here is the difference between the forecasts for usage and  
19 the actual gate station data that we are reporting on, and  
20 which we have to buy credits.

21 MR. BRETT: You are reporting on the actual, are you?

22 MS. OLIVER-GLASFORD: On the actual throughput at the  
23 gate station.

24 MR. BRETT: The actual efficiencies that you would  
25 realize in 2018, for 2018 purposes.

26 MS. OLIVER-GLASFORD: We wouldn't be identifying  
27 changes within that. We are simply reporting what is the  
28 throughput that's gone through.

1 MR. BRETT: What are your emissions for 2018 for that  
2 particular segment of the population?

3 MS. OLIVER-GLASFORD: For our ...

4 MR. BRETT: Customers for which you're responsible.

5 MS. OLIVER-GLASFORD: We don't do it by customers. It  
6 is just simply at the gate station.

7 MR. BRETT: The total?

8 MS. OLIVER-GLASFORD: Right.

9 MR. BRETT: And do you -- okay, so you use that  
10 guideline to report on the reduction in -- in your  
11 remaining emissions total, right?

12 MS. MURPHY: Correct. So we're reporting our total  
13 emissions for the customer emissions that we're responsible  
14 for --

15 MR. BRETT: Right, right.

16 MS. MURPHY: -- for the year.

17 MR. BRETT: Now, then how do you -- going forward, how  
18 do you set your cap-and-trade charge? It's a volumetric  
19 charge, a pure volumetric charge, right, in the sense that  
20 you -- let me see if I can tell you what I understand it to  
21 be, and then tell me if I'm wrong here.

22 You look at your -- you look at your costs of -- you  
23 look into your plan and see what the costs of your  
24 compliance undertaking are going to be, forecast, and then  
25 you divide that effectively by the volumes of the customers  
26 for whom you're steward and you get a rate, you get a  
27 number. And that number is then a number per cubic metre,  
28 let's say, and that number is then added to the rate of

1 each and every one of those customers for whom you are the  
2 -- responsible on a per cubic metre basis. That's what I  
3 meant by a volumetric basis.

4 So if I have a -- you get a unit rate first, then you  
5 apply it to the volume of each individual class of customer  
6 or individual -- well, sorry, individual customer. How is  
7 that done? Is it a uniform amount across all your volumes?  
8 Is it done on a class basis, or how is that done?

9 MR. LANGSTAFF: So development of the rates is  
10 detailed in Exhibit G, tab 1, schedule 1.

11 MR. BRETT: Right.

12 MR. LANGSTAFF: And the rates are developed based on a  
13 customer-related component and then a facility-related  
14 component --

15 MR. BRETT: I understand that. I just need a high-  
16 level sort of a statement of how the rate is applied.

17 MR. LANGSTAFF: So the rate is applied based on what  
18 the customer consumes.

19 MR. BRETT: On the volume that it consumes.

20 MR. LANGSTAFF: That's correct.

21 MR. BRETT: But the unit rate, the rate per MCF, how  
22 is that derived?

23 MR. LANGSTAFF: The rate --

24 MR. BRETT: For the customer rate.

25 MR. LANGSTAFF: The rate per MCF, we used the annual  
26 -- to forecast our annual carbon price forecast we used the  
27 21-day strip of the intercontinental ICE exchange for the  
28 daily settlements for each month of the forecasted period.

1 MR. BRETT: Right.

2 MR. LANGSTAFF: And that's available in Exhibit B,  
3 tab 4, schedule 1.

4 MR. BRETT: That gives you a dollar amount?

5 MR. LANGSTAFF: That's correct, that gives you \$18.99.

6 MR. BRETT: Right. And what's the 18 multiplied by  
7 then to get the total compliance billed, or is it? I just  
8 want you to track the --

9 MR. LANGSTAFF: Sorry, yeah, I'm just going to back --  
10 that's \$18.99 per tonne.

11 MR. BRETT: Right.

12 MR. LANGSTAFF: And then we use conversion factors to  
13 determine that cost in dollars or cents per cubic metre.

14 MR. BRETT: Right. And that amount of money of cents  
15 per cubic metre is added as a surcharge, to use that word,  
16 to -- per unit of volume consumed.

17 MR. LANGSTAFF: That's correct.

18 MR. BRETT: But the same number is used for every  
19 customer. The weighing of variations the customer's  
20 volume.

21 MR. LANGSTAFF: That's not entirely correct.

22 MR. BRETT: What's not?

23 MR. LANGSTAFF: The majority of the customers receive  
24 all of the facility-related cost, but there are some rate  
25 classes that do not receive each of --

26 MR. BRETT: Are you talking facility now or customer?

27 MR. LANGSTAFF: Sorry, the unit rate that we apply to  
28 customers is made up of two components. It has a facility

1 cost and then it has a customer cost.

2 MR. BRETT: I'm not interested in the facility cost,  
3 just the customer cost I'm --

4 MR. LANGSTAFF: So the customer cost is the same  
5 across all customer rate classes.

6 MR. BRETT: Okay. And so an individual customer who -  
7 - just -- an individual customer -- let's say a residential  
8 customer who in 2018 has done an individual CDM project  
9 with you, he realizes some savings in his commodity cost by  
10 doing that. He doesn't realize much saving in his delivery  
11 cost courtesy of the change in rate design, but that's  
12 another story, but he gets a reduction in commodity costs,  
13 so essentially then he pays a lesser amount, he pays an  
14 amount less than he would have paid in the surcharge had he  
15 not done the DSM project; is that right?

16 MS. OLIVER-GLASFORD: That's correct.

17 MR. BRETT: That is correct? Okay. So no customer  
18 really is in a situation where they're paying twice, if you  
19 like. Nobody is in a position where they actually are  
20 paying both a climate change levy and paying for -- all  
21 right, let me -- let's leave it at that for now.

22 MS. OLIVER-GLASFORD: They are not paying for cap-and-  
23 trade that they not using --

24 MR. BRETT: They are not paying for the cap-and-trade  
25 and they are also paying some of their own money toward a -  
26 - I think a DSM project, but the two balance off,  
27 essentially. In other words, the savings -- they spend  
28 money on a -- they don't balance off, but they -- but they

1 pay less on the climate change written tariff, surcharge.

2 MS. OLIVER-GLASFORD: Customers will only pay the cap-  
3 and-trade unit rate on what they're using.

4 MR. BRETT: Right. Okay. That's a little harder than  
5 I -- I was a little bit rusty on that. I haven't read  
6 those details for a while.

7 But let me go -- if you turn up -- okay. You probably  
8 don't have to turn up this. I want to ask you a few  
9 questions on the Green Investment Fund. And you do have in  
10 your evidence the amount of reduction that you are  
11 forecasting.

12 And what I would like to know initially is, what does  
13 it -- what does the Green Investment Fund do in your  
14 case -- it -- for your home retrofit program? Does it add  
15 new components to your home retrofit program that are not  
16 there now, or does it increase the amount that you can  
17 spend on some of those components? How does it fit? How  
18 do the two fit together?

19 MR. JOHNSON: So there's a couple components to it.  
20 The first and primary is that it augments in additional  
21 areas, so outside --

22 MR. BRETT: Could you speak into your mic a bit more?

23 MR. JOHNSON: Sorry. It augments our programs or is  
24 complementary to our programs in areas outside our  
25 franchise. So example --

26 MR. BRETT: So it puts more money into some of the  
27 same elements that you are subsidizing?

28 MR. JOHNSON: Yeah, or even elements that our programs

1 wouldn't subsidize because they're a different fuel source.  
2 So for example, customers who have furnaces but are running  
3 off propane outside of our franchise, those would be  
4 supported by the GIF funds.

5 The second thing it does is it also provides  
6 additional funds within our franchise to target --

7 MR. BRETT: People who aren't on gas; is that right?

8 MR. JOHNSON: So that's the first example I was  
9 referring to --

10 MR. BRETT: All right.

11 MR. JOHNSON: -- yeah, people who are not on gas.

12 MR. BRETT: The second is where it supplements what  
13 you are spending?

14 MR. JOHNSON: Within our franchise to target  
15 incremental --

16 MR. BRETT: And it does that how, by increasing the  
17 percentage of a particular item, let's say weather-  
18 stripping that you are paying part of the cost of, or by  
19 financing some new item that isn't in your retrofit program  
20 at the moment, or both?

21 MR. JOHNSON: So the primary part of the attribution  
22 agreement was to give us additional dollars that we could  
23 do outreach -- greater outreach, and in the initial part of  
24 the program we were actually -- I don't know that that's  
25 true today, I'd have to take that away, but we were ramping  
26 up the program, and we saw lots of opportunity, and so we  
27 were -- we were actually budget-constrained, so it gave an  
28 opportunity to reach out to additional customers, so we've

1 used it for additional outreach, and then to your point,  
2 we've also used it to augment our funding model, basically,  
3 for customers.

