



ONTARIO ENERGY BOARD

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EB-2017-0255
EB-2017-0275

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

VOLUME: Volume 1

DATE: April 23, 2018

Ken Quesnelle Vice-Chair and Presiding Member

Susan Frank Member

Michael Janigan Member

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 Monday, April 23, 2018,
commencing at 9:34 a.m.

VOLUME 1

BEFORE:

KEN QUESNELLE	Vice-Chair and Presiding Member
SUSAN FRANK	Member
MICHAEL JANIGAN	Member

A P P E A R A N C E S

LJUBA DJURDJEVIC LAUREN MURRAY	Board Counsel
VALERIE BENNETT	Board Staff
MYRIAM SEERS ADAM SPIERS JOSH CHARLES	Union Gas
DENNIS O'LEARY	Enbridge Gas
JOHN WOLNIK	Association of Power Producers of Ontario (APPrO)
TOM BRETT	Building Owners and Managers Association, Toronto (BOMA)
SCOTT POLLOCK	Canadian Manufacturers & Exporters (CME)
JULIE GIRVAN	Consumers' Council of Canada (CCC)
ROGER HIGGIN	Energy Probe Research Foundation
KENT ELSON	Environmental Defence (ED)
DWAYNE QUINN	Federation of Rental-housing Providers of Ontario (FRPO)
DAVID POCH	Green Energy Coalition (GEC)
LAURA VAN SOELEN	Industrial Gas Users' Association (IGUA)
JOANNA VINCE MARIA JACKIW	Ontario Sustainable Energy Coalition (OSEA)
MARK RUBENSTEIN	School Energy Coalition (SEC)
SHELLEY GRICE	Vulnerable Energy Consumers' Coalition (VECC)

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1 Monday, April 23, 2018

2 --- On commencing at 9:34 a.m.

3 MR. QUESNELLE: Good morning, everyone. Please be
4 seated. Full house here today.

5 The Board sits today on the matter of applications
6 filed by Enbridge Gas Distribution Inc., Union Gas Limited,
7 and EPCOR Natural Gas Limited Partnership, seeking approval
8 of the forecast costs arising from their cap-and-trade
9 compliance plans for January 1st to December 31st of 2018.

10 The gas utilities filed their applications in
11 accordance with the OEB's report of the Board regulatory
12 framework for assessment of costs of natural gas utilities'
13 cap-and-trade activities.

14 The Board assigned the following numbers to the
15 applications: EB-2017-0224 for Enbridge Gas, EB-2017-0255
16 for Union Gas, and EB-2017-0275 for EPCOR Natural Gas.

17 On December 1st, 2017 the OEB issued a notice of
18 hearing for a combined public hearing to consider the
19 application of each of the gas utilities.

20 The OEB has issued procedural orders establishing the
21 schedule for the filing of interrogatories, intervenor
22 evidence, a technical conference, and for this hearing.

23 My name is Ken Quesnelle, and I'll be presiding over
24 the hearing. Joining me on the Panel are Board members
25 Susan Frank and Michael Janigan.

26 I will now take appearances.

27 **APPEARANCES:**

28 MS. SEERS: Good morning, Panel. My name is Myriam

1 Seers, counsel for Union. To my left is Adam Stiers from
2 Union and to my right Josh Charles, also from Union.

3 MR. BRETT: Good morning, Panel, Tom Brett appearing
4 for BOMA.

5 MR. QUESNELLE: Good morning, Mr. Brett.

6 MR. POCH: Good morning, Panel. David Poch appearing
7 for Green Energy Coalition. Good morning.

8 MR. QUESNELLE: Mr. Poch.

9 MR. ELSON: Good morning. Kent Elson for -- sorry,
10 David turned off my mic. Good morning, Kent Elson for
11 Environmental Defence.

12 MR. QUESNELLE: Mr. Elson.

13 MR. RUBENSTEIN: Good morning, Panel. Mark
14 Rubenstein, counsel for the School Energy Coalition.

15 MR. QUESNELLE: Mr. Rubenstein.

16 MS. VAN SOELEN: Laura Van Soelen, counsel for
17 Industrial Gas Users Association.

18 MR. QUESNELLE: Good morning.

19 MS. VAN SOELEN: Good morning.

20 MR. QUINN: Good morning, Panel. Dwayne Quinn on
21 behalf of the Federation of Rental-housing Providers of
22 Ontario.

23 MR. QUESNELLE: Mr. Quinn.

24 MS. GIRVAN: Julie Girvan on behalf of Consumers'
25 Council of Canada.

26 MS. GRICE: Good morning. Shelley Grice, consultant
27 for Vulnerable Energy Consumers' Coalition.

28 MS. VINCE: Joanna Vince, counsel for the Ontario

1 Sustainable Energy Association.

2 MR. QUESNELLE: Good morning.

3 MS. JACKIW: Maria Jackiw, also counsel for OSEA.

4 MR. O'LEARY: Good morning, counsel, Dennis O'Leary
5 for Enbridge Gas Distribution Inc., and we'll introduce our
6 panel and people accompanying me tomorrow.

7 MR. QUESNELLE: Okay. Good morning.

8 DR. HIGGIN: Good morning, Panel, Roger Higgin for
9 Energy Probe.

10 MR. QUESNELLE: Okay.

11 MR. WOLNIK: Good morning, John Wolnik for APPrO.

12 MR. QUESNELLE: Mr. Wolnik.

13 MR. POLLOCK: Scott Pollock, counsel for Canadian
14 Manufacturers and Exporters.

15 MR. QUESNELLE: Anyone else? That's it? Board Staff?

16 MS. DJURDJEVIC: Good morning, Panel, Ljuba
17 Djurdjevic, counsel for OEB Staff.

18 MR. QUESNELLE: Good morning.

19 MR. MURRAY: Lauren Murray, legal counsel for OEB
20 Staff.

21 MS. BENNETT: Valerie Bennett, OEB Staff.

22 **PRELIMINARY MATTERS:**

23 MR. QUESNELLE: Good morning. Okay. Preliminary
24 matters? I understand there's -- we've got the issue to
25 deal with around confidentiality of certain documents came
26 up.

27 MS. DJURDJEVIC: Mr. Chair, if I may I speak to that
28 issue -- as soon as I get the microphone working.

1 There were two documents produced in response to
2 undertakings from the technical conference; namely, JT1.1
3 and JT1.12. Those documents apparently contain third-party
4 proprietary information for which Union was seeking
5 confidential treatment.

6 I believe Ms. Seers, counsel for Union, has some
7 updates or is prepared to speak to that this morning and
8 advised that there is some consent or permission to
9 disclose some of the information, confidentially or
10 publicly.

11 MS. SEERS: Thank you. Actually, so backing up for a
12 second, the document in response to JT1.1 is a carbon price
13 forecast from California Carbon. California Carbon has not
14 consented to the disclosure of that information publicly.
15 In fact, they've expressly allowed Union to disclose it in
16 response to the undertaking on the condition that the
17 Board's confidential treatment be followed.

18 So I don't have any other update other than that.
19 Obviously Union is not at liberty to disclose the document
20 publicly without that party's consent, and I would submit
21 that if anything further were to be sought, that party
22 would need to be on notice and have the opportunity to make
23 submissions.

24 With respect to JT1.12, that is an ICF presentation,
25 which as I understand it contains information that is
26 proprietary to ICF and also information that is proprietary
27 to California Carbon.

28 It has been filed confidentially with the Board with

1 the California Carbon information redacted, so the consent
2 has not been provided by either of those parties to
3 disclose that presentation publicly, so I would make the
4 same submission that if anything further were to be sought
5 here, ICF would need to be on notice and given an
6 opportunity to explain why that information is or should be
7 treated confidentially by the Board.

8 MR. QUESNELLE: Ms. Seers, just for my understanding
9 here, the second document that you mentioned, it has been
10 provided in a redacted format in confidence under the --
11 seeking the confidential treatment?

12 MS. SEERS: Correct, so the ICF information is
13 available to the -- the ICF information contained in the
14 presentation is available to the Board confidentially but
15 not publicly, and the California Carbon information in that
16 presentation isn't available at all.

17 MR. QUESNELLE: Right. Understood. Mr. Elson?

18 MR. ELSON: Mr. Chair, I have some comments about that
19 and some submissions, and these comments will relate to
20 JT1.1, JT1.2, and also JT1.35.

21 And in our view, the materials, for the most part,
22 don't meet the confidentiality criteria set out in the
23 Board's practice guideline. And secondly, in our view, the
24 process hasn't been followed in terms of putting forward
25 the kind of details that are required under the practice
26 direction in order for parties to make submissions on those
27 reasons and for the Board to reasonably adjudicate them.

28 With respect to the confidentiality criteria, the

1 nature of the information as far as we can tell will not
2 cause harm if it is disclosed publicly. And I am speaking,
3 in particular, about JT1.2, which is the ICF report. That
4 is a report about the impacts of cap-and-trade on natural
5 gas markets and on Union Gas and is obviously quite germane
6 to this cap-and-trade proceeding that we are in at the
7 moment.

8 And the reason that I don't think it is going to cause
9 harm is that similar ICF reports have been disclosed in
10 other proceedings, including the natural gas expansion
11 proceeding and also the 2017 cap-and-trade proceeding.

12 With respect to JT1.35, that's an attribution
13 agreement with the Government of Ontario. And that's
14 accessible through Freedom of Information and the
15 Protection of Privacy Act, and I don't see how it can be
16 deemed confidential if it would be otherwise accessible
17 through regular Freedom of Information processes.

18 Secondly, it's not a type of information that has been
19 held confidential in the past, and in front of you you
20 should have a brief compendium on the confidentiality
21 issues that has been put in front of you. And on page 11
22 of these materials you will find the list from the
23 guidelines describing the types of information that have
24 been previously held confidential, and I'm not going to go
25 through the list one by one except to say that this kind of
26 information is not of the kind that is referred to in
27 Appendix B. It's not listed there.

28 But I think there's another way to look at it, which

1 is from a principled and practical perspective. If you go
2 back to page 6 of this compendium, which is the first page
3 of the practice direction, it says that:

4 "The Board's general policy is that all records
5 should be open for inspection by any person,
6 unless disclosure of the record is prohibited by
7 law. This reflect the Board's view that its
8 proceedings should be open, transparent and
9 accessible."

10 So that's the basis on which we start, and that is an
11 articulation of the open court principle, which has been
12 affirmed by the Supreme Court a number of times. So there
13 is that practical reason, which is in order to provide
14 public confidence, you need to have as much information on
15 the public record as possible in setting the rates that
16 everybody in Ontario pays.

17 In addition, there is a practical challenge because
18 there is a lot of hassles and time involved when you have
19 information that is confidential and requires going in
20 camera, which can cause delay in the hearing and also
21 causes extra time and paperwork from the Board's
22 perspective.

23 So those are the reasons why we don't think the
24 confidentiality criteria applies. But I may be getting
25 ahead of myself a little bit, because in our view, the
26 process hasn't been followed.

27 MR. QUESNELLE: I was just going to ask you about
28 that, Mr. Elson, because if we are going to make a ruling

1 that we're going to go back to square one, you are
2 providing all your arguments to Ms. Seers as to what she
3 should be asking for. I'm just wondering if we could stop
4 there for a moment.

5 Ms. Seers, do you intend to be filing any further
6 documentation as requesting beyond your oral comments this
7 morning?

8 MS. SEERS: Certainly Union can't -- cannot respond to
9 the argument good morning that Mr. Elson is making as to
10 the nature of the information, as it is not Union's
11 information. So we can't speak to whether there is going
12 to be harm or not to the competitive position of anybody.
13 That needs to come from them.

14 We received Mr. Elson's compendium and noticed that
15 he would be raising this objection last night. There
16 hasn't been time to seek submissions from those third
17 parties, so we would submit that the appropriate course
18 would be to give them the opportunity to provide a letter,
19 or whatever other submission they feel is appropriate
20 addressing these concerns, and then go from there.

21 MR. QUESNELLE: Thank you. Mr. Elson, any comment?

22 MR. ELSON: If I could address the process which
23 hasn't been followed, that's detailed in page 7 of the
24 compendium which is the Board's practice direction.

25 And if you go to page 7 and the sidebarred section,
26 which is section 5.1.4: "A request for confidentiality
27 must include the following items...", and the first is a
28 cover letter indicating the reasons for the confidentiality

1 request, including the reasons why the information at issue
2 is considered confidential, and the reasons why public
3 particulars of that information would be detrimental.

4 And so the way this is supposed to work is that when
5 this material was first put forward, a letter explains why
6 it's detrimental, so that we can respond to it. So I have
7 put forward a couple of reasons why we don't think this
8 meets the confidentiality criteria, but I'm shooting in the
9 dark a little bit because the process hasn't been followed.

10 MR. QUESNELLE: That was my reason for my question to
11 Ms. Seers on whether or not they plan on filing something
12 to this effect, and I took it that they would be.

13 MR. ELSON: That's good. So one of the suggestions
14 that Ms. Seers has made is that we have to wait until we
15 provide an opportunity to provide comments -- to hear
16 comments from ICF itself.

17 I have never heard of that in a Board process before,
18 and I think that would be a completely untenable process
19 and that's not how the practice direction works. If every
20 time you needed to provide a consultant report that the
21 utilities are using, we had to back and talk to the
22 consultants, that would be causing significantly and
23 potentially opening up a new category of exceptions to
24 filing materials on the public record where some third-
25 party for one reason or another -- perhaps because they
26 know that the utility doesn't want it on the record -- says
27 we don't want this on the record.

28 So I think it is actually Union that has the

1 obligation to say why this should be detrimental. What
2 work they do behind the scenes to determine that is another
3 question.

4 MR. QUESNELLE: Ms. Seers?

5 MS. SEERS: We certainly have several examples of
6 Board decisions that involve letters having been filed by
7 consultants explaining the confidentiality of their own
8 information. So we are happy to provide those as well, if
9 that's useful.

10 But as we speak, we are reaching out to the
11 consultants at issue to try to get those letters from them
12 as quickly as possible.

13 MR. QUESNELLE: To Mr. Elson's point, I take it you
14 would agree with him, Ms. Seers, that it is Union's
15 obligation to convince the Board that this is to be treated
16 confidential. How you go about amassing the rationale for
17 that is what you are endeavouring to do right now?

18 MS. SEERS: Certainly, yes.

19 MR. RUBENSTEIN: If I may make a comment?

20 MR. QUESNELLE: Sure.

21 MR. RUBENSTEIN: I have a more narrow question through
22 you to Union.

23 I was provided -- I have signed the declaration and
24 undertaking and I was provided on Friday with the response,
25 the undertaking response to JT1.35, and I took from Ms.
26 Seers' comments earlier this morning that JT -- the
27 confidential responses in JT1.1 and, I think JT1.2, are not
28 being provided confidentially -- putting aside if they

1 should be public or not, but are not being provided
2 confidentially to those who have signed the declaration and
3 undertaking.

4 I thought I'd understood that and in my view, and in
5 my experience sort of adjudicating commercially sensitive
6 parties to making informed decisions on that specific
7 matter, it is not helpful if we don't have those -- at
8 least those who have not signed it don't have access to
9 sort of determine if -- in many cases, the claim may be
10 warranted that it should not be publicly disclosed. But
11 one needs to see the information.

12 And I'm not sure what the -- the information, as I
13 understand it, from at least the broad sense, is not the
14 type that should be what the Board calls strictly
15 confidential in this process. So I'm not sure what the
16 basis for not providing it to the...

17 MR. QUESNELLE: I was anticipating that that would
18 have been included in the request as to what level of
19 confidentiality, strictly confidential or available to
20 those who signed the undertaking, Mr. Rubenstein.

21 Is that correct, Ms. Seers?

22 MS. SEERS: And since the redacted information from
23 the ICF report is California Carbons, and we're already
24 reaching out to them with respect to JT1.1, we'll ask them
25 about JT1.2 also.

26 And so we are, as I say, endeavouring to get that
27 information as quickly as we can, so we are not delaying
28 the process.

1 MR. QUESNELLE: And it will be clear as to what level
2 confidentiality you are seeking?

3 MS. SEERS: Correct, and why.

4 MR. RUBENSTEIN: But I had understood -- at least I
5 think it is with JT1.1, the presentation -- it was being
6 provided confidentially with a redacted part that would be
7 -- so not even the broader presentation with the redacted
8 part is being provided on a confidential basis to the
9 parties. And that, I don't under fully understand the
10 basis for that.

11 MR. QUESNELLE: Thank you, Mr. Rubenstein. Ms. Seers?

12 MS. SEERS: As I say, the redactions to the ICF report
13 are the California Carbon information. So when we reach
14 out to California Carbon to ask about JT1.1, which is their
15 forecast, we will ask about whether those redactions may be
16 lifted and filed confidentially.

17 MR. QUESNELLE: I think Mr. Rubenstein's question is
18 do you have access to the redacted report. I don't believe
19 they do.

20 MS. SEERS: They do not, because we don't have
21 consents from California Carbon to provide that.

22 MR. QUESNELLE: Unredacted version?

23 MS. SEERS: Unredacted, correct.

24 MR. QUESNELLE: I don't know that they are seeking
25 unredacted. I think they're seeking just to look at the
26 redacted version.

27 MR. RUBENSTEIN: Well, I understood there is a report
28 and you've provided, confidentially to the Board, a

1 redacted version of that report. So a portion of it is
2 even -- may be strictly confidential. I'm not sure what
3 the basis for that is. But at least the redacted version
4 of that report has not been provided on a confidential
5 basis.

6 MR. QUESNELLE: Perhaps we're saying it differently,
7 but seeking the same information.

8 MS. SEERS: We can provide the redacted version to
9 those who have signed the undertaking.

10 MR. QUESNELLE: Okay.

11 MR. ELSON: I think Mark's question was that the
12 version that was filed confidentially should be unredacted.

13 MR. QUESNELLE: At this juncture, I don't think that
14 is the question that Mr. Rubenstein was asking. Union will
15 take that on to try to -- take on the onus to convince the
16 Board as to why it was the practice direction. But we'll
17 deal with that when we get to it.

18 MR. RUBENSTEIN: And I should add that with respect to
19 JT1.1, proprietary information is not a listed exemption
20 under the guidelines. But in this case, we wouldn't object
21 to JT1.1 being filed confidentially.

22 MR. QUESNELLE: Why don't we let the process run, Mr.
23 Elson, because I didn't want to take your comments today as
24 being the only time you'll have an opportunity to say so,
25 and keeping track of that, so ...

26 MR. ELSON: I appreciate that and I'd like to just
27 make one comment about timing, that we could receive
28 whatever revised request for confidentiality as soon as

1 possible because we will be cross-examining tomorrow
2 morning, and this information was requested during the
3 technical conference on the 5th and the 6th.

4 So I think it's warranted for that behind-the-scenes
5 work to happen as quickly as possible so that it can be
6 used productively in the hearing, which was the purpose of
7 the technical conference and the undertakings.

8 MR. QUESNELLE: Understood, Mr. Elson, Ms. Seers.

9 MS. DJURDJEVIC: Just one further comment, Mr. Chair,
10 if I may -- and identify the undertaking, the second one, I
11 believe it is JT1.12, but I heard a couple of parties
12 refer to it is a JT1.2. I just wanted to clarify that
13 JT1.12 is the ICF report, and whether it's redacted or
14 unredacted, so I just --

15 MR. ELSON: That's correct.

16 MS. DJURDJEVIC: -- want to make sure everybody is
17 clear about that; okay. That's fine. That was the only --

18 MS. SEERS: 1.1 and 1.12.

19 MS. DJURDJEVIC: Yes, thank you.

20 MR. ELSON: And 1.35.

21 MS. SEERS: And so with respect to 1.35 we are
22 prepared to file it publicly because we've received the
23 consent from the Ministry, so that will be filed publicly
24 shortly.

25 MR. QUESNELLE: So 1.35 is --

26 MS. SEERS: Which is --

27 MR. QUESNELLE: -- off the table. We're -- that's
28 fine. That's --

1 MS. SEERS: Correct.

2 MR. QUESNELLE: -- coming on to the public record.

3 Okay.

4 MS. SEERS: Which is an attribution agreement between
5 Union and the government which will be filed publicly.

6 MR. QUESNELLE: Excellent. Okay. Thank you.

7 MR. ELSON: Thank you.

8 MR. QUESNELLE: Thank you, Mr. Elson. Okay.

9 If that's the only preliminary matter, then we will
10 proceed. Ms. Seers, if you would like to introduce your
11 panel and we'll have them affirmed.

12 MS. SEERS: Thank you. So closest to the Panel we
13 have Mr. Steve Dantzer, who is the cap-and-trade program
14 manager. To Mr. Dantzer's right we have Cheryl Newbury,
15 who is the director, gas supply and customer support, to
16 her right, Sue Flaman, who is the director of energy
17 conservation, to her right Harris Ginis, who is the
18 manager, DSM regulatory strategy, and to his right,
19 Francois Trofim-Breuer, director, technology and
20 innovation. So I would ask that the panel be affirmed.

21 MR. JANIGAN: Thank you, I'm going to do the panel all
22 at once, so I will ask each of you. I didn't get the
23 proper pronunciation of your name, Mr. Trofimier, is it?

24 MR. TROFIM-BREUER: Trofim-Breuer, but that's fine.
25 It's Trofim-Breuer. It's a German name. Sorry about that.

26 **UNION GAS - PANEL 1**

27 **Cheryl Newbury,**

28 **Harris Ginis,**

1 **Sue Flaman,**
2 **Steve Dantzer,**
3 **Francois Trofim-Breuer; Affirmed.**

4 MR. JANIGAN: Thank you very much.

5 MS. SEERS: I'll ask Ms. Flaman to adopt on behalf of
6 the panel Union's evidence filed in this proceeding, which
7 is the application evidence as updated, the interrogatory
8 responses as updated, and the undertaking responses as
9 updated.

10 MS. FLAMAN: I adopt the evidence.

11 MS. SEERS: Thank you. So I will turn it over to Ms.
12 Flaman to give Union's presentation. We should have it up
13 on the screen, and also paper copies will be distributed.

14 MR. QUESNELLE: Perhaps we want to give this an
15 exhibit number, Ms. Djurdjevic.

16 MS. DJURDJEVIC: That will be Exhibit K1.1.

17 **EXHIBIT NO. K1.1: UNION GAS PRESENTATION.**

18 MR. QUESNELLE: Whenever -- we can get started. I
19 think everyone has what they need.

20 **PRESENTATION BY MS. FLAMAN:**

21 MS. FLAMAN: Thank you. Good morning, Panel. Thank
22 you for the opportunity to present today. This slide sets
23 out the agenda I'll address.

24 We're here seeking Board approval of the
25 reasonableness of Union's 2018 compliance plan cost
26 consequences, approval of up to 2 million of cost
27 consequences associated with a low carbon initiative fund
28 and a greenhouse gas emissions impact deferral account,

1 approval to dispose of 2016 balance, and Union's greenhouse
2 gas emissions impact deferral account, and final approval
3 of 2018 compliance plan rates.

4 Union has expanded its consideration of both customer
5 and facility abatement in its 2018 compliance plan. We
6 have analyzed and applied the OEB issue, long-term carbon
7 price forecast, the LTCPF, and the marginal abatement cost
8 curve, the MACC, received on May 31st, 2017 and July 20th,
9 2017 respectively.

10 Union has also explored complementary support
11 structures that are consistent with the province's climate
12 change plans and the framework in order to advance the
13 development of abatement over the long-term.

14 Union's customer abatement plan for 2018 includes the
15 pursuit of new technologies, such as renewable natural gas.
16 Other technologies include integrated air source heat
17 pumps, ground-source heat pump, net zero energy, net zero
18 energy-ready homes, hydrogen and power to gas, micro-
19 generation, just to name a new examples.

20 In Ontario, cap-and-trade is still very new, Ontario
21 having joined the WCI market only this year, January 1st,
22 with only one auction so far.

23 Timelines remain tight for the filing of compliance
24 plans and significant uncertainty exists regarding the
25 impact of WCI, political uncertainty, outstanding Ontario
26 offset protocols, and GreenON and other government funding
27 is a huge area of uncertainty as well, as we see
28 government-funded energy conservation and savings

1 approaches enter the market.

2 We continue to operate under the OEB-approved 2015-
3 2020 DSM plan and are successfully delivering energy
4 conservation programs to our customers as we have for the
5 past 20 years, and to further support the transition to the
6 low-carbon economy we are moving forward with proposals
7 aligned with the government's priorities and supported by
8 cap-and-trade funding that could lead to future abatement
9 opportunities such as renewable natural gas.

10 Before reviewing Union's compliance plan it is
11 important to understand the guiding principles with which
12 the OEB framework defines. In the framework on page 7 the
13 OEB notes that compliance plans will outline how they will
14 meet their obligations under the Act and regulations. It
15 also states the OEB will review these plans for prudence
16 and reasonableness.

17 The need to meet the compliance obligation required by
18 the Climate Change Act and the regulations and to do so
19 prudently are the cornerstone of Union's 2018 compliance
20 plan.

21 The plan also addresses the Board's six guiding
22 principles. These are cost-effectiveness and prudence,
23 rate predictable, cost recovery, transparency that balances
24 the need for confidentiality and market integrity,
25 flexibility, and continuous improvement. The plan will be
26 built upon in future plans as uncertainties are addressed
27 and experience is gained.

28 In alignment with the principles noted on the previous

1 slide, Union, as a natural gas distributor, must ensure
2 compliance with the cap-and-trade framework, including a
3 facility-related obligation for facilities Union owns and
4 operates, a customer-related obligation for Union's
5 residential, commercial, and industrial customers who are
6 not large final emitters or voluntary participants.

7 To meet our compliance obligation we have ensured the
8 plan addresses the key elements noted on this slide as
9 well.

10 In 2017 the OEB found that Union's compliance plan was
11 based on reasonable option analysis and optimized decision-
12 making and risk management processes and analysis.

13 The OEB also found that Union's 2017 administrative
14 cost forecast was consistent with the expectations
15 established by the cap-and-trade framework.

16 New developments since Union's 2017 plan was created
17 are noted on this slide and more importantly, are reflected
18 in our 2018 plan. Union's 2018 compliance plan has
19 expanded in scope and analysis. Our 2018 plan reflects
20 Union's experience and significant new developments that
21 have occurred throughout 2017.

22 It also reflects continuous improvement and
23 advancement. It continuous improvement advancement in our
24 compliance processes and activities. I'll take you through
25 a few highlights in the next slides.

26 We have introduced the abatement construct to advance
27 abatement initiatives both in the short and long-term.
28 Abatement initiatives can develop over a period of several

1 years, particularly given their reliance on new and
2 emerging technologies and the iterative nature of their
3 development.

4 Union has worked with Enbridge Gas Distribution to
5 develop the initiative, reflected by the graphic on this
6 slide to depict the process of identifying, developing, and
7 implementing abatement opportunities.

8 We believe the abatement construct is not only
9 conducive to, but necessary to drive forward abatement in
10 the province in order to benefit our customers and advance
11 the low carbon economy.

12 There may be many concepts or ideas that Union will
13 investigate in parallel as possible abatement
14 opportunities, with only some coming to fruition.

15 In order to achieve the greenhouse gas reduction
16 targets set out by the province and for Union to satisfy
17 its obligations under the Climate Change Act and the
18 framework, alternative funding models should be considered
19 for step change initiatives that may not be cost effective
20 within existing regulatory mechanisms.

21 Since the abatement construct is consistent with
22 guiding principles in the framework, it is Union's an
23 intent that this abatement construct be applicable to
24 future abatement proposals and compliance plans.

25 To support the transition to a lower carbon economy,
26 Union proposes to establish a low carbon initiative fund to
27 facilitate development of new technologies aimed at moving
28 future abatement opportunities through the initiative

1 funnel.

2 We believe that a consistent, predictable level of
3 available funding is necessary to support the steady flow
4 of ideas into and through the initiative funnel described.

5 This allows for new innovative opportunities to be
6 identified and explored. By leveraging the low carbon
7 initiative fund, in combination with its market
8 infrastructure and regulatory expertise, Union can remove
9 adoption barriers and facilitate the highest potential
10 abatement applications being developed through to
11 commercialization.

12 In the end, this will contribute to reducing
13 greenhouse gases emissions in Ontario, while making
14 commercially viable technology choices available for
15 Ontario; Ontario wins.

16 As referred to in the framework and earlier in this
17 this proceeding at the technical conference, there are
18 elements of Union's compliance plan which must remain
19 strictly confidential and viewable only to the Board and
20 Board Staff.

21 This is as a requirement of the Climate Change Act. It
22 prohibits the sharing of any information related to oxygen
23 participation, bidding strategies, or financial information
24 relating to an auction. It also prohibits tipping or
25 sharing of information that is generally not disclosed, and
26 could reasonably have an impact on the market price or
27 value of allowances or credits.

28 The OEB framework recognizes that is this is a new

1 market early in its development, and has taken a cautious
2 approach in order to preserve market integrity.

3 This is also aimed at ensuring that the utilities,
4 particularly given their size in the market, and that other
5 market participants are not regulated, are able to cost
6 effectively execute their compliance plans and protect
7 customers from undue costs.

8 In summary, Union is seeking approval that its
9 compliance plan's cost consequences, as forecasted and
10 proposed, are just and reasonable. This includes approval
11 of up to \$2 million of cost consequences associated with a
12 low carbon income fund to support potential future
13 abatement initiatives.

14 Union is seeking final approval of 2016 Greenhouse Gas
15 emissions deferral account balance in order to clear the
16 balance in that account, and Union is seeking final
17 approval of the 2018 compliance plan rates.

18 Thank you for your time.

19 MR. QUESNELLE: Thank you.

20 MS. SEERS: Mr. Chair, the panel is available for
21 cross-examination.

22 MR. QUESNELLE: Thank you, Ms. Seers. Mr. Rubenstein,
23 I understand you are up first.

24 MR. RUBENSTEIN: Thank you very much. I have a
25 compendium. I'm not sure if the panel has been given a
26 copy, the Board Panel.

27 MR. QUESNELLE: We do.

28 MR. RUBENSTEIN: And I will be using this for both

1 Union and Enbridge.

2 MR. QUESNELLE: We'll mark that.

3 MS. DJURDJEVIC: That will be Exhibit K1.2.

4 **EXHIBIT NO. K1.2: SEC CROSS-EXAMINATION COMPENDIUM**
5 **FOR UNION PANEL 1**

6 **CROSS-EXAMINATION BY MR. RUBENSTEIN:**

7 MR. RUBENSTEIN: Thank you very much. I just want to
8 situate ourselves. Am I correct that under the cap-and-
9 trade regime, Union is responsible for the GHG obligations
10 of both its customers, with the exception of large final
11 emitters, and its own facilities? Do I understand that?

12 MS. NEWBURY: That's correct, with the exception of
13 the voluntary participants as well.

14 MR. RUBENSTEIN: And I want to get a sense of the
15 major components of the compliance plan that you are
16 putting in place to meet those obligations.

17 If we can turn to page 4 of the compendium, this is
18 from your evidence and you say at line 10: "Union's 2018
19 compliance plan for customer and facility-related
20 obligations is largely based on purchasing compliance
21 instruments", and then there is a confidential section.

22 In a broad plans, not asking about specifics of your
23 plan, but when we are talking about compliance instruments,
24 we're talking about allowances, offsets, things purchased
25 in the secondary market, correct? Sort of in a broad
26 sense, that's what we talk about when we mean compliance
27 instruments?

28 MS. NEWBURY: I would broaden it just to say anything

1 that's purchased. You had said purchased in the secondary
2 market, so it would be primary or secondary.

3 MR. RUBENSTEIN: Yes, primary or secondary. I didn't
4 mean specifically in the secondary. But not just purchased
5 in auctions, but also in the secondary market.

6 And then in line 14 of page 4 you say:

7 "Union recognizes the importance of abatement in
8 contributing to provincial GHG emission reduction
9 targets and that in the framework, utilities are
10 expected to contemplate abatement in their
11 long-term plans. In completing the 2018
12 compliance plan, Union has expanded its
13 consideration about customer and facility
14 abatement measures."