4 MR. BRETT: And how many houses, approximately, have  
5 you done -- have utilized the -- have utilized this Green  
6 Fund enhancement over the last -- well, it started in '16,  
7 went on through '17, and now where it's going to go through  
8 '18, so what's -- what has it done to date and what do you  
9 think it will do over the three-year period, roughly? I  
10 mean, we're talking ballpark here, not...

11 [Witness panel confers]

12 MR. JOHNSON: So for 2017, a rough forecast would be  
13 about 7,000 units.

14 MR. BRETT: Seven?

15 MR. JOHNSON: 7,000 units for '17.

16 MR. BRETT: What about '16?

17 MR. JOHNSON: I don't have that number available.

18 MR. BRETT: What do you think will be done in '18? The  
19 same as '17?

20 MR. JOHNSON: We would expect to it to go up.

21 MR. BRETT: The same?

22 MR. JOHNSON: No, we would expect it to go up in '18.

23 MR. BRETT: You would expect it to go up. By how  
24 much? Any idea?

25 MR. JOHNSON: Potentially, a few thousand again.  
26 That's a bit of a guess.

27 MR. BRETT: Fifteen?.

28 MR. JOHNSON: No, a few thousand. Sorry.

1 MR. BRETT: What's the budget for this? You had a  
2 three-year budget. Was it 100 million for three years?

3 MS. OLIVER-GLASFORD: That's correct.

4 MR. BRETT: Yes?

5 MS. OLIVER-GLASFORD: Between the two utilities.

6 MR. BRETT: Between the two, of which your share is  
7 What? Sixty percent or something?

8 MS. OLIVER-GLASFORD: Roughly.

9 MR. BRETT: It's always more, I think. Okay. Have  
10 you been able to spend your money essentially each year?  
11 Each year, have you been able to spend your budget on this?

12 MR. JOHNSON: Subject to check, yes, as far as I know.

13 MR. BRETT: Okay. Do you have a -- again, this is  
14 different in some respects. How are you compensated for  
15 this again now? How does this -- the government puts up  
16 the money, but what do you do? What is your role actually  
17 in making it happen, making the enhanced projects happen?

18 They flow through you, or they -- you obviously do  
19 some administrative work and some marketing work, but what  
20 else?

21 MS. OLIVER-GLASFORD: We don't have somebody on the  
22 panel who is involved with the GIF. But at a high-level,  
23 we have transfer of payment agreement with the government  
24 to essentially deliver the home energy conservation program  
25 to a broader audience.

26 MR. BRETT: So they -- you do some marketing  
27 essentially, eh, to get the word out?

28 MS. OLIVER-GLASFORD: Yes, we would do all aspects.

1 MR. BRETT: And you manage it essentially, I mean in  
2 terms of -- I guess what you're doing is managing the  
3 implementation of a -- well, I'd better be careful here.

4 Is the homeowner that really manages this himself, or  
5 do you come in and install all of this?

6 MS. OLIVER-GLASFORD: We essentially do the same thing  
7 that we do with our existing home energy programs, which is  
8 develop and enable those channels, and then, you know --

9 MR. BRETT: All right, I got you.

10 MS. OLIVER-GLASFORD: -- and then work with the  
11 auditors, et cetera.

12 MR. BRETT: Okay. So going back to the compensation  
13 question, how are you compensated for this effort? I take  
14 it you don't -- well, how are you compensated?

15 MS. OLIVER-GLASFORD: Through what's called a TPA with  
16 the government, which is essentially a transfer of payment  
17 agreement where we have an arrangement with them for the  
18 costs.

19 MR. BRETT: This was the attribution agreement,  
20 effectively?

21 MS. OLIVER-GLASFORD: Yes. That's a piece of it, yes.

22 MR. BRETT: Under that agreement, how do you get --  
23 you get reimbursed for your costs, you're saying. Do you  
24 also get some sort of a margin, or a payment for your  
25 effort over and above your costs?

26 MS. OLIVER-GLASFORD: I'm not familiar with all the  
27 details of the agreement.

28 MR. BRETT: We've asked -- I'd ask you if you would

1 undertake to file a copy of the agreement, to ascertain  
2 whether you can file a copy of it.

3 We asked the same thing of Union, and I think they  
4 agreed to look into it and see if there was any  
5 confidentiality problem and if there wasn't -- and I'm sure  
6 Union will correct me from the back of the room if I'm  
7 misstating anything -- to file it.

8 MR. O'LEARY: They can't because I don't believe Union  
9 is here.

10 MR. BRETT: Better.

11 MR. O'LEARY: And confidentiality would be one concern  
12 we have. But also, Mr. Brett, I'm not sure it is going to  
13 be of any help to the Board Panel in this proceeding. I  
14 don't think it's of relevance and therefore, we will not be  
15 producing it.

16 MR. BRETT: I think it would be very relevant  
17 actually, because this arrangement is -- for two or three  
18 reasons.

19 One is that you speak throughout your application here  
20 of investigating additional opportunities to fund, to have  
21 the government fund programs that you are already -- in the  
22 DSM area that won't necessarily go into your current DSM  
23 program. So it is very important for us, I think, the  
24 intervenors, to understand the basis on which Enbridge does  
25 this.

26 You are not a charity and I'm assuming that if you go  
27 out and try to elicit a whole lot of funds -- I don't care  
28 who starts it, if you start it or the government starts it

1 -- you are going to want to be paid for it.

2       So it is -- and it also bears on the question of  
3 what's the appropriate vehicle to carry these DSMs forward.  
4 Is it a change to the -- is it just simply adding more  
5 dollars to the DSM program which you've talked about, and  
6 which I'm sure we'll have more talk about. Or is it better  
7 to try and do this type of thing to try and duplicate or  
8 replicate the Green Energy Fund in different sectors of  
9 DSM?

10       I think it is very relevant and it would be helpful to  
11 us to see exactly what this arrangement was. I suspect  
12 probably it isn't confidential. I mean, why would the  
13 government want to hide this? This is their innovative  
14 approach to trying to get more money into a sector that  
15 they declare to be the most important energy sector they  
16 have, CCF.

17       MR. O'LEARY: Thanks, Mr. Brett. We have heard your  
18 position, but our objection stands.

19       MR. BRETT: Sorry? You are refusing to file it?

20       MR. O'LEARY: That's correct.

21       MR. BRETT: That's unfortunate. I would like to put  
22 on the record that that's an outrageous retrograde  
23 decision, and that will impair us in trying to do an  
24 analysis, and it will impair the intervenors' efforts to  
25 try and provide a coherent -- more important, it will  
26 inhibit the Board in being able to understand what's going  
27 on here.

28       MS. DJURDJEVIC: So we have the refusal and the

1 objection on the record. We are now into the end of the 35  
2 minutes which we have allotted.

3 MR. BRETT: No, 45 minutes, not 35.

4 MS. DJURDJEVIC: No, we've reduced everybody's time,  
5 so we are -- we can extend by another few minutes, if you  
6 could focus on areas that are particular issues for BOMA.

7 MR. BRETT: These are issues for BOMA, but I'll focus  
8 on -- so you are giving me another five minutes, or  
9 something like that?

10 MS. DJURDJEVIC: I think in fairness to all parties  
11 who have had their times reduced, we need to get to ...

12 MR. BRETT: Then you will come back and use time at  
13 the end. Is that the idea?

14 MS. DJURDJEVIC: We still have Mr. Neme.

15 MR. BRETT: No, after Mr. Neme.

16 MS. DJURDJEVIC: At that point, if it is not already  
17 4:35, we need to be lucky. But let's move on and see how  
18 much we can get done.

19 MR. BRETT: Let me just ask a couple of more questions  
20 here.

21 Could you turn up EGDI Staff 24, please? I would ask  
22 you to look at the bottom, start with the last paragraph on  
23 page 2. I'm going to read a brief passage from it here for  
24 you:

25 "The availability of GreenON funding can play a  
26 material roll in the cost-effectiveness of an  
27 abatement activity. For example, if the  
28 government directs funding to an activity that is

1 not currently cost-effective from a ratepayer DSM  
2 or MACC perspective, such programs may be with  
3 the customer's subsidy."

4 And then if you just go up ahead a little bit to the  
5 third last paragraph, the big paragraph, you say there:

6 "It is important to note that the gas utilities  
7 are already actively collaborating with GreenON  
8 and other entities in the design and rollout of  
9 new and significantly expanded programs that are  
10 being funded by GreenON, at least in part. In  
11 other words, there is already a substantial  
12 expansion of abatement, including incremental  
13 energy efficiency activities."