15 Do you see that?

16 MS. FLAMAN: Yes.

17 MR. RUBENSTEIN: So Union -- help me, correct me.
18 Union conceptually breaks down its compliance plans into
19 two parts. I see the compliance instrument part and the
20 abatement activity part. Is that a fair way to look at it?

21 MS. FLAMAN: Union considers the compliance plan to
22 address both customer abatement and our facilities
23 abatement.

24 MR. RUBENSTEIN: But it's fair to characterize the
25 compliance plan -- we can break it into compliance
26 instruments and then the abatement component, recognizing
27 the abatement has multiple parts.

28 MS. FLAMAN: Yes.

1 MR. RUBENSTEIN: And in terms of looking at actual
2 numbers and strategies, the abatement activities we can
3 look at, the compliance instruments have a strictly
4 confidential nature to them, correct?

5 MS. FLAMAN: Yes.

6 MR. RUBENSTEIN: And so I want to ask you, when we
7 talk about abatement, what we mean. And I what I want to
8 make sure I understand what we're broadly talking about.

9 By abatement, we are talking about reducing the GHG
10 obligations of your own or your customers, is that correct?

11 MS. FLAMAN: Yes.

12 MR. RUBENSTEIN: So from reading your application, it
13 seems one can generally do that in two different ways. One
14 is lowered consumption of natural gas -- so for example,
15 through energy efficiency type programs -- or by lowering
16 the carbon content of someone's use of natural gas, say by
17 substituting renewable natural gas supply for a
18 conventional supply. Isn't that a fair way to look it?

19 MS. FLAMAN: Yes, although I would expand that to
20 include technologies that lower greenhouse gas emissions.

21 MR. RUBENSTEIN: Would I characterize that part as a
22 sort of the first, where you are lowering part of the
23 consumption of natural gas? Or would you categorize that
24 as the second or maybe both, lowering the natural gas
25 content, lowering the GHG content of natural gas use?

26 MS. FLAMAN: Yes, I'd say that's fair.

27 MR. RUBENSTEIN: And so with respect to abatement, as
28 I understand it, you've come up with what you called the

1 abatement construct and the framework to guide those
2 potential abatement opportunities from sort of blue sky to
3 seeking the cost consequences of implementation in a
4 compliance plan; is that correct?

5 MS. FLAMAN: We've developed the abatement construct
6 to advance abatement initiatives both in the short-term and
7 the long-term and to guide incremental abatement
8 development.

9 MR. RUBENSTEIN: So I take it that's what I said
10 essentially, just different words?

11 MS. FLAMAN: Sure.

12 MR. RUBENSTEIN: And my understanding is you work with
13 Enbridge to develop the abatement construct?

14 MS. FLAMAN: We worked with -- in conjunction with
15 Enbridge to develop the abatement construct approach, yes.

16 MR. RUBENSTEIN: So if we turn to page 7 of the
17 compendium -- sorry, I apologize, if we turn to page 5 of
18 the compendium we see the abatement funnel, and you showed
19 this in your presentation.

20 It is made up of three stages, which are described on
21 page 6. We go from stage 1, the conceptualizing the
22 activity, stage 2, the formulating the activity, then stage
23 3, the sort of proposing it, and implementation, I guess,
24 is stage 4 in a way; do I have that correct?

25 MS. FLAMAN: Yes.

26 MR. RUBENSTEIN: So it is my understanding the idea is
27 to guide the development of each of the activities so that
28 from an initial thought that we could work through

1 constructively and it will guide how Union will determine
2 which activities to, in the end, implement, seek approval
3 for the cost consequences of that.

4 MS. FLAMAN: Yes, it offers -- the abatement construct
5 was developed to facilitate and guide development of
6 incremental abatement.

7 MR. RUBENSTEIN: And so if we turn to page 7 of the
8 compendium, we had asked you in this, turns out to be an
9 undertaking, we had followed up on an interrogatory to ask
10 you if there were any sort of internal documents setting
11 out the abatement construct, because all we have is what's
12 set out in the application, and your response in the -- as
13 I read the undertaking, this response is essentially no.
14 Really, it's the -- what's in the evidence is what you
15 have; is that correct?

16 MS. FLAMAN: As discussed at the technical conference,
17 this -- a development of the abatement construct was done
18 in conjunction with Enbridge Gas Distribution, and we did
19 that, and I mentioned this in my presentation as well:
20 Compliance plan timelines are tight, so we did that as we
21 were developing a plan, developed the construct and wrote
22 the plan and put it into the plan.

23 MR. RUBENSTEIN: And so -- and if we turn to page 8 if
24 you want, this was another undertaking that was asked, and,
25 you know, there were no meeting minutes from those
26 discussions with Enbridge; correct?

27 MS. FLAMAN: No, no meeting minutes are available.
28 Again, timelines were tight for development of the

1 compliance plan, and we worked together to develop the plan
2 and the construct into the plan at that time.

3 MR. RUBENSTEIN: So, I mean, is it that formal of a
4 framework if, really, you know, you are just put -- it's
5 just only part of the application; there is no internal
6 guide to sort of work through the various application of
7 the abatement construct?

8 MS. FLAMAN: I'd say absolutely. The abatement
9 construct is the approach that we will use to review,
10 develop incremental abatement technologies and to ensure
11 the thoroughness of it, and to speak to your question
12 regarding how formal it is, we have abatement principles,
13 abatement construct principles that have been included in
14 the plan to guide how we review technologies that would
15 move through the funnel.

16 MR. RUBENSTEIN: And it's only that's what's set out
17 in the evidence, correct? When you say you have the
18 principles to work throughout the abatement construct.

19 MS. FLAMAN: The plan sets out the principles, yes.

20 MR. RUBENSTEIN: And as I understand it in the
21 application, you are seeking approval to spend up to
22 \$2 million of part of what you call the low-carbon
23 initiative fund to do various work you would need at stage
24 1 and 2 of the abatement construct?

25 MS. FLAMAN: That's correct.

26 MR. RUBENSTEIN: And as I understand it, I don't think
27 it is part of the \$2 million, but you are also planning to
28 add new FTEs to do the work on stage 1 and 2 of the

1 initiative, correct?

2 MS. FLAMAN: No, that's not correct. That's not part
3 of our proposal.

4 MR. RUBENSTEIN: So there's no incremental FTEs for
5 the purposes of the abatement construct work?

6 MS. FLAMAN: [No audible response]

7 MR. RUBENSTEIN: And would it be fair to characterize
8 the low-carbon initiative fund as essentially sort of a
9 research and development fund for low-carbon technologies
10 or initiatives?

11 MR. TROFIM-BREUER: Yes, that would be fair.

12 MR. RUBENSTEIN: So we asked you -- and you can --
13 this is at page 9. We asked you in part D to confirm that
14 under your proposal there would be no subsequent review of
15 the prudence of the amount spent up to \$2 million, and as I
16 read SEC 11, part D, that's essentially what it says; do I
17 have that correct? Just as a sort of a procedural matter,
18 once the Board approves it, if you spend up to \$2 million
19 there is no further review from the Board on the prudence
20 of that?

21 MR. TROFIM-BREUER: Yes, that would be correct.

22 MR. RUBENSTEIN: All right. And if we turn to page
23 12, this is in response to Staff Interrogatory No.21. And
24 you break down the activities and the initiatives in stage
25 1 and 2 and you estimate the costs of how you plan to spend
26 the low-carbon initiative fund, and you see that on page 13
27 and 14, you have the amounts for 2018; am I correct?
28 That's what that interrogatory is showing on those two

1 tables on page 13 and 14?

2 MR. TROFIM-BREUER: Yes, that is correct.

3 MR. RUBENSTEIN: And on page 17 of the interrogatory
4 -- sorry, of the compendium we asked you for the work plans
5 for these initiatives, for the stage 2 initiatives, and you
6 provided them for the stage 1 as well in the undertaking
7 response, and that's -- begins on page 18; do I have that
8 correct?

9 MR. TROFIM-BREUER: Yes, that is correct.

10 MR. RUBENSTEIN: And if we turn to page 18 -- and it
11 is the same, as you will see, we previously looked at the
12 table -- am I correct that you are only planning to spend
13 \$1.158 million, not \$2 million? That's how much you have
14 budgeted?

15 MR. TROFIM-BREUER: That is correct, and that is also
16 consistent with the ask for -- and up to \$2 million fund.
17 The initiatives identified at this point are represented --
18 are covering 1.159 of up to \$2 million.

19 MR. RUBENSTEIN: So it begs the question: Why are you
20 asking for -- to spend up to \$2 million if you actually
21 only plan to spend \$1.158 million?

22 MR. TROFIM-BREUER: The thought process about how to
23 identify and drive initiatives through the funnel has
24 started just last year. In our process we started looking
25 and leveraging a modest budget that we had internally to be
26 able to identify the right selection process, the right
27 project management process, in order to be able to identify
28 the right initiative and guide them through the funnel.

1 As part of that work, the initiative that we have
2 found so far that we think are -- have a good potential and
3 are representative of the work that can be done and could
4 be expanded are amounting to this amount.

5 We always said it is up to \$2 million. We believe
6 that it is important also to have a certain level of
7 contingency to identify new initiatives as they come in,
8 and as we move forward, when the actuals are going to be
9 updated we are only going to request the funds that have
10 been actually spent.

11 MR. RUBENSTEIN: So I take it what you are saying is,
12 well, we'll be spending more money on new things that are
13 not in -- that you're not -- you can't forecast right now
14 and are not in the budget.

15 MR. TROFIM: That is not correct. What we're saying
16 is that we think when we're looking at -- when we are
17 looking at the opportunities that are available, we started
18 with what we know today of 1.15.

19 We are only charged -- we are only true-up the actuals
20 that have been incurred, and if the LCAF is approved, at
21 that moment we will never spend more than \$2 million. If
22 there is change in circumstances, then we will come in
23 front of the Board for any change in circumstances. But we
24 are not going to go beyond the up to \$2 million.

25 MR. RUBENSTEIN: No, I understand. But I was just
26 trying to understand -- I had heard from your response that
27 we're seeking approval for \$2 million, not 1.158 million,
28 which is what you budgeted, because we may spend more money

1 than the 1.158 on other low carbon initiatives activities
2 that we don't know about right now. Is that not correct?

3 MR. TROFIM: Well, it is, but with a slight nuance.
4 So we are not saying 2 million; we are saying for up to
5 2 million. The ask is not only for this year, but is for
6 compliance for every -- compliance plan as we go through.
7 So that's why we need to have assurance about the
8 forecastable consistent and stable budget of up to
9 \$2 million.

10 This way, we will be able to improve -- not improve,
11 but actually clarify and make sure that we have a good
12 planning process within a budget of up to \$2 million.

13 The budget of today, the 1.159, only represents what
14 was identified in the short period of time since we have
15 put in place since late last year.

16 MR. RUBENSTEIN: Have you identified any new
17 activities since the filing of the application and the
18 determination of the budget and today?

19 Is the forecast amount actually changed?

20 MR. TROFIM: So the work is continuing obviously, and
21 there are a number of potential initiatives that are
22 currently at the beginning of the investigation. We don't
23 have necessarily funds allocated yet for that.

24 Once we have had more assurance, or once we get
25 approval for up to \$2 million, then what we will do is we
26 will go back and say now that we know it, what are the new
27 initiatives, what is the actual truing-up and making sure
28 that we can proceed with newly identified opportunities as

1 appropriate.

2 MR. RUBENSTEIN: And you said you plan to spend, or
3 this approval that you are seeking would allow you to spend
4 up to \$2 million.

5 Am I correct that all that means, though, is if you
6 spend more than \$2 million, you will have to seek approval
7 from the Board when you seek to clear the account.

8 You are not saying anything we spend over \$2 million,
9 we are not going to seek approval for from the Board?

10 MR. TROFIM: I'm not sure I understand the question.

11 MR. RUBENSTEIN: Fair enough. Am I correct that when
12 you say we are seeking approval to spend up to \$2 million
13 on this proceeding, all you are saying is if we spend more
14 than \$2 million, we will have to seek approval from the
15 Board to recover that?

16 Or are you saying we are we will not under any
17 circumstances spend more than \$2 million, or we won't seek
18 recovery from any amounts over \$2 million?

19 MR. TROFIM: As of now, based on what we know, we are
20 only seeking approval for up to \$2 million.

21 Should there be any changes in circumstances, we will
22 definitely approach the Board for approval beyond those
23 funds.

24 MR. RUBENSTEIN: Let me ask you about some of the
25 projects and the process. Can you can help me understand
26 if at stage 1, when you are conceptualizing, what is the
27 limit? I mean, what is the boundaries of things that you
28 can -- that you will consider that stage?

1 MR. TROFIM: The question is too open. Can you
2 clarify what you mean by boundaries? What kind of
3 boundaries are you looking for? Is about budgetary, is it
4 -- what kind of boundaries are you looking for?

5 MR. RUBENSTEIN: I'm not asking about budgetary. I
6 think we just talked about sort of the overall budgetary.
7 But in terms of initiatives that you will -- before they --
8 there are lots of things out in the world. Before you
9 determine what you will consider a phase one -- sorry,
10 stage one conceptualized in that funnel, what are the rules
11 for that type of activities, or initiatives, or research
12 that could ever fit in within that?

13 MR. TROFIM: Thanks for the clarification. Every
14 initiative that -- or every idea or potential technology
15 that has the potential to become an initiative as part of
16 the construct will first undergo a review against the
17 abatement construct, the guiding principle of the abatement
18 construct, and make sure that it meets those guiding
19 principles.

20 We are also looking at other elements, such as
21 customer segments, the opportunity, the type of technology.
22 We are not necessarily looking only at natural gas
23 technologies. We are looking at any kind of -- consistent
24 with the spirit of abatement, we are looking at any kind of
25 opportunities that can help the Ontario ratepayers reduce
26 their energy costs, so -- and that can help the Ontario
27 ratepayers as well reduce their GHG emissions.

28 And if those initiatives that are out there that are

1 coming to our attention, if they fit from a qualitative
2 perspective, the abatement construct guiding principles,
3 the -- obviously OEB's guiding principles and elements such
4 as market segments and others, then we will continue that
5 selection and that evaluation process.

6 MR. RUBENSTEIN: So do I -- I'm going to tell you what
7 I think I heard, and you can correct me.

8 MR. TROFIM: Okay.

9 MR. RUBENSTEIN: So to get into stage 1 in the
10 conceptualize, it has to meet the abatement construct
11 principles, all of them, correct?

12 MR. TROFIM: Well, it -- in principle, yes, we are
13 looking at all of them.

14 So if I take -- yeah, if I take -- so some of them --
15 actually, let me back up and explain it differently.

16 It has to meet all the principles, but they might --
17 they are qualitative. At the beginning, considering that
18 we are in -- we are in pre-commercial phase here. It's not
19 -- some of these ideas are only ideas in someone's head, or
20 they have only been demonstrated from a lab perspective.
21 So obviously, there is no quantitative data available.

22 So what we do at that point, we are looking at the
23 guiding principles and do we ask that question, from a
24 funding perspective, would we -- if the technology is
25 interesting from a funding perspective, would we be able to
26 pursue it. Is this technology, is this something that
27 would help us to timely advance something that would
28 benefit the Ontario ratepayers.

1 Is there -- you know, can we do it cost effectively?
2 And actually, is there -- do we actually have the
3 regulatory construct available for this particular
4 technology to be able to deploy it, because in other
5 jurisdictions, they have different regulatory frameworks
6 which may enable certain technologies to operate there well
7 and maybe not here.

8 So all of these are questions that we're looking at.
9 It is more from a qualitative perspective and as we learn
10 more, if we have the LCIF approved -- as we learn more, we
11 will become more sophisticated in terms of how to quantify
12 those things. But in the end, they have meet in principle
13 all of the these principles.

14 MR. RUBENSTEIN: I thought when you were going through
15 phase I, at least as I read the principles, you are
16 actually working through the issues that the principles
17 raise, right? So timely advancement of technology; you are
18 learning about that technology and that's what you are
19 doing in phase I.

20 I'm talking about how you even get to phase I. If
21 you had to sort of describe the rule in a sentence of what
22 is at stage zero and will never get to stage 1, what will
23 it be? What is the sort of the of entryway into stage 1?

24 MR. TROFIM: It's the guiding principles. We start
25 -- every initiative we start with that principle. Is
26 there -- we're looking at all these in -- as a whole,
27 actually. And based on that, we're able to determine, yes,
28 it has promise, but this piece is not necessarily clear and

1 we need no get more information or whatever.

2 But we start -- the guiding principles are really
3 very important for us in terms of how we identify which
4 technology. And there are certain things that are really
5 clear. If there is a technology that is really cool but
6 there is no GHG emission reduction opportunity, then it
7 doesn't even make it.

8 It's one of the -- it's one of the -- that would be as
9 part of, you know, timely advancement of technology that
10 would be a criteria under that, then, yeah, if it doesn't
11 meet then we are not even pursuing it.

12 The guiding principles are really important. They are
13 guiding us, as the name is saying. We use it, as I said,
14 from a qualitative perspective, but they are really there
15 to guide our decisions.

16 MR. RUBENSTEIN: Maybe just from a practical
17 perspective you can help me. Someone -- there is a new
18 technology you hear someone is working on or you may think
19 it may go through the -- someone may think it may meet
20 their criteria of these principles. Is someone formally
21 sitting around saying, "All right, what's the case that it
22 meets or that could meet all of these principles," or is it
23 sort of just some discussion you are sort of generally
24 thinking about? Is there sort of a rigorous, written-down
25 process somewhere that someone has to meet, the criteria?

26 MR. TROFIM-BREUER: Thanks for asking that question.
27 It's a very good question. Right now we -- until now we
28 were only able to leverage a modest budget so far, so the

1 aim is to get to that piece where we are evaluating very
2 formally, very -- every initiative as we go through, but so
3 far, given our modest budget, what we are able to do is to
4 identify what the selection approach should be, what are
5 the guiding principles we're using to be able to make our
6 decisions and how to go about it. We don't necessarily
7 have, like, a formal vetted tool to get there, but we're
8 going to get there, especially if we have the opportunity
9 to have access to the LCIF, which is really an opportunity
10 for the ratepayers to invest now in future technologies
11 that will help them in the future, then for sure -- and as
12 part of our -- of the guiding principle of continuous
13 improvement, for sure we will get to a point where we
14 actually have very formal documents right from, you know,
15 the beginning -- at the beginning of the selection process.
16 Right now it's just discussions.

17 MR. RUBENSTEIN: Shouldn't you have that before you
18 ask ratepayers for funding for those projects? Shouldn't
19 you put that in place?

20 MR. TROFIM-BREUER: It's a fair question. It's an
21 interesting question. So the choice we had as a team when
22 we were -- when we were given the opportunity to work on
23 this was to do one of two things: On the one side, you
24 know, take a step back, read, work with the consultant,
25 come up with the framework, write it down and everything
26 else, and get to a point where you're saying, okay, now we
27 have something, let's go out and test it, and obviously
28 work the bugs out of it. That was option number 1.

1 The other option was to be more practical. And I'm a
2 practical person. And being more practical, the choice we
3 did was to say: How do we leverage existing internal
4 processes? So, you know, project management, we used
5 project management internally for major projects. We are
6 not going to use a major projects, project management
7 methodology for these kinds of initiatives because we are
8 not talking about, you know, \$600-billion -- or a million
9 dollars. We are talking about smaller things.

10 But the principle of using project management, we're
11 all trained, it is a language that everybody understands.
12 That is something that we already know. We don't
13 necessarily need to have everything formally defined at the
14 beginning. What we need is to know that we are going to
15 apply those principles, use very simple tools, and then
16 work out with them.

17 In terms of selection, it is the same thing. What we
18 wanted to say is, we could -- you know, there is -- do we
19 need all the tools? Yes, we would need in an ideal world,
20 but we wanted to be practical. We wanted to develop the
21 selection approach that was described -- we have described
22 as part of Staff OEB 21A, and we thought that the
23 practical, common-sense approach that would get us as
24 quickly as possible to identifying opportunities that are
25 out there, that would get us as quickly as possible to
26 actually getting into a pilot demonstration project that
27 will eventually benefit the ratepayers, we felt this was a
28 better approach.

1 MR. RUBENSTEIN: Let me ask you about a couple of the
2 projects, and maybe going back to page 13 of the compendium
3 is easiest.

4 MR. TROFIM-BREUER: Sure.

5 MR. RUBENSTEIN: So the first thing I want to ask you
6 about is your plan to spend in the stage 1 conceptualizing
7 about \$100,000 for the building skins initiative.

8 MR. TROFIM-BREUER: Yes.

9 MR. RUBENSTEIN: And I understand that is working with
10 MaRS to develop workshops, creating building envelope
11 systems for retrofit for low-income housing; correct?

12 MR. TROFIM-BREUER: Yes.

13 MR. RUBENSTEIN: Now, why would you -- why would this
14 work not be part of the funding you were already given as
15 part of the 2015 to 2020 DSM approvals for the
16 collaboration and innovation fund?

17 MR. TROFIM-BREUER: As I understand it, that fund is
18 deemed for commercially available technologies. Building
19 skins is an idea. It is pre-commercial. It doesn't exist.
20 And on a personal basis, I know it will work in Ontario.
21 And the reason I know it will work in Ontario if we get
22 there is because, as a student, more than 20 years ago,
23 back in Germany where I come from, I actually had the
24 chance once, a summer job, with one of my friends who -- I
25 wanted to go to school, he wanted to start the business,
26 and his business was that, and I experienced at that moment
27 where the benefit a building skin can actually do to an old
28 house. That house was very old. I will spare you the

1 details. We can have a discussion after that, and I can
2 provide you the details, but the reality is when you look
3 at -- so building skins, a couple of facts that are
4 important: Building skins consume about 40 percent of the
5 primary energy worldwide and they are accountable for about
6 33 percent of the GHG emissions. So when you look at
7 Ontario -- and that's not my data, that's according to the
8 CMHC, based on StatsCan data, there are 4.9 million
9 dwellings in Ontario. Of those, half of them have been
10 built before 1980, so that is for all intents and purposes
11 you should say 2.4 million houses, and of those, so that
12 were built before 1980, half of them, according to the
13 CMHC, are in need of repair.

14 So if we understand that piece and we think that if we
15 had an opportunity to develop a solution that can be
16 implemented with a minimum invasion, because you go and you
17 put a new building skin outside on a house, on a house that
18 is old, leaking, and by definition drafty, and by
19 definition consumes more energy, I think it is an
20 opportunity to say that we can, you know, reduce GHG
21 emissions, and that's the reason. It's pretty -- I'm
22 getting there.

23 MR. RUBENSTEIN: I think you actually answered my
24 question, was why is it not utilized from the other fund,
25 and I think you made the comment about, that it's your
26 understanding that that's only for commercialized -- that
27 was all my question was about.

28 MR. TROFIM-BREUER: Sorry, I am passionate about these

1 things.

2 MR. RUBENSTEIN: That's fine.

3 MR. TROFIM-BREUER: I think we have an opportunity
4 there, and that's why I was answering this --

5 MR. RUBENSTEIN: And some other technologies that you
6 may need a little bit more response to.

7 So if I actually turn to page 14.

8 MR. TROFIM-BREUER: Yes.

9 MR. RUBENSTEIN: So this is --

10 MR. QUESNELLE: Mr. Rubenstein, just to interrupt -- I
11 was trying to catch you at a clean break there -- we will
12 go to about eleven o'clock before we break this morning,
13 okay?

14 MR. RUBENSTEIN: I just have a couple of questions of
15 some of the stage 2 projects that you are undertaking, and
16 the first I had a question is with respect to the ground-
17 source heat-pump project.

18 MR. TROFIM-BREUER: Yes.

19 MR. QUESNELLE: My understanding, it's you were
20 essentially doing some pilot projects, developing some
21 pilot projects with respect to ground-source heat pumps; is
22 that correct?

23 MR. TROFIM-BREUER: That is not correct. What is
24 correct is that we are planning on potentially
25 demonstrating pilot demonstration project, but we will do
26 so only based on the experience of Enbridge Gas
27 Distribution, who has pilot project at this point.

28 MR. RUBENSTEIN: So ground-source heat-pump technology

1 is not new, so what is left to research exactly?

2 MR. TROFIM-BREUER: So I'm not the expert in the area,
3 but thanks for the question. Let me share a little bit
4 with you on what I know so far. In terms of research
5 there's been -- you are right, it is not new, there has
6 been a couple of attempts and there are a couple -- there
7 are actually a number of systems installed already in
8 Ontario, but the experiences are actually mitigated.

9 I remember a couple of months ago reading in the Globe
10 & Mail, actually, an installation where, because of
11 undersizing, that that ground-source heat pump was not
12 functioning, and unfortunately the homeowner was paying
13 horrendous prices and not getting where they needed to be.

14 I think -- Union Gas, we have experience -- and not
15 only Union Gas, but as a utility we have experiences with
16 piping in the ground. We have experience on how to manage
17 that piece.

18 I think there is research to be done in terms of how
19 to size appropriately the system, what are the most -- you
20 know, what's the best approach to getting there, how you
21 could help the ratepayers to be able to get a system that
22 benefits them. And that area, that is the area that we are
23 looking into.

24 MR. RUBENSTEIN: But it seems it's far enough along,
25 at least as I understand it, Enbridge has proposed -- it's
26 already at their stage 3 to implement this technology, part
27 of an actual different Board proceeding for the approval
28 process for that. So they think it's -- they're past stage

1 2 on this type of technology.

2 MR. TROFIM: Sorry, I can't talk about that.

3 MR. RUBENSTEIN: You don't know, or you...

4 MR. TROFIM: I don't know.

5 MR. RUBENSTEIN: Okay. I want to ask about hydrogen
6 power to gas. As I understand this -- can you help me
7 understand how this reduces your customers' GHG
8 obligations?

9 MR. TROFIM: Yes. So power-to-gas is a technology
10 that uses electricity and through a very simple process of
11 electrolysis. So if you remember when we were back in
12 school, from school and college and school, we were doing
13 those experiments with catalytic -- you know, hydrogen is
14 created in the process. Well, at an industrial scale, what
15 it does is takes electricity and creates hydrogen in lieu
16 of it.

17 If we can use that hydrogen to inject it into the
18 natural gas pipeline, we are essentially displacing the
19 need to bring, you know, natural gas from conventional
20 sources and thereby reducing GHG emissions.

21 MR. RUBENSTEIN: And my understanding of what you are
22 planning to spend money on in 2018 is to monitor Enbridge's
23 project, and do preliminary work on your own demonstration
24 projects. Is that correct?

25 MR. TROFIM: Yes.

26 MR. RUBENSTEIN: So if I can turn you to page 23, this
27 is a presentation that I provided your counsel last week
28 from the IESO. And I understand it, they are beginning

1 their own power-to-gas research initiatives, and my
2 understanding is it will culminate in their own funding for
3 their own demonstration project.

4 Is that your understanding of what this initiative is
5 about?

6 MR. TROFIM: Yes and no, actually. So the IESO is
7 interested in the power-to-gas technology. The webinar you
8 are referring to, I have somebody on my team to attended
9 that seminar.

10 The purpose of this seminar was to basically reach out
11 to people in the industry, or companies out there in the
12 industry, and validate whether they were asking the right
13 questions, whether they were going in the right direction,
14 what a pilot project might look like and inform what an
15 expression of interest would look like.

16 And based on that, we will -- you know, then people --
17 the IESO will make a decision as to what projects it might
18 do.

19 MR. RUBENSTEIN: So since they have funding to do, in
20 a general way, a power-to-gas project, demonstration
21 projects, shouldn't you be working with them? Shouldn't
22 they be the ones to provide the funding for this project?

23 MR. TROFIM: It is important for Union to investigate
24 power-to-gas technologies application in our franchise,
25 regardless of the pilot demonstration that may or may not
26 be done by the IESO because that decision hasn't been made
27 yet.

28 The reason for that is injecting hydrogen into the

1 pipeline is -- has a number of technical requirements that
2 have to be met, and I think that the research is associated
3 with that. We have to consider implications on our
4 infrastructures, implications on our customer base, and
5 everything else. It's not -- and that research has to
6 happen regardless of the pilots that might or might not be
7 conducted by the IESO.

8 I think it is complementary, the work to do that.

9 MR. RUBENSTEIN: If I can turn you back to page 9, we
10 had asked you to SEC.11 part (c) about Union's position
11 regarding a potential condition of approval for -- this is
12 with respect to the low carbon initiative fund, that all
13 research activities undertaken using these ratepayer funds
14 should be available to the public.

15 In your response, you say -- well, as I take it,
16 they'll be public in the OEB process, so the conditions are
17 not required and I think in an -- in an up-dated
18 undertaking response that I followed up in the technical
19 conference, you updated an interrogatory response and you
20 somewhat said a similar type thing, sort of in a general
21 sense, that this information would be public in the context
22 of an OEB proceeding.

23 But my question is different. It is not about the
24 Board necessarily reviewing this or intervenors. It's
25 providing the research information from the demonstration
26 projects, regardless of how they go down the funnel, to the
27 public since it's -- you know, ratepayer dollars are paying
28 for this research that anyone in the public could benefit

1 from that research. And I wanted to understand Union's
2 position, if they would believe that's an appropriate thing
3 for the Board to require if they're going to fund this
4 research and development type activity.

5 MR. TROFIM: I think the answer we provided is
6 accurate. We will make the data available.

7 There will be future proceedings and as part of those
8 future proceedings, we will make the data available on, you
9 know, the initiatives that have been conducted where they
10 are in the stage funnel, what happened. Some of those
11 initiatives may be good and some of them may not be good.

12 But the data would be -- it may not be that we would
13 have conducted it, and may have come to the conclusion that
14 they are not beneficial to the ratepayers, and therefore we
15 are not pursuing it. That would be a more accurate
16 response.

17 So as part of those proceedings, the information would
18 be made public. I don't see another way at this point on
19 how to do that. And again, the one caveat that we do have
20 to bring up is, you know, we would do that while being
21 mindful of customer sensitive information, any commercially
22 sensitive information, any IP related information. We
23 would have to be mindful and respectful of those regulatory
24 requirements associated with those elements. But we will
25 make the information publicly available.

26 MR. RUBENSTEIN: In the context of an OEB proceeding.
27 My question is: Would Union oppose making that information
28 publicly available on its website, regardless of a Board

1 process in the future?

2 MS. FLAMAN: Union's developed -- so let's step back
3 as you ask questions. Union has developed the abatement
4 construct with its principles to achieve transparency on
5 how we will move incremental abatement forward.

6 So in response to your question, we believe we are
7 being transparent with the abatement construct
8 demonstrating to you how we will consider those new
9 technologies and move them forward. We have provided the
10 information we have on hand for those technologies that are
11 currently in stages 1 and 2. And as Mr. Trofim has
12 indicated, we would bring those forward into the public
13 venue as part of the regulatory process at the appropriate
14 time.

15 MR. RUBENSTEIN: Okay. Could I ask you to turn to
16 page 35 of the compendium? This is a response to SEC.7.

17 In this interrogatory, you confirm that Enbridge Gas
18 Distribution and Union Gas are affiliates; am I correct?

19 MS. FLAMAN: Yes.

20 MR. RUBENSTEIN: And your response is you're
21 affiliates, but you are continuing to operate, at least as
22 of now, as separate companies, correct?

23 MS. FLAMAN: That's correct.

24 MR. RUBENSTEIN: And your response -- in part B, we
25 had asked you if you are affiliates, to confirm and explain
26 why you require separate cap-and-trade groups within the
27 companies, considering they are affiliates.

28 And part of your response was even though the various

1 regulations have been invoked which required some
2 separation, the development took place in 2017 when those
3 regulations were in place, correct?

4 MS. NEWBURY: So to make sure I understand your
5 question correctly, your question is, the regulations have
6 been revoked and why are we continuing to act separately?

7 MR. RUBENSTEIN: I am just reading -- I am just
8 interpreting your own response. So we had asked you to
9 confirm in Part A if you are affiliates. You say yes. In
10 Part B we said:

11 "If A is confirmed please explain why Union
12 requires separate cap-and-trade groups within
13 their companies, considering they are now
14 affiliates."