14 So my first question is -- there is the GreenON, the  
15 Green Energy Fund program that we just discussed, that is a  
16 supplement your existing home retrofit program.

17 Are there any other programs that the government has  
18 announced that deal with energy efficiency activities --  
19 and just bear with me; there's an important clause to come  
20 here -- that cover the same areas, or something close to  
21 the same areas, that you are existing DSM programs cover?

22 I read this to be saying this conveys the impression  
23 that there either are or may be. My understanding is there  
24 are not. Am I correct in that, that the only one there is  
25 is the one that is now -- you are now talking about, the  
26 one that deals with the -- that supplements your single  
27 family home program; is that right?

28 MS. OLIVER-GLASFORD: So am I understanding that your

1 question is, is there another program that actually  
2 duplicates something?

3 MR. BRETT: No, sorry, no, the question is very clear,  
4 I think, if I can paraphrase my friend, Dr. Higgin.

5 You have got a series of DSM programs in the  
6 industrial, commercial, institutional, and residential  
7 sector. You have got some low-income programs. The  
8 government has launched a GreenON program to supplement  
9 your program that deals with single-family homes.

10 Has it launched any analogous program in any of the  
11 other sectors I just mentioned? In other words, I'm not  
12 talking about cars or planes or ships. I'm talking  
13 about -- see, you raised the issue here in your evidence  
14 that we can't do any more until we see exactly what the  
15 government is going to do, and I have some sympathy for  
16 that, frankly, but you've got to tell us -- at least I  
17 would like you to tell us, to confirm that the government  
18 so far is not doing anything else.

19 And, secondly, you might take this at the same time,  
20 and then I'll just forbear -- excuse me, just -- you'd  
21 better focus on my question, okay? And secondly, are  
22 you -- have you got a plan in place to go and deal with the  
23 government, talk to them, negotiate something with them,  
24 whether it's a memorandum of understanding -- the words  
25 don't matter a hell of a lot, the important thing is you  
26 get a deal with the government to ensure that they don't  
27 come in and try and do what you're doing with more money,  
28 that it is a complementary activity, not a duplicative

1 activity. Now, have you -- so have you on that at this  
2 stage?

3 MS. OLIVER-GLASFORD: We've had numerous discussions  
4 with that as the aim, yes, where we are trying to encourage  
5 the government to use the existing channels and the  
6 programs that are delivered by the utility.

7 MR. BRETT: Do you have an agreement with them? Have  
8 they --

9 MS. OLIVER-GLASFORD: No, we do not.

10 MR. BRETT: All right. And then going back to my  
11 first question, am I correct that the GreenON program -- I  
12 am repeating this for about the fourth time, but am I  
13 correct that the program that the government has launched  
14 as part of this proposal is the only program so far? This  
15 is not rocket science; this is pretty straightforward.

16 MR. JOHNSON: So I think it's -- the confusing piece  
17 is the reference to the program. The GreenON has launched  
18 numerous RFPs for --

19 MR. BRETT: Sorry, would you speak a little louder,  
20 please? Speak into your mic.

21 MR. JOHNSON: GreenON has launched numerous RFPs  
22 across different sectors, including residential, low-  
23 income, I believe industrial, so they have put RFPs out in  
24 different areas.

25 MR. BRETT: Anything in commercial and institutional?

26 MR. JOHNSON: I'd have to -- I can check that --

27 MR. BRETT: Hospitals, schools, universities?

28 MR. JOHNSON: I think they have RFPs in most sectors.

1 MR. BRETT: And have you bid on these RFPs?

2 MR. JOHNSON: I have bid on a number of the RFPs. So  
3 far the only one that we have won is residential. There  
4 was an RFP for doing basically a home energy report card.

5 MR. BRETT: That is one that -- this one here that  
6 we're talking about.

7 MS. OLIVER-GLASFORD: No, it is incremental to that  
8 one, so that one is a Green Investment Fund initiative,  
9 which was essentially the down-payment that the government  
10 started before they got the cap-and-trade revenues coming  
11 in. The program that Mr. Johnson is referring to is  
12 incremental still to that Green Investment Fund initiative.

13 MR. BRETT: And what does it do exactly?

14 MR. JOHNSON: So again, I'm not as familiar with that,  
15 so I'll give a very high-level description, but if you'd  
16 like more information we can get it. But it basically --  
17 there was a -- there was two RFPs, one which was to go in  
18 and install adaptive thermostats. We did not win that.  
19 That was one that Union and Enbridge bid on, but we did not  
20 win that.

21 The second part of that is based on some of the  
22 information that they gather while they are there to do  
23 sort of a report card on other opportunities.

24 MR. BRETT: So that you won, essentially.

25 MR. JOHNSON: Correct.

26 MR. BRETT: And that was to study other opportunities  
27 that are available out there for the sector?

28 MR. JOHNSON: I think it's specific to that individual

1 customer as they are doing the direct install for the  
2 thermostat.

3 MR. BRETT: C&I customers or residential --

4 MR. JOHNSON: No, this is residential.

5 MR. BRETT: To study opportunities out there for  
6 further enhancements for programs for residential  
7 customers?

8 MR. JOHNSON: No, to look for opportunities for the  
9 individual customers that are part of the first RFP for the  
10 direct install.

11 MR. BRETT: I see. And what was the first RFP? What  
12 did it do? What's the project?

13 MR. JOHNSON: It was a direct install RFP for adaptive  
14 thermostats.

15 MR. BRETT: Okay. Thanks. Those are my questions.

16 MS. DJURDJEVIC: Thank you, Mr. Brett. So we'll move  
17 on to OSEA.

18 **QUESTIONS BY MR. WOON:**

19 MR. WOON: Thank you, good afternoon, panel.

20 In the interests of time I just really have two issues  
21 I just want to follow up on. It is in reference to OSEA  
22 Interrogatory No. 7. I just wanted some clarification,  
23 because Mr. Brett raised the offset credits issue, and in  
24 response to one of our questions, question A, about  
25 Enbridge's rationale for proceeding with RNG, you have  
26 Enbridge's response there, and it said that the MACC did  
27 not consider any value generating from offset credits which  
28 would make RNG a cost-effective abatement measure.

1 But based on the evidence given earlier this afternoon  
2 I didn't quite understand how that would play into cost-  
3 effectiveness, since that -- my understanding was Enbridge  
4 wouldn't be the one gaining the benefit of the offset  
5 credit by using RNG.

6 MS. MURPHY: I think the reference there, where we've  
7 said it would make it more cost-effective, is that it would  
8 bring down the cost that we would pay from -- through  
9 contract with a producer. So if they're able to generate  
10 revenue through the sale of offsets, if we're buying, you  
11 know, in our illustrative example that we use \$16 a gJ,  
12 that that price would actually come down over time once  
13 they can generate the offset credits.

14 MR. WOON: So you are assuming that the producer of  
15 the RNG is going to be able to apply for offset credits and  
16 get benefits that way, and that's...

17 MS. MURPHY: Yes. It depends on the offset protocol.  
18 So there are some limitations on the, you know -- as an  
19 example, in the landfill gas offset protocol, the size of  
20 the landfill is a factor that would determine if they can  
21 generate credits, but for those that can generate offset  
22 credits, then that would be an additional way of funding, I  
23 guess you could look at it that way, of the RNG.

24 MR. WOON: Okay, thank you. Moving on to a discussion  
25 earlier this morning about the abatement measure, if we  
26 could pull up Staff Interrogatory No. 24, Enbridge cited  
27 this in response to one of our questions, also number --  
28 OSEA Interrogatory No.7.

1 I want to just clarify and confirm my understanding.  
2 In the -- below in that answer there is a chart that was  
3 pulled from the evidence about how Enbridge came to the  
4 conclusion that there was no cost-effective abatement  
5 outside of their DSM plans.

6 So from my understanding is that Enbridge looked at  
7 the MACC as a whole, applied some adjustment factors, and  
8 then compared that broad scale, compared to the DSM plan,  
9 based on industry sectors, but did not look at the  
10 individual measures in the MACC itself.

11 MR. JOHNSON: So as I discussed this morning, you are  
12 correct. It was done at that high level. We did look  
13 within the MACC at some specific areas where we noticed  
14 that we didn't have programs that were covered in things  
15 like our customer whole home program and determined that  
16 those weren't prudent to pursue either because they were  
17 very, very small or we believed that they were -- were  
18 either -- were currently or going to be duplicated by  
19 potential GreenON or other government programs.

20 MR. WOON: I think this probably would best be done  
21 under undertaking, but I would like to request that  
22 Enbridge look at the abatement measures in the MACC for  
23 residential, commercial, industrial and identify the  
24 measures that aren't included in their existing DSM plan.

25 I think Union filed the same evidence, so I would like  
26 Enbridge to do the same, and the rationale about why they  
27 are not proceeding with those specific measures.