15 I read your response is:

16 "We are affiliates, but we are operating as
17 separate companies. As well, each utility has
18 its own compliance obligations and in late 2017
19 filed their respective 2018 compliance plans in
20 relation to satisfy those obligations, since
21 Subsection 6(5)(3) and Subsection 4 are corrected
22 of O-Reg 144/16 was in place during the
23 development of those plans."

24 I took it that the, as I read this, the reason why you
25 have the separate groups is you are operating as separate
26 companies, and when you developed the plan those
27 regulations were in place requiring a certain separation;
28 is that correct?

1 MS. NEWBURY: That is correct. That regulation did
2 not come into effect until January 1 of this year, the
3 affiliate designation.

4 MR. RUBENSTEIN: So now, as we move into 2018, where
5 that is with respect to your 2018 compliance plan and the
6 costs, in that you have two companies -- two affiliates
7 operating with two separate cap-and-trade groups, am I
8 correct then the only reason for the two separate groups is
9 that you are operating as two separate companies?

10 MS. NEWBURY: So we are continuing to operate as two
11 separate companies because we are two separate legal
12 entities and we have developed two separate compliance
13 plans and strategies related to those compliance plans.
14 The timing for the filing of these plans was originally
15 August 1st last year and then subsequently delayed until
16 later in the year, so to suddenly switch gears, I guess, at
17 January 1st and act differently, first of all, again, did
18 not make sense necessarily.

19 I can speak from a procurement perspective in a
20 competitive marketplace, but it also did not make sense
21 that again, until we have a successful MAADs application
22 that confirms that we will, in fact, amalgamate, we will
23 continue to operate separately.

24 MR. RUBENSTEIN: I understand the MAAD application, so
25 I understand, but can you -- can you help me understand why
26 the Board would not expect two affiliates, two related
27 companies both regulated by the Board, would not work
28 irregardless of them being two separate companies or one

1 company, to work together with respect to their cap-and-
2 trade plans?

3 MS. NEWBURY: So the one thing I will add is, there is
4 actually a third affiliate that we can't forget about,
5 which is Gazifère. So there is not just Union and Enbridge
6 Gas, there is Gazifère under the definition within the WIC
7 market as well.

8 MR. RUBENSTEIN: Well, my question is with respect to
9 -- the Board regulates Enbridge and Union. They both have
10 cap-and-trade groups, they both have forecasted
11 administrative budgets for that.

12 Why would not the Board expect that the two affiliates
13 would work together and rationalize those costs?

14 MS. FLAMAN: As Ms. Newbury indicated and as we've
15 said previously, we continue to operate as separate
16 entities, so until the amalgamation is approved, we will
17 continue to meet our compliance obligations and have done
18 so with our separate plans.

19 MR. RUBENSTEIN: I'm not interested in the MAAD
20 application. Let's assume there was never a MAAD
21 application, you were continuing to operate as two separate
22 companies. Why would the Board not expect that as
23 affiliates you would work -- that both regulated by the
24 Board -- that you wouldn't rationalize those costs where
25 appropriate?

26 MS. FLAMAN: Again, I'll come back to, we are two
27 separate entities functioning within the affiliate rules,
28 as you've noted. However, we need to ensure that we are

1 meeting our compliance obligations and, again, developed
2 our 2018 plan to do so.

3 MR. RUBENSTEIN: If I can ask you to turn to page 36
4 of the compendium. So this is a presentation that's just
5 something I was able to pull out of the interrogatory
6 responses. This is a joint presentation that you provided
7 with respect to the cover, at least, of the integration of
8 renewable natural gas; am I correct? That's what that
9 shows?

10 MS. FLAMAN: Yes.

11 MR. RUBENSTEIN: And if we go to page 37, this is an
12 interrogatory response from Environmental Defence, and you
13 are providing certain documents that were requested. In
14 attachment A -- it was completed in November of 2015 -- it
15 is an ICF presentation for Union and Enbridge jointly;
16 correct?

17 MS. FLAMAN: Yes.

18 MR. RUBENSTEIN: And I just -- you filed on Friday on
19 the record -- there was a letter from Enbridge's counsel,
20 but on behalf of both Union and Enbridge with respect to a
21 request to, in the -- to include certain costs of carbon
22 with respect to the DSM midterm review, a proposal to do
23 that; am I correct?

24 MS. FLAMAN: Yes.

25 MR. RUBENSTEIN: So you seem to be in certain
26 circumstances working together, but in others -- if you are
27 two separate companies I don't understand why you do not
28 have separate presentations from ICF, separate letters,

1 separate presentations?

2 MS. FLAMAN: To speak to your reference to the ICF
3 presentations, I would say that with cap-and-trade it was
4 certainly a learning experience, and so we have worked
5 together to understand the larger cap-and-trade issues and
6 policy implications, as you can imagine that would be
7 common to both utilities.

8 One of those things is the letter that we filed on
9 Friday. That's a common issue for us, and looking at, as
10 we tried to understand the market -- and again, this was
11 back in 2015, in 2016, in the evidence that you've pointed
12 to -- we were looking to understand together the
13 implications to the utilities. That doesn't speak to our
14 separate businesses, nor does it speak to the unique nature
15 of our operations.

16 MR. RUBENSTEIN: If I can ask you to turn to page 39.
17 This is a response to Staff Interrogatory No. 12. So as I
18 understand, in part D you were planning -- or part C or A
19 and B and D -- you are planning, just as an example here,
20 to spend -- forecast to spend \$100,000 in 2018 for Blue
21 Source, and Blue Source is to provide expertise on the
22 offset market, interpretation of offset protocols and
23 regulations and insights with respect to their development
24 of the offset market in Ontario and the WCI; correct?

25 MS. FLAMAN: Yes.

26 MR. RUBENSTEIN: Sort of market intelligence-type
27 activities?

28 MS. FLAMAN: Yes.

1 MR. RUBENSTEIN: All right. If I could ask you to
2 turn to page 69. This is a response from an Enbridge
3 interrogatory, a similar question they were asked about
4 their consultant costs in Staff 13. And I see a lot of
5 different market intelligence type activities that they are
6 planning to spend on, so assuming they are having their
7 consultants look at the same things you are, understanding
8 the offset market, understanding the California WCI market,
9 why are both of you hiring consultants to do something that
10 is essentially a generic activity? Why is that prudent?

11 MS. FLAMAN: The nature of the Blue Source Consulting
12 that we have is described better within strictly
13 confidential, as it does address market intelligence.

14 To speak to your point about why are we doing -- using
15 consultants to do the same thing, they're actually not. So
16 -- and we can describe more the market intelligence piece
17 that Blue Source has provided in the strictly confidential
18 realm.

19 MR. RUBENSTEIN: Okay. I leave that to Staff to
20 follow up, I guess.

21 My last question is this. Just, am I correct -- and
22 this is on page 41 -- that you are seeking approval for --
23 and I think you talked about that, just so we get the
24 number down correctly -- you are seeking the actual
25 approval in this proceeding to dispose of the 2016 balances
26 in the greenhouse gas emissions impact deferral account;
27 correct?

28 MS. FLAMAN: Yes.

1 MR. RUBENSTEIN: And that's the \$2.232 million?

2 MS. FLAMAN: Yes.

3 MR. RUBENSTEIN: Am I correct that under the approved
4 2014-2018 IRM framework Union's Z-factor materiality
5 threshold is \$4 million? Do I have that correct?

6 MS. FLAMAN: Subject to check, yes.

7 MR. RUBENSTEIN: And so this amount is below
8 4 million.

9 MS. FLAMAN: Yes.

10 MR. RUBENSTEIN: Thank you very much. Those are my
11 questions.

12 MR. QUESNELLE: Thank you, Mr. Rubenstein.

13 MS. NEWBURY: If I may just add a comment? You put
14 some examples forward of where Union and Enbridge have
15 worked together. I think it is important to note there are
16 many areas where we have worked together as utilities that
17 are both regulated by the Ontario Energy Board that is
18 unrelated to our affiliation.

19 In some cases, it really has to do creating an
20 understanding for the Board and creating an -- making it
21 easier for the market and, quite frankly, for intervenors.

22 So you talked about us working together on RNG and how
23 we are approaching the RFP for RNG; that is a good example
24 of it.

25 Another good example has been the work that we have
26 done since 2014 on distributor gas supply planning.

27 So it is common that we do work together as regulated
28 entities in Ontario. That has nothing to do with being

1 affiliates.

2 MR. QUESNELLE: Thank you very much. We'll take the
3 morning break now, and return at 11:20, please.

4 Just for planning purposes, we will break for lunch at
5 12:45 today.

6 --- Recess taken at 11:06 a.m.

7 --- On resuming at 11:27 a.m.

8 MR. QUESNELLE: CME, Mr. Pollock.

9 **CROSS-EXAMINATION BY MR. POLLOCK:**

10 MR. POLLOCK: Thank you very much. And thank you to
11 the panel. Sorry, I can't quite see all of you, but thank
12 you to the panel.

13 MR. QUESNELLE: Is your -- could we perhaps take care
14 of the visual obstruction there if we -- how is that, Mr.
15 Pollock? Sight lines better?

16 MR. POLLOCK: Again, thank you, yes.

17 So as mentioned, my name is Scott Pollock. I'm
18 counsel for Canadian Manufacturers & Exporters, and I
19 wanted to ask you a few questions today about renewable
20 natural gas.

21 So if we could bring up Exhibit 3, tab 4, page 20 of
22 60.

23 MS. SEERS: If I may, Mr. Chair, just before we get
24 into renewable natural gas, seek a clarification from the
25 Board as to the scope of what this proceeding is intended
26 to cover in relation to renewable natural gas.

27 In its procedural order number 2 -- perhaps Mr.
28 Charles could pull it up -- page 4, under the heading "RNG

1 procurement and funding model", the Board said:

2 "The OEB has determined that the RNG procurement
3 and funding model does not require approval. The
4 model provides that ratepayers will not be
5 allocated any costs arising from the incremental
6 costs of gas associated with the procurement of
7 RNG now, or in the future, pursuant to any
8 contract entered into by the proponents for such
9 supply. The proponents would have to obtain OEB
10 approval for any allocation of such costs to
11 ratepayers."

12 And so the question, I guess, that we have for the
13 Board is simply, to what degree does the Board -- or would
14 it be helpful to the Board to hear testimony concerning
15 renewable natural gas, appreciating that it's part of the
16 framework but that the Board has issued this direction in
17 connection with it. It is really just a question, not a
18 submission.

19 MR. QUESNELLE: Well, I think Mr. Pollock would be
20 aware of this, and I think if Mr. Pollock strays beyond
21 what the Board's describes, and Ms. Seers, if you have an
22 issue with that you can raise it at that point in time.

23 MS. SEERS: Thank you.

24 MR. POLLOCK: And if I may make a preliminary comment,
25 it was our interpretation that the scope of issue 1.10.1 --
26 namely, are the gas utilities' procurement funding
27 proposals reasonable and appropriate -- are broader than
28 simply whether or not the Board gives it an approval, and

1 we believe that that would be in keeping with the larger
2 Board direction on cap-and-trade compliance plans insofar
3 as it's not necessarily about approvals. I believe the 2017
4 cap-and-trade compliance plan decision said that there were
5 not going to be approvals, but rather just a determination
6 about the reasonableness of the plans.

7 MR. QUESNELLE: Well, Mr. Pollock, I think if you
8 carry on in that premise, then if we get into any areas
9 which are grey, I think Ms. Seers will bring it to our
10 attention.

11 MR. POLLOCK: All right. Thanks very much.

12 So if we could hop back to Exhibit 3, tab 4, page 20.
13 So if we could just go down a little bit to figure 2. My
14 first question is just sort of setting the background.
15 This chart, this figure, is illustrating the funding
16 allocation between the various parties for the RNG
17 proposal; correct?

18 MS. NEWBURY: So I believe you are referring to figure
19 2. So figure 2 is really more of a cost allocation, so
20 what we're saying is that we would recognize the -- in how
21 we allocate costs for RNG, so if we were to purchase RNG
22 and we had a contract price, how would that contract price
23 be allocated, and we're saying a component of it would go
24 to the avoided cost of natural gas, since it's replacing
25 the natural gas alternative, and another piece would go to
26 the avoided cost of carbon, and then any amount incremental
27 to those two pieces would be subsidized with government
28 funding.

1 MR. POLLOCK: Understood. Thank you.

2 So the whole bar sort of from top to bottom, that
3 would represent the RNG cost fixed under the contract with
4 a particular RNG producer; correct?

5 MS. NEWBURY: Correct.

6 MR. POLLOCK: And the total amount would vary
7 depending on the specific contract that you entered into
8 with any particular RNG producer.

9 MS. NEWBURY: Yes, Union is undertaking an RFP to
10 establish pricing. We don't have any market pricing
11 available to us, so it's through the RFP that we will be
12 looking to identify what the market price is for RNG, and
13 that will be the basis for the total price.

14 MR. POLLOCK: Okay. And I see that on the right-hand
15 side of the figure that the blue and the green portion are
16 the ratepayer-funded, and as you were discussing, the
17 difference between the total price and the ratepayer-funded
18 would be the government's funded portion, yeah.

19 MS. NEWBURY: That's correct, so the ratepayer-funded
20 would flow through our existing regulatory mechanisms for
21 recovery of costs of natural gas and carbon and the
22 remaining piece would be allocated government funding
23 dollars.

24 MR. POLLOCK: Thank you. So I want to drill down on
25 the blue portion, which is the cost of gas. And as I
26 understand it, when you enter into the contract with an RNG
27 producer, you would use the forward price forecast or a
28 forward price forecast for the entire length of the

1 contract, and I believe you are proposing ten years, but it
2 doesn't have to be ten years, so for each year that the
3 contract is going to operate you will get a forward price
4 forecast at the time that you enter into the contract;
5 correct?

6 MS. NEWBURY: Yes, that is correct, so what we have
7 said -- and we've explained it more fully in JT1.9 -- is
8 that at the time that the contract is negotiated the cost
9 of natural gas will be determined based on a forecast of
10 natural gas prices available at that point in time, and we
11 will hold that fixed for the term of the contract.

12 MR. POLLOCK: And as I understand it, the reasoning
13 behind fixing all of these costs was so that you would be
14 able to get a certain allocation of funds from the
15 government and you would be able to understand how much you
16 could do with that allocation by fixing both the total cost
17 and the ratepayer-funded portion in advance; is that
18 correct?

19 MS. NEWBURY: So that is one of the considerations,
20 certainly, in why we wanted to use fixed-price components.
21 Ensuring that there is funding available for the full term
22 of the contract is very important.

23 The other thing is that in fixing the price for the
24 producers it allows them to establish what their revenue
25 stream will be to support their capital costs, so I wanted
26 to make sure that again we are working with producers in a
27 manner that will help develop the market, which is
28 currently in its infancy, but also allows us to work within

1 existing regulatory mechanisms and apply the government
2 funding in such a way that there is no risk to ratepayers.

3 MR. POLLOCK: Thank you. And if we take a step back,
4 in terms of forecasting, would you agree with me that
5 forecasting as goes further in time becomes less accurate?
6 So to put it another way: A forecast for year one is more
7 likely to be correct than a forecast for ten years out.

8 MS. NEWBURY: So I would say that the forecast is the
9 best information that we have available at the time. We do
10 know that actual costs will likely vary from the forecast.
11 We don't know whether it will -- the cost will be positive
12 or negative relative to the forecast, but we also know that
13 gas prices are relatively low right now, and from our
14 estimation -- estimation, any variance from forecast would
15 have a minimal impact on our ratepayers.

16 MR. POLLOCK: Okay. Thank you. Just to circle back
17 around, though, in terms of the accuracy component, as you
18 go out it becomes less accurate in time?

19 MS. NEWBURY: Again, it is the best information that's
20 available at the point in time, and the degree of accuracy
21 can only be determined in hindsight.

22 MR. POLLOCK: Okay. So to the degree that actual --
23 the actual cost of gas deviates from the forecast it will
24 be the ratepayer who, depending on whether they forecasted
25 below or above the actual cost, will benefit or be harmed
26 or have to pay more, I suppose, at the end of the day, is
27 that correct? The forecast risk lies with the ratepayer?

28 MS. NEWBURY: So the way -- again, if I refer back to

1 JT1.9, the way that we are flowing these costs through our
2 accounting system is that we will treat the forecast as an
3 actual. So it will flow through our accounting as another
4 supply cost and again there will be -- because there is no
5 true-up, we are treating the forecast cost as the actual
6 cost. Again, that would be the ratepayer cost is the
7 forecasted cost.

8 MR. POLLOCK: So if you forecasted that it would cost
9 3.50 per gJ and the actual market was 3, then the actual is
10 going to be the forecast and ratepayers would will pay the
11 3.50?

12 MS. NEWBURY: That's correct.

13 MR. POLLOCK: Am I correct in saying that Union
14 doesn't plan on having any contractual mechanisms with the
15 RNG to mitigate the forecast risks? So for example, if the
16 forecast is a certain amount above or below the market
17 rate, that there will be a reforecasting or a termination
18 or anything like that? There's no plans to have any sort
19 of contractual mechanism?

20 MS. NEWBURY: As I mentioned, it is very important for
21 these producers to have price certainty as they look to
22 invest capital in these projects, and as we look to develop
23 the RNG market in Ontario. So at this point in time, we
24 are not looking to open up pricing within the term of the
25 contract. We want that contract price to be there as
26 surety for the producer, in obtaining financing or whatever
27 else they need, to make their project successful.

28 But I also want to recognize that again, that

1 forecasted price could be higher or lower. So again, it
2 can go either the -- if you want to look at -- if we wanted
3 to look at hindsight being 20/20 as to again what would the
4 impact be, it could be a benefit to ratepayers or it could
5 be a cost to ratepayers.

6 In either case, we do expect it would be a minimal
7 cost. If it was a cost or a benefit, it would be minimal.

8 MR. POLLOCK: Thank you. I was just going to have a
9 few questions about the carbon price forecast and that
10 works in a similar fashion, as I understand it.

11 At the time that you enter into the contract, you use
12 the long-term carbon price forecast for the duration of the
13 contract, and you fix the cost forecast for each year of
14 the contract in advance when you sign, correct?

15 MS. NEWBURY: Correct. Again, we would use the most
16 recent long-term carbon price forecast, and we're looking
17 at using the mid case scenario that would be available at
18 the time the contract is negotiated, and we would hold that
19 price for the term of the contract.

20 MR. POLLOCK: Could we turn up CCC 10, please?

21 MS. NEWBURY: Could you repeat the reference, please?

22 MR. POLLOCK: CCC 10. Could we scroll down a little
23 bit on the page, please? That's great, thank you.

24 MS. NEWBURY: I have it.

25 MR. POLLOCK: Thanks. So in this you were asked about
26 what might happen if the Ontario cap-and-trade program were
27 eliminated or replaced, and I just want to take you to one
28 of the -- the second last sentence, so on line 4, beginning

1 with "elimination or modification" -- sorry, the fourth
2 last line.

3 MS. NEWBURY: I'm sorry, I missed your question.

4 MR. POLLOCK: I just wondered if you were there.

5 MS. NEWBURY: Yes, I have it.

6 MR. POLLOCK: So your answer is:

7 "Elimination or modification of the price of
8 carbon for Union and its customers under this
9 scenario will impact only the forecast price of
10 carbon used at the time of the contract going
11 forward."

12 So this answer, as I take it, was a very specific
13 answer to a set of circumstance where you had the funding
14 for the government, you had entered some contracts with RNG
15 producers, but you hadn't exhausted fully the funding.

16 So I just wanted to go through with you what would
17 happen in various scenarios if the Ontario cap-and-trade
18 program were eliminated.

19 So if it were eliminated before you ever were to get
20 any RNG funding for the government, would you continue to
21 pursue funding and pursue the program, or would that be the
22 end of it?

23 MS. NEWBURY: We feel very strongly about the
24 opportunity to pursue RNG in the province. Right now, it
25 really is the only commercially available product that can
26 help lower the emissions content of natural gas using
27 existing community and customer equipment. So it is the
28 opportunity that is readily available and again, can be

1 readily injected into our distribution and transmission
2 system.

3 So we would certainly continue to look for funding to
4 the extent that again, the funding was not currently
5 available. However, that is not the case. We are still
6 under the full expectation that we will receive funding,
7 and that we will proceed on that basis with our proposal.

8 MR. POLLOCK: Thank you. So in the circumstance where
9 in the answer to CCC.10 for the future RNG contracts -- so
10 you've had some of them already, you've done some of them,
11 and then the program gets cancelled. For the ones going
12 forward, would Union plan on using the pan Canadian
13 framework cost of carbon as a different proxy for the
14 carbon cost? Would there be no carbon cost? What would
15 the impact of that be?

16 MS. NEWBURY: So again, as written in the
17 interrogatory response, we would just have to make sure
18 that the carbon forecast that we had identified for use was
19 still appropriate in the current market conditions. And if
20 we did not feel it correctly reflected the market or was
21 appropriate to use, we would take a look at what other
22 forecasts could be available and could be used for that
23 purpose.

24 But the methodology and the mechanism do not change at
25 all.

26 MR. POLLOCK: Again, thank you. So my question is
27 more directed at -- let's say that after the cancellation,
28 the cost of carbon were to be substantially less. In terms

1 of the difference between -- because you are still with a
2 fixed amount of cost to the RNG producer, right? So to the
3 extent that there is now a lower cost of carbon, is that
4 going to be borne by additional government funds, or would
5 that still be borne by the ratepayer?

6 MS. NEWBURY: I think one of the foundational
7 assumptions you are making in the question that you just
8 asked me is that absent government funding, the long-term
9 carbon forecast would change. And again, I don't know that
10 that is a -- is an appropriate assumption. So again, I
11 just -- as I say, I just don't think that it's an
12 appropriate assumption.

13 MR. POLLOCK: Sorry, just to be clear, the Assumption,
14 I think, was that the destruction or the elimination of the
15 cap-and-trade program would change the carbon price. Do
16 you think that's a fair assumption?

17 MS. NEWBURY: Yes, the elimination of the cap-and-
18 trade program in its entirety in Ontario could have an
19 impact on carbon price forecasts.

20 However, that impact would be contingent on the other
21 information that was available at the time that -- again,
22 if there was an announcement to say the cap-and-trade
23 program was eliminated or replaced, there would have to be
24 other information that goes with that announcement that we
25 would have to take into consideration in order to make the
26 assessment that you are asking.

27 MR. POLLOCK: Okay. Maybe I'll come at it one more
28 time, and then I'll move on. But if it's fair to assume

1 that it will change the cap-and-trade -- the carbon price
2 for the elimination of the Ontario cap-and-trade program,
3 to the extent that the carbon price is now lower, is that
4 gap that was going to be ratepayer-funded now going to be
5 funded by a government fund?

6 So if we go back to our bar chart and the green is
7 less, is the red going to take that, or is it still
8 ratepayer-funded?

9 MS. NEWBURY: The mechanism would not change. So
10 again, the calculation of each component would not change.
11 The red bar or the premium for RNG supply, the provincially
12 funded would, again for any contracts that have not yet
13 been negotiated, take the swing on any change in the
14 forecasted price both of natural gas and of carbon.

15 MR. POLLOCK: Okay, thank you. And just to confirm,
16 for the RNG contracts that you had already entered into,
17 those would still be unchanged by the elimination of the
18 cap-and-trade program? Those would just be as forecasted
19 previously?

20 MS. NEWBURY: That's correct, any contracts that we
21 enter into will be binding on both parties for the term of
22 the contract, and the pricing construct will not change for
23 the term of the contract.

24 MR. POLLOCK: Theoretically, if the cap-and-trade
25 program were to be eliminated and the cost of carbon were
26 to be decreasing as a result of that, then to the extent
27 that you've already entered into RNG contracts, ratepayers
28 would be paying more for a cost of carbon than they would

1 otherwise, absent the RNG contracts?

2 MS. NEWBURY: So again, there is lots of conditions
3 that can happen in a market that affect market pricing. So
4 again, we use the best information that's available at the
5 time. When we set -- or when we establish the component
6 pieces shown in figure 2, so again, to the extent that they
7 do change up or down, whether it's a good thing or a bad
8 thing, I think that is, you know, again hindsight, and
9 again, for us to assume that the cap-and-trade program
10 would be eliminated, I would say would be considered
11 speculative at this point.

12 MR. POLLOCK: Okay, those are my questions. Thank you
13 very much.

14 MR. QUESNELLE: Thank you, Mr. Pollock.

15 Okay. Mr. Wolnik.

16 **CROSS-EXAMINATION BY MR. WOLNIK:**

17 MR. WOLNIK: Yes, thank you. Good morning, panel.
18 John Wolnik, and I represent APPrO.

19 A few questions, maybe just following up from Mr.
20 Pollock's questions on RNG. I had a few as well, so this
21 may be the best time just to chat about those. And Ms.
22 Newbury, I understand that part of the reason for the
23 proposal that you have now for customers to take the
24 pricing risk on both gas and carbon is to help the market
25 develop over the next little while; is that a fair
26 understanding?

27 MS. NEWBURY: Sorry, can you just explain what you
28 mean to me by "market risk"?

1 MR. WOLNIK: Well, as I understand what you are
2 proposing is that you are going to forecast the price of
3 both carbon and natural gas as you go forward, and to the
4 extent that the market price of those products, those
5 commodities, change in the future, customers and ratepayers
6 will end up paying that difference.

7 MS. NEWBURY: So once again, the price paid by the
8 ratepayers is the forecasted price that's contained within
9 the contract?

10 MR. WOLNIK: Ratepayers are going to pay the
11 forecasted price?

12 MS. NEWBURY: That's correct.

13 MR. WOLNIK: And I had understood your interrogatory
14 -- or undertaking response in the technical conference to
15 say that to the extent that, let's say in year five, if you
16 had forecasted the price of gas at -- I'll just pick a
17 number -- \$3, and the price of gas turned out to be a
18 different number, that that different number was going to
19 go into the deferral account; is that not correct?

20 MS. NEWBURY: That is not correct.

21 MR. WOLNIK: Okay.

22 MS. NEWBURY: That was clarified through JT1.9.

23 MR. WOLNIK: So ratepayers aren't at risk then on a
24 cost of the commodity.

25 MS. NEWBURY: I'm sorry, can you repeat your question?

26 MR. WOLNIK: Ratepayers are not at risk for the cost
27 of the commodity when you enter into these RNG contracts.

28 MS. NEWBURY: That's correct. They are fixed for the

1 term of the contract.

2 MR. WOLNIK: All right. Thank you.

3 In the future when you enter into additional RNG
4 contracts, assuming that the program continues, would you
5 consider a different model where you are paying RNG
6 providers simply the market price as it exists from time to
7 time?

8 MS. NEWBURY: So I think, to answer your question, it
9 would depend on the condition of the market at that point
10 in time.

11 Again, right now, there are no readily available
12 market prices for RNG. Again, we also recognize that these
13 are projects that require capital investments, and so the
14 price that a producer requires in order to invest that
15 capital may differ, so that is where we are using the RFP
16 as price discovery to help us better understand the market,
17 so to your question of in the future, if the funding was to
18 continue to be available and if the program continued,
19 would we look at a -- at another -- would we look at
20 whether this mechanism continues to make sense? I think
21 the answer is, yes, we would. However, again, I think we
22 could not speculate on what that would look like, because
23 it would depend on the state of the market at that point in
24 time.

25 MR. WOLNIK: Okay, fair enough.

26 And to the extent that the cap-and-trade program was
27 eliminated in the future, there will be some ongoing costs,
28 is that right, that you will pay for, that would have been

1 included in the RNG costs, the carbon component; is that
2 right? How would those get recovered over time?

3 MS. NEWBURY: Yes, whatever is in the contract we will
4 incur, whatever costs are in the contract we will incur for
5 the term of the contract.

6 MR. WOLNIK: Right. And for any contracts you have
7 not entered into at this point in time, would you consider
8 a force majeure clause that eliminated that component of
9 the cost in the event that the program disappeared in the
10 future?

11 MS. NEWBURY: So if I go back to what it is we are
12 trying to do through this RNG mechanism and through
13 entering into the RNG market, is to take advantage of a
14 readily available opportunity to reduce the carbon content
15 of natural gas. Again, there are commitments required not
16 only by ourselves but also by the producer, the developer
17 of the project, so to introduce price uncertainty or a
18 force majeure clause, I would suggest may be very difficult
19 for a producer because, again, they cannot then predict
20 their revenue stream in support of their costs and
21 financing.

22 MR. WOLNIK: All right. Thank you.

23 I prepared a compendium for handout. I think that
24 Staff have copies of that. I don't know whether the Board
25 Panel have that or not. I will be referring to that
26 shortly.

27 MS. DJURDJEVIC: Can we make that Exhibit K1.3.

28 **EXHIBIT NO. K1.3: APPRO CROSS-EXAMINATION COMPENDIUM**

1 **FOR UNION PANEL 1.**

2 MR. WOLNIK: Thank you.

3 I have a few questions around the staffing plan that
4 Union has proposed, and tab 1 -- panel, do you have a copy
5 of that compendium? It looks like it's --

6 MS. FLAMAN: Yes, we do.

7 MR. WOLNIK: Thank you. In tab 1, page 2 of SEC 15
8 there is a table that compares Union's cost to Enbridge.
9 And I'd like to focus on the staffing resources line, the
10 second line in that.

11 And it looks like in 2016 Union's costs were roughly
12 215 percent higher than Enbridge's, in '17 they were 250
13 percent higher, and that in 2018 they're 73 percent higher.
14 Is that correct?

15 MR. DANTZER: That's what the table indicates, yes.

16 MR. WOLNIK: All right. And do you agree with that?

17 MR. DANTZER: I'm sorry?

18 MR. WOLNIK: Do you agree with that? I know that's
19 what the table says. I assume you agree with it as well.

20 MR. DANTZER: Yes, the numbers are accurate as stated
21 in here.

22 MR. WOLNIK: Thank you.

23 And in the third full paragraph on page 3, it talks
24 about one of the reasons, I think, for the costs being
25 higher. And as I understand your position here, is that
26 you contend that Enbridge has already included some of the
27 costs for cap-and-trade in their budget and you haven't; is
28 that approximately correct?

1 MR. DANTZER: Yeah, that's fair. So as it relates to
2 Union, we've stated here that the IR models are different,
3 in Union's trading cap-and-trade resources is incremental.

4 MR. WOLNIK: Okay. Thank you.

5 Can we go to tab 2 now. This is an excerpt from
6 Enbridge's EB-2012-0459 application, Exhibit D1, tab 8,
7 Schedule 5.

8 And on page 1, paragraph 3 there is a -- Enbridge was
9 seeking approval for their deferral account, cap-and-trade
10 deferral account here, and they indicate that:

11 "While Enbridge, EGD, has become aware of the intended
12 timeline of the Ministry's program, the requirements and
13 potential ramifications of the program to EGD and its
14 ratepayers are currently unknown. As a result EGD believes
15 it is appropriate to establish this deferral account as it
16 is unable to analyze and account for any of the impacts of
17 the program that might have on EGD within the 2014 to 2018
18 time frame or any year beyond that."

19 So you seem to suggest that Enbridge has already
20 accounted for some of these costs, and this evidence led by
21 Enbridge seems to suggest otherwise; can you comment on
22 that?

23 MR. DANTZER: So we can only speak to Union's costs as
24 parts of this proceeding, not Enbridge's. As stated in the
25 response to the interrogatory SEC.15 and as we've
26 discussed, we are operating under different incentive
27 regulation models. And therefore, I can't speak to the
28 nature of resources and staffing required by Enbridge prior

1 to the implementation of cap-and-trade, and the incremental
2 resources required as a result of cap-and-trade.

3 MR. WOLNIK: So at page 3 of SEC.15, we actually
4 provide that as one of the reasons then. So that's not
5 accurate then, is that correct?