28 MR. JOHNSON: So again, the only three within

1 industrial and commercial we have custom programs that  
2 really are intended to cover all areas. Within residential  
3 there were three, one which was fireplaces, another which  
4 was pool heaters, and a third which was clothes dryers.  
5 The last two were very, very small. Fireplaces was still  
6 relatively small, but a bit larger, but again, I believe  
7 that was partially and going to be further duplicated in  
8 the market.

9 MR. WOON: So it was only those three measures that  
10 you just listed now that were not included in your existing  
11 DSM plan?

12 MR. JOHNSON: Yes, because our -- most of our  
13 commercial industrial are custom programs, which can  
14 capture basically all types of savings, and the whole home  
15 captured all those other areas other than those three --

16 MR. WOON: Thank you. Those are my questions.

17 MS. DJURDJEVIC: Our next questioner is on behalf of  
18 LIEN, and it was Ms. Peterson. Are you available?

19 MS. PETERSON: Good afternoon.

20 MS. DJURDJEVIC: Go ahead.

21 **QUESTIONS BY MS. PETERSON:**

22 MS. PETERSON: I can just hear myself a little bit in  
23 the echo. So if I pause a little bit, it's just to let  
24 that go.

25 So I am Nicole Peterson, counsel for LIEN. Most of my  
26 questions have already been covered by the previous  
27 intervenors, so I am going to ask a little bit of a  
28 clarification question.

1 I am looking at LIEN interrogatory 2 -- I'll just give  
2 it a second to come up on the screen.

3 So in the last sentence of the Enbridge response,  
4 Enbridge states that Enbridge and Union have partnered in a  
5 bid for a low income energy efficiency RFP put forth by  
6 GreenON. And then this is briefly restated in LIEN  
7 Interrogatory No. 6.

8 My question is fairly simple. I'd like to know more  
9 about your RFP, about the bid process and if successful,  
10 specifically are these funds earmarked for a specific  
11 project?

12 MR. JOHNSON: Sorry, can you repeat that question?

13 MS. PETERSON: Absolutely. I would like to know more  
14 about the RFP bid that is discussed in Interrogatory No. 2,  
15 the response. It is a paid for low income energy  
16 efficiency RFP put forth by GreenON.

17 I just want to know what that RFP is about, what the  
18 content is and if you are successful in the RFP, are the  
19 funds earmarked for a specific project.

20 MR. O'LEARY: Ms. Peterson, it is Dennis O'Leary. I  
21 thought I would respond. First of all, we don't know  
22 whether or not there are confidentiality provisions in  
23 terms of the response, so I am cautioning the panel that we  
24 have to be careful that we don't say something on the  
25 record that we contractually agreed not to do.

26 I presume that the RFP itself from GreenON is publicly  
27 available, and you would be able to access that. But I'm  
28 not certain that this panel can add much more to what I've

1 just said, actually.

2 MS. PETERSON: Okay, I understand. I just wanted to  
3 get that on the record. Thanks so much. Those are my  
4 questions.

5 MS. DJURDJEVIC: Thank you, Ms. Peterson.

6 MS. PETERSON: Thank you.

7 MR. TURNEY: So next is Schools, Mr. Rubenstein.

8 **QUESTIONS BY MR. RUBENSTEIN:**

9 MR. RUBENSTEIN: Thank you very much, panel. I just  
10 have a few questions.

11 The first is I just wanted some clarification on the  
12 discussion that was happening earlier on with Ms. Girvan  
13 about what, with respect to the 2018 administrative costs,  
14 you are actually seeking approval for in this proceeding,  
15 versus some other point in time.

16 And I took it from your conversation that it was  
17 limited, or what I thought it was limited to was the --  
18 your ability to spend up to \$2 million for the low carbon  
19 investment fund or -- sorry, initiative fund. Is that  
20 correct?

21 MS. OLIVER-GLASFORD: Yes, that's correct.

22 MR. RUBENSTEIN: Could I ask you to pull up the  
23 evidence, and this is where my confusion came in. This is  
24 Exhibit A to schedule 1, page 6.

25 Here you are and if you scroll up to, I guess, the  
26 previous page on page 5 -- the scroll up a bit. This is  
27 essentially the relief you are seeking under the  
28 application under, I guess, point 8 and then the A, B, C,

1 and so on. And if you go down on page 6 to G, it says:

2 "The forecast cost associated with Enbridge's  
3 planned abatement activities, as set out in  
4 Exhibit C, tab 5, schedule 1, which are comprised  
5 of the cost for two additional FTE employees,  
6 resources, and the available funds of up to  
7 2 million in the Low Carbon Initiative Fund that  
8 will be tracked through the 2018 GGEIDA."

9 So that reads to me that it's the \$2 million, plus the  
10 cost of the two additional employees. Do I have that  
11 correct?

12 MS. OLIVER-GLASFORD: Yes, it does as well include two  
13 FTEs that are associated with that LCIF work. But what we  
14 are asking for is the Board's assessment that our plan is  
15 reasonable in its totality, so that the full amount of the  
16 administrative costs that we have put forward, which does  
17 include up to \$2 million for low carbon initiatives, as  
18 well as two FTEs for that work.

19 MR. RUBENSTEIN: I'm again confused. I just want to  
20 be precise about what the relief is you are seeking.

21 I understand you are presenting the 2018  
22 administrative costs and you would like the Board to tell  
23 you if you are totally off base, to do it now versus later  
24 on. I understand that.

25 But I understand the specific relief that you are  
26 seeking is an approval to spend up to \$2 million today, so  
27 that the Board cannot later on say you shouldn't have done  
28 that, I guess.

1           And the one area where I am somewhat confused and sits  
2 in between those two points is the two employees who, I  
3 guess, are supposed to work on the low carbon initiative  
4 Fund, but to my understanding are not part of the  
5 \$2 million. They are incremental to that as part of the  
6 administrative cost.

7           MS. OLIVER-GLASFORD: I understand now. Yes, they are  
8 incremental to the \$2 million, and the reason that they are  
9 categorized with the \$2 million is because if we don't  
10 receive an assessment that the \$2 million is a reasonable  
11 item to move forward with, we would not need those two  
12 additional FTEs.

13           MR. RUBENSTEIN: So you are seeking from the Board a  
14 specific finding that the \$2 million is reasonable, as well  
15 as two individual employees to work on that fund?

16           MS. OLIVER-GLASFORD: Correct.

17           MR. RUBENSTEIN: And I understood the cost of that is  
18 roughly \$350,000?

19           MS. OLIVER-GLASFORD: That's correct.

20           MR. RUBENSTEIN: So really it's \$2,350,000 that you  
21 are seeking the cost consequences are with respect to the  
22 administrative costs in this proceeding.

23           MS. OLIVER-GLASFORD: Correct.

24           MR. RUBENSTEIN: Thank you very much. If I can ask  
25 you -- I have some questions and they are very similar to  
26 the ones I asked Union yesterday, and Union provided  
27 undertakings. So I'm hopeful you will do the same.

28           The first is with respect to SEC 9, where we had asked

1 you to provide internal memorandum, guide, or other  
2 documents that sets out the detailed abatement construct.  
3 And your response was essentially there is no further guide  
4 detailing abatement construction.

5 And I had a discussion with the Union witnesses about  
6 this exact same issue, with the understanding that there  
7 must be something behind this document, and they provided  
8 me an undertaking to, I guess, look to see if it does exist  
9 and to provide it. And I would ask for the same  
10 undertaking from you.

11 MS. OLIVER-GLASFORD: Perhaps I'm able to provide more  
12 clarity here.

13 That abatement construct was essentially developed  
14 straight into the evidence format. We were under an  
15 extremely tight timeline. We were just finishing the  
16 hearing from 2017, and so the discussions that were had  
17 were primarily over the phone with my colleague at that  
18 time, Ms. Binge and myself, around development of the  
19 abatement construct.

20 So the evidence was the product of that, so there are  
21 no underlying presentations or memorandum, other than some  
22 kind of working drafts, if you will.

23 But I think it's important to note that this abatement  
24 construct has been developed to provide the discipline and  
25 the rigour around how we make decisions with a longer-term  
26 view to low carbon initiatives and GHG abatement. It helps  
27 our management with a framework.

28 It also helps all of us with kind of comments that

1 have language, terminology, and ways to categorize  
2 projects. Because what we were finding was in the 2017  
3 plan, we kind of put a list of activities and a lot of  
4 questions came up about how far away are some of these  
5 initiatives from reality.

6 So it gives a sense of that longer-term planning, the  
7 transparency, the continuous improvement that the Board is  
8 seeking in our plans.

9 MR. RUBENSTEIN: I'm not taking issue necessarily with  
10 the actual abatement construct. I guess that will be for  
11 the hearing.