6 MR. DANTZER: No, no, this was a joint IR response, so
7 prepared by both Union and Enbridge.

8 MR. WOLNIK: So this response is Enbridge's response
9 to this question?

10 MR. DANTZER: The response was a joint response from
11 the utilities.

12 MR. WOLNIK: Did you review the response before it was
13 filed?

14 MR. DANTZER: We did. We provided input as required
15 to complete the Union portion of the response.

16 MR. WOLNIK: So did you agree with this?

17 MR. DANTZER: Again, I can't comment on Enbridge's
18 resource staffing requirements. The response that we're
19 referring to, SEC.15, was a joint response. We answered
20 the response in an effort to be helpful to the Board, but
21 we can only speak to the Union components within this
22 response.

23 MR. WOLNIK: Okay, thank you. Moving on then, let's
24 talk more generally about the cap-and-trade program.

25 You are looking for a determination at this time, I
26 think, that the \$6 million of cost consequences -- you are
27 looking for approval that those costs are just and
28 reasonable at this time, is that correct?

1 MS. FLAMAN: Yes, that's correct.

2 MR. WOLNIK: Okay. And in the discussion with Mr.
3 Rubenstein this morning about potentially working together
4 with Enbridge to try and reduce those costs, as I
5 understand your position, until such time as a MAAD
6 application is approved, you are not prepared to offer up
7 any synergies at this time; is that fair?

8 MS. FLAMAN: As we noted earlier today, we are
9 separate entities until such time as all necessary
10 approvals associated with MAAD and the MAADs application is
11 approved.

12 MR. WOLNIK: And is there anything preventing you --
13 even though you are separate legal entities, is there
14 anything preventing you from working cooperatively?

15 You've talked about some examples that you do on an
16 ongoing basis, and presumably you have over time. Is
17 there anything prevent you from working together more
18 closely on some of these new initiatives?

19 I appreciate that there may be some compliance issues
20 where you can't work together. You have your own volumes,
21 you have your own purchasing group to purchase carbon
22 emission credits. But in terms of some of these new
23 initiatives, in particular the LCIF initiatives, is there
24 anything preventing you from working together?

25 [Witness panel confers]

26 MS. FLAMAN: As we discussed earlier this morning,
27 Enbridge and Union, as gas utilities, regulated gas
28 utilities, absolutely have to work together on larger

1 policy issues.

2 And also as we talked about this morning, we jointly
3 proposed the abatement construct within our compliance plan
4 as a way to drive incremental abatement forward.

5 We do have to keep in mind the affiliate rules, and
6 make sure that we also comply with those.

7 MR. WOLNIK: So at a project level then, it sounds
8 Like -- I think there was an example this morning and I
9 don't remember the specific example. But I think there was
10 a discussion about before Union proceeds with introducing
11 demonstration projects, that you wait for the result of
12 Enbridge's investigation of this. Is that fair?

13 MR. TROFIM: Yes, this is fair and it is a good
14 example of an area where we do collaborate with -- work
15 together with Enbridge, giving the example that we're
16 talking about where we are we're part of gas and --

17 MR. WOLNIK: So you are working together in some
18 projects?

19 MR. TROFIM: Yes, yes, in some respects, we do.

20 MR. WOLNIK: And is there any reason why you couldn't
21 expand that in those areas that were of common interest,
22 that reflected the affiliate relationship rule?

23 MS. NEWBURY: I think, Mr. Wolnik, we do. We do work
24 together where it makes sense to work together and where it
25 is appropriate to work together.

26 I think -- you know, speaking generically, it can be
27 difficult. I can tell you that when it comes to
28 procurement, it's not appropriate. So we are not sharing

1 information with Enbridge as another gas utility in
2 Ontario, or as an affiliate for that matter.

3 But again, where it makes sense to work together, we
4 are looking to do that. And I think there's examples and
5 there's probably lots of examples, we just don't readily
6 have them at our fingertips. But again, the one that I've
7 been involved with most recently is again the RNG RFP,
8 where we did work together. With he did hold joint
9 webinars and we did approach the market together, so it
10 would be a consistent approach.

11 And again for the benefit of the Board, we are looking
12 to -- we actually did a comparison of how we would flow
13 costs through our different accounting programs to again
14 make sure that we are in fact being consistent as to
15 separate utility in Ontario.

16 Where on that program it won't be appropriate is again
17 when it comes to the RFP evaluation. So that is where, on
18 that program, where we're saying you know what, we work
19 together right up until the point that bids are received
20 and at that point, we each have our own unique set of
21 circumstances, our own unique set of considerations, so at
22 that point in time, we are not working together.

23 MR. WOLNIK: Thank you. As I understand it, you are
24 looking to retain or hire two additional people, and I had
25 thought your evidence was that these two people were going
26 to assist with undertaking some of the LCIF projects.

27 But I may have misunderstood what you were saying this
28 morning. Can you just clarify that?

1 MS. FLAMAN: To clarify, that is not our proposal.

2 MR. WOLNIK: What are the two new people -- what they
3 are they going to be doing?

4 MS. FLAMAN: To clarify, we have not asked for two new
5 people.

6 MR. WOLNIK: Okay. You forecast at 12 and a half FTE
7 roles for 2018.

8 MS. FLAMAN: Correct.

9 MR. WOLNIK: How many FTEs were there at the end of
10 2017?

11 MR. DANTZER: You are referring on an actual basis?

12 MR. WOLNIK: Yes.

13 MR. DANTZER: 11 and a half.

14 MR. WOLNIK: And today?

15 MR. DANTZER: If I recall correctly, I think there is
16 11 and a quarter FTE.

17 MR. WOLNIK: So will the functions of the difference
18 between the 12 and a half and the 11 and a quarter, what
19 will their roles be for the balance of '18?

20 MR. DANTZER: So if you are looking for a description
21 of the role accountabilities, that can be found in
22 Exhibit 3, tab 5, page 7.

23 MR. WOLNIK: So you've got roughly one and a quarter
24 of additional roles between now and, I guess, the balance
25 of -- or on average, 2018.

26 Putting aside the specific responsibilities, what are
27 they going to be doing? Where are they? Are they working
28 on some these LCIF projects, or something else?

1 MR. DANTZER: So you are referring to the roles that
2 would support the technology initiatives?

3 MR. WOLNIK: Why do you need 12 and a half, if you
4 only have 11 and a quarter now?

5 MR. DANTZER: The 12 and a half was the forecast at
6 the time of filing. 11 and a quarter would be more
7 representative of 2018 on an outlook basis.

8 MR. WOLNIK: Can you update your budget then for the
9 11 and a quarter?

10 MR. DANTZER: We could do that, yes.

11 MR. WOLNIK: Thank you.

12 MS. DJURDJEVIC: That would be undertaking J1.1.

13 **UNDERTAKING NO. J1.1: TO UPDATE THE BUDGET TO INCLUDE**
14 **THE 11.25**

15 MR. WOLNIK: Mr. Trofim, we had a discussion in the
16 technical conference regarding making all non-private
17 project information public; do you remember that?

18 MR. TROFIM-BREUER: Yes.

19 MR. WOLNIK: It was on page 141 of the transcript. I
20 can read it if --

21 MR. TROFIM-BREUER: No, that's all right.

22 MR. WOLNIK: And I asked if it was all non-private
23 project information was going to be made public, and your
24 response was yes, the short answer was yes, but I
25 understand from your discussions with Mr. Rubenstein
26 earlier today that you may be limiting that. That answer
27 may not still be current, that you may -- you may be
28 restricting this, only providing it at future OEB

1 proceedings, and maybe not all of it.

2 Can you just comment on whether or not your original
3 answer is still correct?

4 MR. TROFIM-BREUER: So the answer provided is correct.
5 We will make all the research and data that we're creating
6 on -- or obtaining as part of the LCIF available.

7 The only area where we do have to be absolutely
8 mindful about regulatory construct and other elements are
9 the areas that are related to customer-sensible
10 information, commercially sensible or sensitive
11 information, and IP, and those are -- and we actually did
12 provide an answer to that as well. We did say that, you
13 know, in terms of IP we would respect, you know, we would
14 respect the conditions associated with that.

15 MR. WOLNIK: So I think you had indicated to Mr.
16 Rubenstein that this was like research and development
17 work; right?

18 MR. TROFIM-BREUER: In certain cases it could be like
19 this. In other cases it's not necessarily research and
20 development. It could be simply like in the case of the
21 air-source heat-pump projects where we're basically
22 analyzing how two existing technologies are functioning to
23 be able to determine the optimal fuel switching points, so
24 the results of that -- so it is not necessarily research
25 and development. It is more often demonstration. That
26 will be provided, yes.

27 MR. WOLNIK: And you are not the only company doing
28 that. There could be other companies that are interested

1 in developing this technology besides Union; is that fair?

2 MR. TROFIM-BREUER: That -- potentially --

3 MR. WOLNIK: So having -- so these other companies
4 that are working on this, they could benefit from your work
5 that's ratepayer-funded?

6 MR. TROFIM-BREUER: To the extent the information can
7 be publicly disclosed, yeah.

8 MR. WOLNIK: Thank you. And in terms of the benefit
9 that might come from this work, all the benefit that comes
10 from your work in this LCIF, will that benefit fully accrue
11 to ratepayers, including any intellectual property that may
12 develop from this?

13 MR. TROFIM-BREUER: So in terms of -- actually, if I
14 could refer you to what I think is JT1.28... If I could
15 have a moment.

16 So in terms of IP rights, so back to your question, in
17 terms of benefits, so ratepayers will benefit from the work
18 that is being developed under the LCIF. And they could be
19 developing -- they could be benefiting, for example, from a
20 load-balancing perspective.

21 And in terms of IP rights and anything related to
22 that, then that would be governed by the contractual
23 agreement that would be put in place at that time with the
24 supplier.

25 MR. WOLNIK: So I guess, maybe just to be a bit more
26 specific, to the extent that there are some intellectual
27 property rights that are developed by Union as a result of
28 this work, investments through the LCIF paid for by

1 ratepayers, to the extent that there is any commercial
2 benefits back to Union as a result of Union having those IP
3 rights, will Union provide all of those benefits to
4 ratepayers?

5 MR. TROFIM-BREUER: The answer is yes. Those -- if we
6 are talking about IP developed by Union, the benefits would
7 manifest in the -- what the technology, hypothetically,
8 would look like and how it would be integrated in our cost
9 of service at that moment.

10 So if -- so I'm a practical guy. I'm going to make a
11 -- give you more of an example. So let's just say we
12 developed a widget in collaboration with a technology
13 provider and we owned the IP rights. If that widget helps
14 us to reduce the GHG emissions, then that would be --
15 result in lower costs for the ratepayers, so ratepayers
16 will benefit from that.

17 MR. WOLNIK: If you were to sell the IP rights or
18 somehow commercially benefit from the IP rights derived
19 from investing in these projects, funded by ratepayers,
20 will the commercial value that you'd obtain that Union gets
21 from that, will that accrue to ratepayers?

22 MR. TROFIM-BREUER: So I think there's -- there are
23 many variables that could come at play in this particular
24 situation, and we haven't gotten there at this point, so
25 I'm not -- I don't feel comfortable speculating on how we
26 are going to address it. I think, as part of future
27 proceedings, we will bring any -- as we always said, we
28 will bring the initiatives as they go to the follows, and

1 they come to a disposition, we will bring them to -- we
2 will bring them for a test of prudence and disposition at
3 that moment, and situation such as this would be covered
4 under that. But I can't speculate on exactly what the
5 mechanism would look like today, because it -- there's too
6 many variables and I'm a practical person. I can't -- I
7 don't feel comfortable speculating.

8 MR. WOLNIK: So if you develop a widget as a result of
9 this, how would the Board or ratepayers even know that
10 you've developed it and are selling that commercially?

11 MR. TROFIM-BREUER: We did say that we are -- that all
12 the initiatives that are going through the funnel from --
13 at any given stage in the funnel, in future proceedings
14 we'll be providing information on every one of them, what
15 has happened, how, you know, have they proceeded or not,
16 and anything that goes to stage 3 will come for disposition
17 so the ratepayers will know.

18 MR. WOLNIK: Okay. Thank you.

19 Can we move to tab 3 in the compendium. And this was
20 a press release that was issued late last week by a company
21 called Union Energy Solutions Limited Partnership, which I
22 understand to be an unregulated affiliate of Union Gas.

23 And as I understand it, Union Energy Solutions, or
24 UES, has entered into an agreement with a company called
25 Clean Energy Fuels Corp. to develop three compressed
26 natural gas fuelling stations for heavy-duty trucking. Are
27 you familiar with that?

28 MS. FLAMAN: Yes.

1 MR. WOLNIK: All right. And again, according to this
2 press release, UES focuses on various clean energy business
3 initiatives in the province of Ontario; is that correct?

4 MS. FLAMAN: Yes.

5 MR. WOLNIK: And other than NGV or CNG, are any of the
6 initiatives of UES in any way related to any of the
7 research that -- or -- that Union is proposing or proposing
8 to invest in through the LCIF?

9 MS. FLAMAN: Not that I'm aware of, no.

10 MR. WOLNIK: All right. And will they have access to
11 any of the information from any of these projects?

12 MS. FLAMAN: To the extent that the information is
13 provided publicly, as Mr. Trofim said, they would have the
14 same access.

15 MR. WOLNIK: And is UES subject to the same Affiliate
16 Relationships Code?

17 MS. NEWBURY: Yes.

18 MR. WOLNIK: And I understand, again from this press
19 release, that Sarah Van Der Pelt is the vice-president of
20 UES Solutions limited partnership. Is that correct?

21 MS. NEWBURY: That's correct.

22 MR. WOLNIK: And does she have any other role within
23 Union Gas?

24 MS. NEWBURY: She does. She is the vice-president of
25 sales, marketing, and customer care.

26 MR. WOLNIK: So she, in her role as vice-president of
27 marketing, would have information on some these projects,
28 would she not?

1 MS. NEWBURY: She is familiar with the efforts around
2 the low carbon initiative effect.

3 MR. WOLNIK: She has a foot in both camps, then?

4 MS. NEWBURY: She is the vice-president associated
5 with customer care, and she is also associated with Union
6 Energy Solutions.

7 MR. WOLNIK: All right. Thank you. Those are my
8 questions.

9 MR. QUESNELLE: Thank you, Mr. Wolnik. Ms. Van
10 Soelen?

11 **CROSS-EXAMINATION BY MS. VAN SOELEN:**

12 MS. VAN SOELEN: Thank you. Good morning, panel.
13 Just a few questions.

14 I want to circle back on a couple of things that John
15 asked about, and the easiest way to do that might be to go
16 to SEC's compendium. I don't know if that can be brought
17 up, page 29 for the first clarifying question.

18 Thank you. If we could scroll down to the bottom of
19 the screen, or make the exhibit just a little bit smaller
20 so we can see a greater portion of it, that would be
21 helpful. Thank you.

22 Mr. Wolnik asked you about what Union was seeking in
23 respect of the \$6 million that you see down at the bottom
24 of the second last column from the right. Now these
25 \$6 million are forecasted administrative costs for the 2018
26 compliance plan, correct?

27 MR. DANTZER: The 6 million includes administrative
28 cost and the LCIF, 2 million.

1 MS. VAN SOELEN: Right, and so if we keep a finger on
2 page 29 and we flip back to page 3 of the SEC compendium, I
3 see at section 5B that what Union is seeking is approval of
4 up to 2 million in costs associated with the LCIF. So
5 that's the 2 million that you just referred to, correct?

6 MR. DANTZER: Correct.

7 MS. VAN SOELEN: And the balance between the 6 million
8 and the 2 million for the LCIF obviously is approximately
9 4 million. And it's my understanding that Union will seek
10 an assessment as to reasonableness and prudence of that
11 amount at the time that it applies to clear the balance in
12 the 2018 GGEIDA account. Is that correct?

13 MR. DANTZER: That's correct. The balance, the
14 4 million that you referred to, that would be included in
15 part (a) on page 3 here, 5A. So we would -- the
16 determination that the cost consequences of the 2018
17 compliance plan are just and reasonable.

18 The 4 million forecast in 2014, the GGEIDA cost, would
19 be included in that, just for clarity.

20 MS. VAN SOELEN: Prudent of those costs that were
21 going to be assessed at the time that you applied to clear
22 the balance in the GGEIDA for 2018, correct?