12 So as I understand it then -- I mean, I'm assuming you  
13 combined, put together some documents since it's showing up  
14 in both your evidence. So are you --

15 MS. FLAMAN: This is evidence we put together. We  
16 literally wrote it into evidence format because our  
17 timelines were so tight, we couldn't afford to have  
18 alternate memos and presentations; we developed it right  
19 into this format.

20 MR. RUBENSTEIN: So when Enbridge was approving this,  
21 some management was approving this, how did that work if  
22 essentially you and Union are on the phone, you know,  
23 working on building this abatement construct? I mean, one  
24 would assume that there was some sort of approval process  
25 before you are putting this into the evidence, when you are  
26 designing these sorts of things?

27 MS. OLIVER-GLASFORD: Management would review all of  
28 our evidence before we would file it, so it went through

1 the normal course of reviewing the evidence and putting the  
2 evidence forward to the Board.

3 MR. RUBENSTEIN: I'd ask you to turn to SEC 15. SEC  
4 15, yes. So in part C we had asked you to discuss  
5 Enbridge's position regarding a potential condition of  
6 approval that all research activities undertaken using  
7 these ratepayer funds as being the low-carbon initiative  
8 fund should be made available to the public. And your  
9 response in part C was you're supportive of making final  
10 reports available to the public. And I had a conversation  
11 with Union about this yesterday, and your answer is  
12 actually a little bit different than theirs.

13 Can I just be -- can I ask -- and you can do this by  
14 way of undertaking if you want, but -- if that's more  
15 appropriate, but is Enbridge supportive of, not just any  
16 final report, but, you know, the underlying data that you  
17 collect, and depending on what the initiative or test cases  
18 that you are running or pilot projects that you are  
19 running, to make that publicly available?

20 MS. OLIVER-GLASFORD: Subject to confidentiality we  
21 would provide reports that would give a sense of progress  
22 and information, yes.

23 MR. RUBENSTEIN: You keep using the term "reports",  
24 and that's a distinction I want to -- it seems to me when  
25 you come to some -- you guys develop a final report  
26 internally, but I'm talking about, you're running -- if you  
27 are doing pilot projects or demonstration projects, you are  
28 -- there is underlying data that you are collecting from

1 that and studying and making determinations of that. You  
2 may summarize that later into a report, but I'm talking  
3 about the raw -- maybe not the raw-raw data, but  
4 essentially the data that you are gathering and all that  
5 information to be publicly available. That is what I'm  
6 asking about, since you are seeking money from ratepayers  
7 for, in essence, research activities.

8 MS. OLIVER-GLASFORD: I think it really depends on the  
9 project, Mr. Rubenstein. I think, you know, it would  
10 really depend on who the partner was. If we had a new  
11 emerging technology where they weren't wanting all of that  
12 information to get on the public record, I think we would  
13 need to respect that, so, again, I think it's on a case-by-  
14 case basis how we would look and provide the information.

15 MR. RUBENSTEIN: All right. If I can ask you to turn  
16 to SEC 17.

17 MS. DJURDJEVIC: Sorry to interrupt, so was there an  
18 undertaking associated with that discussion? No, okay.  
19 Thank you.

20 MR. RUBENSTEIN: So we had asked you in part B for  
21 each of the listed initiatives, and these were sort of  
22 stage 2 initiatives and the abatement construct that you  
23 are undertaking to provide copies of memorandum, concept  
24 outlines, internal documents describing in full the  
25 potential initiative cost benefits and work that should be  
26 undertaken, and essentially you've pointed us to other  
27 interrogatories where you've provided some information  
28 about those activities and said that detailed work plans

1 for each of these initiatives will be developed once you, I  
2 guess, have your two incremental FTEs that you are  
3 requesting in this proceeding.

4 And I had a discussion with Union about this  
5 yesterday. So do I take that for all the -- and maybe it  
6 was best if we actually pull up an interrogatory with a  
7 list of initiatives, which I --

8 MS. OLIVER-GLASFORD: Staff 23, perhaps?

9 MR. RUBENSTEIN: Probably. Yeah, from page 4 there.

10 I'm assuming at some point when you were developing,  
11 that you were seeking to spend \$500,000 on the power to gas  
12 project and 450,000 on the net zero homes micro-generation,  
13 that there must be some work plan, some idea, that -- some  
14 document that sets out why you think that this is an  
15 appropriate program that you had to seek approval from  
16 internally to move forward with; would I be correct?

17 MS. SIGURDSON: So going back to the IR that you  
18 pointed out, SEC 17, the reason we pointed you to Staff 23  
19 is this is the place where we reached, given the restricted  
20 -- or the resources we had at the time. The next step was  
21 to evolve these into program concepts which at the time for  
22 the next compliance plan we would anticipate filing.

23 MR. RUBENSTEIN: So for stage 2 of the 2018, where you  
24 are spending half a -- you plan to spend half a million  
25 dollars on hydrogen-powered gas to go, besides the blurb  
26 that you've included here and the information in the  
27 evidence, there is no document behind that that sets out  
28 internally why you are undertaking some sort of plan about

1 it, how you've come to the budget, any initial research  
2 that you've done; there's nothing.

3 MS. SIGURDSON: As I said, that's the next step.  
4 That's the document we would put together, and in future  
5 compliance plans we anticipate being able to file those.  
6 That's the reason we need these next two FTEs that we've  
7 talked about.

8 MR. RUBENSTEIN: And so there's -- okay. And so how  
9 did you come up with \$500,000?

10 MS. SIGURDSON: So that's an estimate, and again, we  
11 would only claim the amounts that we actually spend in  
12 future. But this is an estimate based on research,  
13 understanding applicable codes. We anticipate there will  
14 be quite a bit of work that needs to be done. Perhaps we  
15 need to move forward with some task forces and whatnot, and  
16 we are not clear on exactly the total cost right now.  
17 That's why we ballparked the 500,000 at this point.

18 MR. RUBENSTEIN: No, but how --

19 MS. SIGURDSON: If less is required, less will be  
20 spent.

21 MR. RUBENSTEIN: So how did you ballpark it?

22 MS. SIGURDSON: That's an estimate. This is a 2018  
23 estimate.

24 MR. RUBENSTEIN: I know, but when I ballpark -- when  
25 I'm ballparking, I am using some reference about where  
26 other things that I've spent money on is roughly  
27 equivalent, you know, think about how we normally ballpark  
28 costs.

1           You are using some sort of reference or some -- you  
2 know, you are saying, well, I think we are going to need to  
3 spend this amount of --

4           [Audio interruption]

5           MS. DJURDJEVIC: Hello? Hello? We have somebody on  
6 the phone who is not using their mute button, and we wonder  
7 if you could please do that.

8           MS. SIGURDSON: Sorry, I'm not sure where we left off  
9 with that.

10          MR. RUBENSTEIN: Yeah, I'll repeat the question --

11          MS. DJURDJEVIC: We can continue without the --

12          MR. RUBENSTEIN: How did you ballpark the 500,000? I  
13 mean --

14          MS. SIGURDSON: So as I said, the 500,000 is a  
15 ballpark. It's -- we talked about applicable codes and  
16 standards. We anticipate there will be consulting fee.  
17 There should be research fees. You know, if I needed to  
18 break it down, maybe there's two or three thousand -- two  
19 or three hundred thousand, I should say, for research,  
20 consulting fees.

21          Right now we haven't moved forward to actually hiring  
22 those consultants. I wouldn't know how much the  
23 consultants would be --

24          MR. RUBENSTEIN: So it's a rough estimate on those --

25          MS. SIGURDSON: It's a rough estimate. The next step  
26 would be to flesh that out further.

27          MR. RUBENSTEIN: And did you, when you determined the  
28 rough estimate for those categories to come up with that

1 amount of money, did you write that down in some long  
2 document that sets out the cost of these programs?

3 MS. SIGURDSON: So the -- and as I said, the expert in  
4 the area of power to gas, there's different folks that  
5 inputted here, so for -- the example I can give you is  
6 carbon capture, with 250,000. We anticipate working with a  
7 couple of different technologies. We've split that out to  
8 be 100,000 for one, perhaps 150 for another. Again, these  
9 are 2018 estimates, and we would look to flush those out  
10 further.

11 MR. RUBENSTEIN: But you are telling me right now that  
12 you are dividing this into multiple -- so you have some  
13 rough breakout based on --

14 MS. SIGURDSON: This is --

15 MR. RUBENSTEIN: -- what you just said. You had  
16 multiple consultants at \$100,000. I'm assuming there is a  
17 document underneath that is explaining all of this and is  
18 setting out in more detail than, you know, essentially a  
19 paragraph what the project is and why you are seeking half  
20 a million dollars for it.

21 MS. SIGURDSON: At this point?

22 MR. RUBENSTEIN: Internally.

23 MS. SIGURDSON: At this point, this is the document  
24 that we have.

25 MR. RUBENSTEIN: All right. And then the last  
26 question I had was: There was a lot of discussion  
27 throughout today about coordination with all the actors  
28 that are now in this space: GreenON, you know, the

1 ministry of -- you know, the Climate Change Action Plan,  
2 the Board's -- your own DSM. And there is discussion about  
3 sort of making sure everyone is not trampling on each  
4 other's zones and ensuring that everyone is incremental,  
5 and I know there's been some questions if there's been sort  
6 of memorandums in the very -- and, you know, and there is  
7 no memorandums, but just maybe if you can help for a  
8 minute, enlighten us, you know, in a practical sense, what  
9 exactly is going on? Are you -- is there -- are you having  
10 meetings where you are all in the same room having this  
11 conversation, or is it sort of Enbridge is going to GreenON  
12 and saying, Please don't. You know, we think you need to  
13 make sure you are moving in this direction. We're doing  
14 this, or is there actually a space for you all to talk at  
15 the same time together, all the different players in this  
16 space?

17 MS. OLIVER-GLASFORD: I'm not aware of any spaces  
18 where we're all talking at the same time. I think the  
19 first thing might be the new or most recently started  
20 conservation potential study that's underway that the OEB  
21 is doing jointly with the IESO. But other than that, I'm  
22 not aware of any forum, let's call it. So the discussions,  
23 as I'm aware of them, are kind of one-off or miscellaneous.

24 MR. RUBENSTEIN: Thanks. Those are my questions.

25 MS. DJURDJEVIC: Thank you, Mr. Rubenstein. And last,  
26 but definitely not least, we have Mr. Quinn from FRPO. Go  
27 ahead.

28 **QUESTIONS BY MR. QUINN:**

1 MR. QUINN: Thank you. Good afternoon, panel. I was  
2 interested in discussions occurring with Mr. Brett, so I  
3 think I'll start there. I'll try to give you the lightning  
4 round, since we are waiting for Mr. Neme also.

5 So the first thing Mr. Brett was talking about was  
6 this offset credit. And what was provided back to him was  
7 two categories, what I would deem to be called "Fugitive  
8 emissions of methane from landfill" -- that would be one of  
9 the categories; do I have that correct?

10 MS. MURPHY: That's correct.

11 MR. QUINN: So the second category was RNG, and I  
12 think the phrase was it does not count towards compliance  
13 obligations. Did I get that right?

14 MS. MURPHY: I'm not sure those were my exact words,  
15 but that's correct.

16 MR. QUINN: Okay, thank you. I did advance and asked  
17 Enbridge to have available the reference material that I  
18 sent in on the weekend. Although it only provided a Union  
19 Gas IR response, it's helpful for context.

20 So, if you were -- had the opportunity to listen, I  
21 know some of you had that opportunity yesterday, I asked  
22 about the basis for these RNG credits not to be counted  
23 because of what the regulations say.

24 So, to skip to the bottom line on this, I provided a  
25 reference document. I think it's about page 4 of the  
26 reference material, Ms. Adams.

27 There it is there, that page there. There is a  
28 highlighted section in this document. I will just scroll

1 down a little further if you are -- thank you very much.

2 So this is what Union Gas has informed us is the basis  
3 for their response to us that RNG is neutral, carbon  
4 neutral, so it says -- you can read it yourself, but I'll  
5 slowly read it into the record and you can consider your  
6 answer.

7 "By emissions of CO<sub>2</sub> from the combustion of  
8 biomass for energy in national emission  
9 inventories are currently assumed to have no net  
10 RF, based on the assumption that these emissions  
11 are compensated by biomass regrowth," and it's  
12 referenced there. "However, there is a time lag  
13 between combustion and regrowth and while CO<sub>2</sub> is  
14 resident in the atmosphere, it leads to an  
15 additional RF."

16 We don't have to go into a lot of the detail about  
17 what the additional RF and the regrowth lag period would  
18 be, but my simple question is -- my understanding is that  
19 this biomass regrowth is pulling carbon dioxide out of the  
20 atmosphere, and therefore it has no net effect eventually.

21 Would you agree with that interpretation?

22 MS. MURPHY: I'll qualify this that I am a GHG  
23 professional. I would think of myself that way, but I'm  
24 not a climate scientist.

25 So my understanding with biomass is that if you think  
26 of a tree, for example, it is a carbon synch, so if it were  
27 to naturally die off, it would release those emissions,  
28 whereas if you burn it, you are just causing those

1 emissions to go into the atmosphere in a different  
2 mechanism. But because it is biomass, it would have  
3 released that carbon anyway.

4 So ultimately, the Ministry of the Environment has  
5 recognized that these types of emissions from biomass  
6 aren't to be included in our GHG reporting as per their  
7 guideline which, if you refer to the response to FRPO  
8 Interrogatory No. 3, I've provided that information there  
9 on the guidelines under regulation 143/16.

10 So because, under that guideline, we are to exclude  
11 emissions from biomass, then therefore we don't face a  
12 compliance obligation.

13 MR. QUINN: Okay. You started out with you're not a  
14 scientist, but I want to make sure I understand.

15 You said if the tree dies, it releases the carbon.  
16 What you mean by that?

17 MS. MURPHY: Ultimately, over time as it decays, it  
18 would go back to nature; that carbon is released.

19 MR. QUINN: How is it released?

20 MS. MURPHY: Through the deposition process.

21 MR. QUINN: And the components of the decomposition  
22 would be?

23 MS. MURPHY: Carbon dioxide? No?

24 MR. QUINN: No, sorry. I'm not going to pretend to be  
25 an expert myself, but I do understand the decomposition  
26 process.

27 Let's just say -- could you undertake to provide, in  
28 an undertaking response, how Enbridge views the ability to

1 have animal and human waste that is converted to methane be  
2 carbon neutral. Beyond the fact that the regulations say  
3 is that, is there a scientific base for that handling?

4 MR. O'LEARY: Mr. Quinn, I'm simply -- I think you  
5 heard you say that despite the regulations providing  
6 something. Is your question asking whether the panel  
7 agrees or disagrees with the regulation, because obviously  
8 Enbridge has to comply with the regulation. This is a  
9 compliance proceeding.

10 So I'm unable to determine the relevance of the  
11 question. It maybe of some academic interest, but the fact  
12 is the regulation is what the regulation says and the  
13 company's complying with it.

14 MR. QUINN: I understand, Mr. O'Leary, your  
15 perspective and I respect it. At the same time, we have  
16 brand new compliance protocol, brand new offset protocol  
17 that are still in a draft and are going to be commented on.  
18 A lot of these things are in flux.

19 We're trying to make sure that Ontario doesn't make  
20 any long-term investment decisions that don't ultimately  
21 reward for the original purposes that are being made. So  
22 we anticipate that the companies can have a lead role  
23 because they are deemed to be experts in some areas. And  
24 if they could assist us, if they have anything else beyond  
25 what's in the regulations, it would be helpful to  
26 understand that.

27 MR. O'LEARY: I think you've received the answer from  
28 the witness to the extent of her technical abilities. And

1 otherwise, I would recommend that you make a submission to  
2 the Minister of the Environment.

3 MR. QUINN: It is underway. Thanks. Okay, I will  
4 move to the next question.

5 Dr. Higgin was going through with you this morning the  
6 cost of methane, and I think it would be really helpful to  
7 see the answers in that area, JT2.6 and, I think, 2.10.

8 I am not going to replough that. I just want to  
9 confirm. I understand you were using \$16 per gJ throughout  
10 your evidence as the cost of RNG, correct?

11 MR. CHAGANI: Yes, that is correct. It is a  
12 hypothetical number.

13 MR. QUINN: When you say hypothetical, there must some  
14 basis for it. Was there any estimate, forecasting, or  
15 build-up of components that went into that number of 16?

16 If it's going to take some time, you could just take  
17 it as an undertaking. You can look it up and provide me  
18 the reference if there was some kind of forecasting or  
19 analysis that went into it.

20 MR. CHAGANI: So I would direct you to Staff 6,  
21 response B.

22 MR. QUINN: Okay, I will look that up in the interests  
23 of time. If that is your answer, I will look it up. Thank  
24 you for the reference.

25 I want to get to the next part of my question that we  
26 went over with Union Gas yesterday when we did pull out  
27 Staff 6, and Union let us know that they have an RFP out  
28 for RNG. Has Enbridge sent out an RFP to receive bids for

1 the provision of RNG?

2 MR. CHAGANI: Yes, we have.

3 MR. QUINN: When is it due?

4 MR. CHAGANI: It is currently in process and we expect  
5 the award to take place in early May.

6 MR. QUINN: When is the bid due?

7 MR. CHAGANI: The bids are due within the next week or  
8 so.

9 MR. QUINN: Okay, would you undertake when the bids  
10 are in to provide a range? We talked about with Union, we  
11 are understanding of commercial sensitivity, not naming any  
12 parties, but the range of bids received by the company in  
13 the RFP?

14 MR. O'LEARY: Mr. Quinn, we have concerns about  
15 producing that range. It is not just a matter of  
16 commercial sensitivity. It is a matter of having the  
17 negative impact on the company's abilities in the future to  
18 secure market rates in terms of future bids, so we think it  
19 is entirely inappropriate.

20 MR. QUINN: Well, we could have a philosophical debate  
21 about the improvement of the market when there is  
22 transparency provided, but how does the Board know that the  
23 projects that are being undertaken have -- that are -- they  
24 are going to be feasible anywhere near the estimates  
25 they've been receiving so far of \$16?

26 MR. O'LEARY: All of this will be very transparent in  
27 subsequent proceedings.

28 MR. QUINN: Well, it may or may not, but if the

1 confidentiality and the concerns of it being commercially  
2 available, could the company file that range and only be  
3 provided to those who signed the confidentiality agreement?

4 MR. O'LEARY: We'll take that under advisement.

5 MR. QUINN: Okay. Well, we would appreciate that  
6 opportunity and a response. If the answer is no, if you  
7 could provide that with your undertakings, that would be  
8 helpful to know what we may need to do as the next step.

9 MS. DJURDJEVIC: We'll identify that as JT2.13 with  
10 the understanding that it is being taken under advisement.

11 **UNDERTAKING NO. JT2.13: WHEN THE BIDS ARE IN, TO**  
12 **PROVIDE A RANGE; TAKEN UNDER ADVISEMENT.**

13 MR. QUINN: Thank you.

14 The last area I wanted to touch on is salaries and  
15 overheads. We went through -- and I don't ask to be turned  
16 up, because it is a Union IR. We went through salaries and  
17 overheads with Union and SEC 13 yesterday, and I tried to  
18 find through the evidence and the undertakings where  
19 Enbridge may have provided a similar table, and in that  
20 table it had salaries and wages, and then it had total  
21 overhead loading that is broken down into benefits loading,  
22 total general overheads, and incentive plan loading, and we  
23 would ask by way of undertaking if Enbridge could provide a  
24 comparable table with its costs, including or excluding, at  
25 least you can tell us which way you are going to put it in,  
26 the two extra FTEs you were discussing with SEC?

27 MR. LANGSTAFF: If I can direct you to SEC  
28 Interrogatory No. 19, I believe that has the information

1 that you are looking for.

2 MR. QUINN: Okay. If I can just have a moment,  
3 because I do have a follow-up question.

4 MR. LANGSTAFF: Okay. Oh, is this what's on the  
5 screen? Oh, this is my screen. Sorry.

6 Okay. Thank you. I see Ms. Adams has pulled it up.  
7 Okay. In the total compensation you've broken out -- you  
8 may have broken it out different from Union. We would like  
9 to compare apples to apples, so could you recategorize the  
10 non-salary items into the categories of what are overheads  
11 and what's compensation, and specifically is any -- does  
12 Enbridge have an incentive program as part of the  
13 compensation, and -- do you know it off the top of your  
14 head, maybe, Ms. Glasford?

15 MS. OLIVER-GLASFORD: All employees have an incentive  
16 program as being an employee of Enbridge.

17 MR. QUINN: Okay. So I guess I would ask if you could  
18 recast those numbers in the same format as Union, I think  
19 that would be helpful, and what we would like to ask is  
20 what are the functional areas, specifically compliance,  
21 cap-and-trade area, what are the functional areas,  
22 performance metrics, or individual performance metrics for  
23 employees in that incentive program?

24 MS. OLIVER-GLASFORD: Perhaps I can provide some  
25 information that --

26 MR. QUINN: And in terms of the --

27 MS. OLIVER-GLASFORD: -- we don't need an undertaking.  
28 We have, you know, as a course -- matter of course we have

1 personal objectives or -- and then we all have kind of the  
2 company objectives that our incentive would be based on.

3 MR. QUINN: I do understand. I have a general  
4 understanding. We've gone through different proceedings  
5 with Union and Enbridge to understand some of the nature.

6 What I'm focusing on, people who work in compliance,  
7 cap-and-trade, they would have individual metrics for their  
8 performance based on their objectives, and the functional  
9 area may have be objectives or performance metrics that  
10 they may need to achieve. Those are the categories we are  
11 looking for specifically, and in respect of time we would  
12 like to take it as part of the undertaking, because there's  
13 some numbers I'm sure you would have to crank out.

14 MS. OLIVER-GLASFORD: Yeah. Just to be clear, though,  
15 I mean, they are based on filing your submission on time,  
16 and --

17 MR. QUINN: If all it is is administrative, provide us  
18 that. What our concern is, and I'll be direct for the  
19 record, is that, is there any incentive that would lead to  
20 behaviour that's not aligned with the ultimate purposes of  
21 the program? That's all we're looking for.

22 MS. OLIVER-GLASFORD: Not for myself or my team.

23 MR. QUINN: I wouldn't think so. I'm not saying  
24 anything is happening, but what we need to do is just ask  
25 the question, and you can tell us the answer there. They  
26 are meeting deadlines, they are meeting this. Whatever it  
27 is, nothing is toward driving the cost down which, in this  
28 case here, would demonstrate -- could lead to speculative

1 behaviour, which is not necessarily in the interests of  
2 consumers or the province.

3 MS. OLIVER-GLASFORD: Okay. In -- there isn't, but I  
4 just want to make sure it's clear that we have an  
5 obligation to, you know, meet the Board's framework to do  
6 that sort of thing. We're not -- nobody's speculating in  
7 the market from the team or --

8 MR. QUINN: Risk management is understood and  
9 appropriate. It is -- are you aligning the employees'  
10 incentives with the ultimate principles of the program and  
11 not having a misalignment, which would create some risk,  
12 additional risk?

13 MS. OLIVER-GLASFORD: Okay. I will seek to undertake  
14 this in best efforts.

15 MR. QUINN: That's satisfactory, thank you.

16 MS. DJURDJEVIC: That's JT2.14.

17 **UNDERTAKING NO. JT2.14: TO RECATEGORIZE THE NON-**  
18 **SALARY ITEMS INTO THE CATEGORIES OF WHAT ARE OVERHEADS**  
19 **AND WHAT'S COMPENSATION, AND SPECIFICALLY DOES**  
20 **ENBRIDGE HAVE AN INCENTIVE PROGRAM AS PART OF THE**  
21 **COMPENSATION.**

22 MR. QUINN: And those are my questions, and thank you  
23 very much.

24 MS. DJURDJEVIC: Okay. And let's break for 15  
25 minutes, come back at 3:30. Thank you.

26 --- Recess taken at 3:16 p.m.

27 --- On resuming at 3:32 p.m.

28 MS. DJURDJEVIC: Welcome back, everyone. Now for a

1 little change of pace, we going to have questions for the  
2 expert retained by Green Energy Coalition, Mr. Chris Neme.

3 **GREEN ENERGY COALITION - PANEL 1**

4 **Chris Neme**

5 MS. DJURDJEVIC: Oh, Mr. Poch.

6 MS. GIRVAN: We can't proceed without him.

7 MS. DJURDJEVIC: Let's go off the record so we can  
8 wait for Mr. Poch to come back.

9 [Brief recess]

10 MS. DJURDJEVIC: Okay, we now have Mr. Poch with us,  
11 and Mr. Neme will be available for questions and we have an  
12 order of questioners.

13 Is there a preliminary matter? Do we need to file Mr.  
14 Neme's resume and make that an exhibit?

15 MR. POCH: I think it's attached to the exhibit  
16 already.

17 MS. DJURDJEVIC: All right. Then we will start with  
18 OEB Staff, Mr. Wasylyk.

19 **QUESTIONS BY MR. WASYLYK:**

20 MR. WASYLYK: Mr. Neme, good afternoon. My questions  
21 are likely a lot shorter than I initially anticipated.  
22 I've had a little bit of an extended opportunity to kind of  
23 review your interrogatory responses.

24 So I have just a couple of quick follow ups on your  
25 responses to OEB Staff questions and then a request.

26 So the first -- this is a build-on of the document  
27 that I had circulated last week. And what I'm particularly  
28 looking at is Exhibit GEC.ED.Staff.3 and your response

1 there.

2 You had included a table, and that table went on to  
3 show a number of different things relative to the gas  
4 utilities' current DSM plans and showing annual savings,  
5 the budgets, and ultimately the net cost per tonne.

6 Do you have that table? That's it right there on the  
7 screen.

8 MR. NEME: I do.

9 MR. WASYLYK: Perfect. The first thing I wanted to  
10 confirm is column A, those are the annual savings from the  
11 gas utilities' current DSM plans. Is that correct?

12 MR. NEME: Yes, three year's worth, from 2018 to 2020.

13 MR. WASYLYK: Great. So the takeaway from this table,  
14 I gather, is that they are largely cost effective relative  
15 to the cost of carbon. Is that correct?

16 MR. NEME: That's correct. Based on the set of  
17 avoided costs to which I had access that were in the -- I  
18 believe, published in -- if not the MACC, in the  
19 conservation potential study.

20 MR. WASYLYK: Okay, thank you. So one thing that was  
21 hoping that you might be able to do, which would help Board  
22 Staff and would help the Board, I think, just to get a  
23 better understanding of the cost effectiveness of the total  
24 potential that we believe may be available is to rerun this  
25 table. But as opposed to using the current annual savings  
26 projections from the DSM plan for those three years, to use  
27 the savings that are included within the conservation  
28 potential report, and at the three various scenarios,

1 constrained, semi-constrained and unconstrained.

2 I wonder if you would be able to take that as an  
3 undertaking to reproduce this table using that ...

4 MR. NEME: For that same year three-year period, 2018  
5 to 2020?

6 MR. WASYLYK: Yes, I can do that.

7 MS. DJURDJEVIC: That's undertaking JT2.15.

8 **UNDERTAKING NO. JT2.15: TO RERUN THE TABLE AT EXHIBIT**  
9 **GEC.ED.STAFF.3 USING THE SAVINGS THAT ARE INCLUDED**  
10 **WITHIN THE CONSERVATION POTENTIAL REPORT, AND AT THE**  
11 **THREE VARIOUS SCENARIOS, CONSTRAINED, SEMI-CONSTRAINED**  
12 **AND UNCONSTRAINED, FOR THE PERIOD 2018 TO 2020.**

13 MR. WASYLYK: Great, and those are all my questions.  
14 Thank you very much.

15 MS. DJURDJEVIC: So we have next Mr. O'Leary for  
16 Enbridge.

17 **QUESTIONS BY MR. O'LEARY:**

18 MR. O'LEARY: Thank you, Mr. Neme.

19 MR. NEME: Nice to see you, Mr. O'Leary.

20 MR. O'LEARY: I won't be long. I would like to start  
21 just by asking some questions to try and understand if  
22 we're on the same page, and ultimately it's going to land  
23 on questions about bill impacts.

24 But you'd agree with me that the goal of abatement  
25 programs and energy efficiency is to ultimately cause  
26 customers, ratepayers, to reduce their gas usage. Fair?

27 MR. NEME: I'm sorry, can you restate the question?

28 MR. O'LEARY: That one of the over all purposes of

1 abatement programs, energy efficiency, DSM, is to encourage  
2 customers, ratepayers, to reduce their gas usage.

3 MR. NEME: I was only confused by the inclusion of the  
4 term abatement in that list of things. But I would agree  
5 that the purpose of DSM programs is to acquire energy  
6 savings that are less than the alternative cost of supply,  
7 and part of doing that would necessitate consumers reducing  
8 their consumption.

9 MR. O'LEARY: Absolutely. And when I say abatement, I  
10 am referring to energy efficiency measures or programs.  
11 You'll understand that's what I'm referring to.

12 MR. NEME: A subset of abatement, yes.

13 MR. O'LEARY: Yes. And in terms of the ratepayer  
14 actually benefiting from participating in those programs,  
15 they actually have to reduce their gas usage. Is that fair  
16 to say?

17 MR. NEME: Sure. If the customers don't reduce their  
18 gas usage then there is no reduction in billing.

19 MR. O'LEARY: Sure. So if you've got in 2017, if I am  
20 a hypothetical customer and I burn 1,000 cubic metres and I  
21 burn the same thousand cubic metres in 2018, then I have  
22 not actually changed my conduct and therefore I'm not  
23 realizing any of the gas cost savings in my bill, correct?

24 MR. NEME: Well, it depends. It depends on what your  
25 baseline was. If I was --

26 MR. O'LEARY: All things being equal.

27 MR. NEME: If I was otherwise going to have increased  
28 my consumption and I kept it at a thousand, then I'm

1 getting savings.

2 But if there is no reasons for consumption to have  
3 otherwise changed, then if I haven't -- if my consumption  
4 hasn't changed, I've saved nothing.

5 MR. O'LEARY: Fair enough. I understand that. So  
6 that's on the commodity side of it. When it comes to the  
7 carbon cost side of it, are you aware that the cost is a  
8 unit, in terms of per cubic metre, so that the amount that  
9 a customer pays for its share of the compliance obligation  
10 is based upon a per unit value?

11 MR. NEME: I learned today that that was the way that  
12 the cost of compliance will be recovered.

13 MR. O'LEARY: Which means that again, if I'm the  
14 hypothetical customer and all things being equal, if I burn  
15 a thousand cubic metres in 2017 and I do the same in 2018  
16 because there has been no change in my conduct or the  
17 temperature, that I have not in fact realized any savings  
18 from a carbon cost perspective?

19 MR. NEME: I'm sorry, restate the question please?

20 MR. O'LEARY: Like the commodity, if I haven't changed  
21 my actual usage, just assume that as part of the  
22 hypothetical, so I'm still using the same volume of gas as  
23 I did in the prior year, like a commodity, will I similarly  
24 not have received or incurred -- generated any benefits  
25 from the carbon unit component?

26 In other words, I'm paying the same amount in 2018  
27 that I would have been in 2017?

28 MR. NEME: If your consumption has stayed unchanged

1 and if the allocated cost of carbon compliance has remained  
2 unchanged, then that's correct.

3 MR. O'LEARY: Okay. So the reason that I asked that  
4 is because in one of your interrogatory responses, which is  
5 to Enbridge number 4, if I could take you there, the  
6 question was -- at that point, we were still referring to  
7 your 9 million in forecast. I understand you've amended  
8 that.

9 But the question was: What part of the forecast  
10 savings will directly benefit ratepayers who do not choose  
11 to participate in such incremental energy efficiency  
12 programs?

13 I just want to look at your response in two parts.  
14 One are avoided gas costs, and that is, according to your  
15 answer, about 56 million. And I understand it's made up a  
16 number of things, but you'd agree with me that the majority  
17 of that is the actual commodity; fair?

18 MR. NEME: Yes, that's fair.

19 MR. O'LEARY: In the sentence before that, you say  
20 that of the total amount, 17 million were associated with  
21 the avoided carbon emissions allowance purchases which  
22 should accrue to all customers, whether they participate in  
23 the program or not.

24 That seems inconsistent with what you've just said to  
25 me. Is that fair?

26 MR. NEME: Yes, and -- or potentially. I've been  
27 giving that response some thought today since I learned  
28 today about how the compliance cost would be recovered, and

1 may want to amend this answer -- I haven't completely yet  
2 thought through the mechanics of the cost recovery and  
3 implications for this, but may want to amend my answer once  
4 I've completely thought that through, potentially in the  
5 direction that you've just implied.

6 MR. O'LEARY: Thank you. Those are my questions.

7 MS. DJURDJEVIC: Do we want to give an undertaking  
8 that there's going to be a further --

9 MR. O'LEARY: No.

10 MS. DJURDJEVIC: No? Okay.

11 MR. NEME: My presumption is I would refile -- we  
12 would -- GEC would file an amended response to the question  
13 if there is a need for an amendment.

14 MR. POCH: That's correct, Mr. Neme has already  
15 advised me that he may have to do that, and we'll do that  
16 if his answer has changed.

17 MS. DJURDJEVIC: Okay, so are there any questions from  
18 Union Gas? I believe I heard -- no, you don't have any  
19 questions.

20 MS. SEERS: No questions. Thank you.

21 MS. DJURDJEVIC: Thank you, Ms. Seers.

22 And so we then come to BOMA. Mr. Brett, you have some  
23 questions for Mr. Neme?

24 MR. BRETT: No, I don't.

25 MS. DJURDJEVIC: No? Sorry. Nothing from me. Okay.  
26 And I'm advised that LIEN has no questions either, which  
27 collapses our list and let's us all go home.

28 So one matter of order. The undertakings, could

1 Enbridge respond to those in a week at most, and if you  
2 could do it earlier that would be great, and I'd like  
3 everybody to stick around just for a minute after we go off  
4 the record to talk about some procedural aspects of the  
5 hearing coming up.

6 Thank you very much, everyone, and we are concluded.

7 --- Whereupon the hearing adjourned at 3:45 p.m.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28