23 MR. DANTZER: Yes, we would expect that the cost would
24 be subject to a prudence review upon disposition, correct.

25 MS. VAN SOELEN: And actually that's what's happening
26 here in respect of the 2016 GGEIDA cost, correct? In this
27 application, you are seeking that review of prudence and
28 reasonableness?

1 MR. DANTZER: Correct.

2 MR. WOLNIK: And it is the same process that you would
3 expect to follow with respect to the 2018 costs in the
4 GGEIDA, save and except for the LCIF funds?

5 MR. DANTZER: That would be my understanding, yes.

6 MS. VAN SOELEN: Thank you. I'd like to go to
7 Staff.21, please. I have a few questions and I'll be
8 focussing on the third paragraph of this response.

9 So first of all, the LCIF is going to include
10 abatement projects that are both customer-related abatement
11 projects and facilities-related abatement projects,
12 correct?

13 MR. TROFIM-BREUER: Yes, that is correct.

14 MS. VAN SOELEN: And when we were talking about how
15 projects get chosen for inclusion in the abatement
16 construct or for funneling into the funnel, whether
17 something is a customer-related project or a facilities-
18 related project is not part of that funneling exercise,
19 correct?

20 MR. TROFIM-BREUER: So I think what your question is
21 is are we -- are we segregating customer facilities
22 abatement opportunities, and we're not; we're looking at
23 abatement opportunities.

24 MS. VAN SOELEN: Right. And if you don't have a quota
25 for customer-related versus facility-related projects in a
26 particular year?

27 MR. TROFIM-BREUER: No, we don't. And the reason for
28 that is, as we mentioned, we just started. We're having a

1 selection -- we've established how to go about projects.
2 As we increase our knowledge and under a continuous
3 improvement approach, we might get to a point where we
4 would be considering what would be a fair balance between
5 different customer -- between different customer segments.

6 MS. VAN SOELEN: Until you get there, I suppose it's
7 theoretically possible that in a given year, you could be
8 considering only customer-related abatement projects to the
9 exclusion of anything facilities-related. Is that correct?

10 MR. TROFIM-BREUER: No, I wouldn't go about it in this
11 way. We are trying to -- we are trying to have -- we are
12 trying -- as we started, we are trying to have a good
13 balance of technologies that are -- that are going across
14 the customer segments.

15 MS. NEWBURY: To build on Mr. Trofim's response to
16 that, it's important to note -- and we have talked about it
17 in our evidence -- that we have undertaken a facilities
18 abatement study.

19 So to your point, we are actively engaged studying
20 both customer and facilities abatement opportunities and
21 would use the lower carbon initiative fund to promote both.

22 MS. VAN SOELEN: I have seen reference to that study,
23 but there is nothing in your principles for the abatement
24 construct that would say we need to have a focus on both
25 customer-related and facilities-related measures in each
26 year. Isn't that correct?

27 MS. FLAMAN: I would say that that is implicit. So if
28 you consider the abatement construct principles, they have

1 been set up to look broadly at incremental abatement and
2 for us, incremental abatement addresses both customer and
3 facilities abatement related abatement.

4 So when we look at the principles, to Mr. Trofim's
5 point, we are not in a position to speculate on how much -
6 what new technologies may enter the market for customer for
7 versus facilities. But we know we have to comply with the
8 requirement for the compliance plan, one of which is to
9 look at both customer and facilities abatement and we will
10 use the guiding principles to guide us to do that.

11 MS. VAN SOELEN: So if we look at the third paragraph,
12 I see you are describing in here how initiatives might move
13 from one stage to another. And you identify some factors
14 that are looked at, including GHG emissions, energy
15 efficiency, market segments, economics and more, what is
16 not stated here is the balance between customer related and
17 facility related abatements.

18 Is that part of the consideration at any stage during
19 the abatement construct?

20 MS. FLAMAN: As I noted already, we have the abatement
21 construct guiding principles, and we will apply those to
22 new technologies as they move through the funnel.

23 At this time, we can look at both customer and
24 facility abatement technologies, but can't prescribe the
25 balance of how much technologies are out there. And so we
26 have committed to, in our compliance plan and we've
27 outlined it, that we will use the guiding principles to
28 help us with our analysis of what moves forward in the

1 funnel, be it customer or facility abatement.

2 MS. VAN SOELEN: If in a given year all of the
3 abatement initiatives that are in the funnel and that you
4 are looking at are customer-related, would you agree with
5 me that there is no benefit that would accrue to your LFE
6 customers as a result of that?

7 MR. TROFIM-BREUER: So if I may, so I don't think that
8 this situation is possible. The reason for that is if you
9 are looking in the same -- in OEB Staff 21 on page 3, at
10 the top of that table we're talking about the technology
11 called carbon capture. And that technology is a technology
12 that can be attached to, you know, boilers or -- so gas
13 type of equipment. And it can be used for residential
14 purposes, but it also can be used for commercial and
15 industrial customers.

16 And as such we already have discussed internally with
17 our colleagues about the potential of using that kind of
18 technologies for ourselves as well.

19 It turns out that some of the technologies that we are
20 looking at, you start at the onset with the possibility of
21 GHG emission reductions, and as you're looking into, as the
22 promise of that technology comes true, then we're looking
23 at all the potential applications, and we're not saying,
24 well, this is specifically only for residential. We are
25 trying to leverage those technologies across the most
26 market segments as possible.

27 MS. VAN SOELEN: Has Union considered whether it would
28 be appropriate to have one LCIF fund for customer-related

1 and a separate LCIF fund for facility-related innovations,
2 and can you comment on that idea?

3 MR. TROFIM-BREUER: We have not considered this. We -
4 - to start with, is we're -- what we're asking is for up to
5 \$2 million for both. That's what we've considered so far.
6 That could be, with more experience, and as we progress, if
7 there's a business case benefiting the ratepayers, then we
8 would come back in front of the Board and propose a new way
9 and would substantiate our proposal with the facts that are
10 driving that recommendation.

11 MS. VAN SOELEN: Okay, thank you.

12 In the technical conference I believe you were asked
13 about initiatives that Union has considered in the
14 abatement construct to date, and you've acknowledged that
15 others have been looking into some of those similar
16 initiatives; correct?

17 MR. TROFIM-BREUER: Can you be more specific --

18 MS. VAN SOELEN: Well, Union isn't the only one
19 looking at many of these proposals that are currently part
20 of your funnel.

21 MR. TROFIM-BREUER: That may be true. It would depend
22 on the -- it would depend on the context in which I made
23 that statement. So let me provide clarification, because
24 I'm not -- so in certain cases we may be looking at micro-
25 generation. It's an easy example. Micro-generation
26 technology, since lots of people who are looking out there
27 for that, but they may not be in Ontario.

28 MS. VAN SOELEN: Right.

1 MR. TROFIM-BREUER: So it would depend on the context.

2 MS. VAN SOELEN: Right. And you'd agree with me that
3 some of the people who are looking at these technologies
4 are regulated entities and some are unregulated entities?

5 MR. TROFIM-BREUER: Possibly.

6 MS. VAN SOELEN: Recognizing that one of the abatement
7 construct principles concerns the regulatory construct, has
8 Union established any internal guidelines to determine
9 whether the proposed activity is appropriate for inclusion
10 in regulated services and activities, as opposed to being
11 an activity that would properly fall outside of the
12 regulated business?

13 MR. TROFIM-BREUER: No, not yet. As stated, we have
14 just started. We -- of the initiatives that are currently
15 in the funnel, none of them has actually reached that stage
16 of a completion where we can actually look back, evaluate
17 the obtained result, and determine what would be the best
18 way forward.

19 MS. VAN SOELEN: So are you saying that at the
20 implementation stage Union could formulate the view that a
21 particular initiative is better pursued by an unregulated
22 entity than within the regulated business?

23 MR. TROFIM-BREUER: I'm not stating that. I am just
24 saying that we have not gotten to that point yet to have an
25 informed opinion on it.

26 MS. VAN SOELEN: Is it possible that when you get to
27 the end of this stage, when you get to implementation, an
28 initiative that has been, let's say, researched and

1 developed through the funnel does become part of an
2 unregulated business?

3 MR. TROFIM-BREUER: Technically it's possible, yes.

4 MS. VAN SOELEN: Okay. I'd like to move to a
5 different area. And I'd like to go to Exhibit 3, tab 5,
6 pages 6 to 7. This is the table with respect to FTEs that
7 are included in the 2018 cap-and-trade compliance plan.

8 And I've heard the evidence that the 12.5 FTEs that
9 were forecast and identified in this table are now, I
10 guess, projected to be 11.25 FTEs for 2018; is that a
11 correct understanding of the evidence?

12 MR. DANTZER: I would have to confirm that, but off
13 the top of my head that would be the latest outlook for
14 2018; correct.

15 MS. VAN SOELEN: And if we can scroll down on to the
16 next page, please, page 7. Going to the -- closer to the
17 bottom of the page, we have a section that relates to the
18 distribution business development, and I want to ask you
19 here about the folks who will be involved with respect to
20 the RNG initiative.

21 If I understand correctly, the director of
22 distribution business development and strategic accounts
23 will be spending 25 percent of his or her time on
24 initiatives related to distribution business development.
25 That's a correct understanding of the chart; right?

26 MR. DANTZER: Yes, that's what the chart indicates.

27 MS. VAN SOELEN: Okay, and the same is true for the
28 manager of distribution development planning? 25 percent

1 of his or her time will be directed to distribution
2 business development activities?

3 MR. DANTZER: Yeah, and more detail underneath that,
4 but that's what the title indicates, yes.

5 MS. VAN SOELEN: But the manager for distribution
6 business development, RNG, that is an RNG-specific role; is
7 that correct? And that will be 100 percent of the time
8 spent on RNG?

9 MR. DANTZER: So my understanding is the business
10 development roles included under the cap-and-trade FTE as
11 it relates to RNG specifically are really focused on the
12 evaluation of the RNG market as a whole to support future
13 abatement opportunities. That includes things like
14 interfacing with government ministries on the development
15 of climate-change initiatives, working with municipalities
16 to gain knowledge and understanding of existing RNG
17 examples, so it is really that focus on the RNG market as a
18 whole, under the FTEs, and included in cap-and-trade.

19 MS. VAN SOELEN: And has this individual, the manager
20 business -- sorry, distribution business development RNG
21 begun his or her responsibility?

22 MR. DANTZER: Yes.

23 MS. VAN SOELEN: And was that started as of January 1,
24 2018?

25 MR. DANTZER: It was, yes.

26 MS. VAN SOELEN: And what happens if -- as I
27 understand it, Union doesn't currently have an arrangement
28 with the government with respect to its RNG development; is

1 that correct? And by "arrangement" I should have said a
2 contract with the government with respect to RNG?

3 MS. NEWBURY: If you are referring to the \$100 million
4 of funding, that's specific to procuring RNG, not -- I
5 think what we are referring here is other things that we're
6 doing corporately to work on developing the RNG market in
7 Ontario separate and distinct from procuring.

8 MS. VAN SOELEN: So even if the arrangement with the
9 government doesn't come to fruition, would it be Union's
10 position that there would continue to be utility resulting
11 from the work that this individual is doing on RNG?

12 MR. DANTZER: That is our position. As I explained,
13 it is really the evaluation of the RNG market as a whole to
14 understand the implications and inclusion in future
15 compliance plans that is the focus.

16 MS. VAN SOELEN: And how does that role differ from
17 the role underneath that, "business development manager"?

18 MR. DANTZER: I couldn't speak to the detailed
19 differences between the two.

20 MS. VAN SOELEN: Is there anyone who could?

21 [Witness panel confers]

22 MS. SEERS: Ms. Van Soelen, I wonder if you could
23 repeat your question? Is it to compare?

24 MS. VAN SOELEN: Yes. I am just curious what the
25 difference in role is between the manager business
26 development RNG and then, underneath that, the business
27 development manager, particularly now in light of the kind
28 of broader role that has been explained for the first

1 position.

2 MS. SEERS: Thank you.

3 MR. DANTZER: So the explanation that I provided I
4 think would apply to both, generally speaking. I think
5 their focus is as it relates to RNG as aligned.

6 MS. VAN SOELEN: All right, I will move on. I do want
7 to clarify that at this point in time with respect to the
8 RNG initiative for which it's expected Union will get
9 access to 100 million from the government, there are no
10 agreements between Union and the government at this time,
11 correct?

12 MS. NEWBURY: There is not a contract between Union
13 and the government. There are ongoing discussions and
14 there have been communications from the government,
15 confirming their intent to provide funding in support of
16 our proposal.

17 But again, there is not a normal agreement yet. It is
18 still going through the -- the funding is still going
19 through the government processes, although we are in
20 regular touch with them and we do know it is progressing.

21 MS. VAN SOELEN: I think it is obvious from your
22 Materials, but I also want to clarify that there is also no
23 agreement between Union and any RNG producer at this time,
24 correct?

25 MS. NEWBURY: At this point in time, there are no
26 Agreements. However, we are actively moving through the
27 process, through the RFP process, to initiate agreements
28 with producers.

1 However, those agreements will be conditional on
2 receiving the government funding.

3 MS. VAN SOELEN: Which is conditional, obviously, on
4 signing a contract with the government, correct?

5 MS. NEWBURY: That is correct.

6 MS. VAN SOELEN: Can we go to LPMA 31, please? This
7 is with respect to the 2016 cost and the GGEIDA account.

8 I've read in the evidence that 3.3 percent of Union's
9 overall cap-and-trade obligation is facilities related. Is
10 that correct?

11 MR. DANTZER: Subject to check, yes.

12 MS. VAN SOELEN: So the vast majority obviously is
13 customer-related, correct?

14 MR. DANTZER: Correct.

15 MS. VAN SOELEN: And would it be fair to say then that
16 the bulk of the administrative costs relate to customer-
17 related obligations of Union as opposed to facilities-
18 related obligations of Union?

19 MR. DANTZER: Sorry, can you just repeat the question?

20 MS. VAN SOELEN: I think we've just come to a -- we
21 all now know that the vast majority of the cap-and-trade
22 compliance obligation is with respect to the customer-
23 related obligation.

24 Is it true that in respect of administrative costs,
25 the vast majority of those costs are attributable to the
26 customer-related obligations?

27 MR. DANTZER: I don't have a rates background, so I
28 don't want to speak on behalf of that group in terms of

1 cost consequences and disposition methodologies.

2 MS. VAN SOELEN: Are you familiar generally with the
3 nature of the administrative costs that are part of the
4 2016 geed GGEIDA?

5 MR. DANTZER: Yes.

6 MS. VAN SOELEN: And based on that experience, can you
7 comment on the extent to which those costs are attributable
8 to customer-related versus utilities-related obligations of
9 Union?

10 MR. DANTZER: I'm not sure that there would be a
11 correct causation attributable to customer and facility. I
12 wouldn't be able to speak to it.

13 MS. VAN SOELEN: I note from the answer at LPMA 31
14 that Union has not considered other allocation methods.
15 But has Union given any consideration to the impact to LFEs
16 of allocating the amount in GGEIDA 2016 in the same manner
17 as existing administrative costs?

18 MS. SEERS: Mr. Chair, if I may interject? The issue
19 of cost recovery and allocation amongst customer classes is
20 to be subject to a written hearing, and not part of this
21 oral proceeding. For that reason, we didn't have the rates
22 person from Union on this panel.

23 These are questions that would have to be directed to
24 that person, and this panel is not in a position to answer
25 those questions.

26 MS. VAN SOELEN: That's fine. I'll move on.

27 MR. QUESNELLE: Thank you.

28 MS. VAN SOELEN: The last area that I want to ask

1 about stems from the letter that was sent jointly by Union
2 and Enbridge on Friday.

3 It is stated in the last paragraph of that letter that
4 Enbridge and Union are both of the view that assessment of
5 energy conservation is more appropriately considered as
6 part of the DSM framework, as opposed to being considered
7 under the cap-and-trade framework.

8 I'd just be looking for a rationale as to why that's
9 Union's view.

10 MS. FLAMAN: Could you, please -- apologies, could you
11 re-ask your question?

12 MS. VAN SOELEN: No problem. I am reading from the
13 last paragraph of a letter that was sent by Union and
14 Enbridge last Friday, if that helps.

15 To make the question quite succinct, I'm curious as to
16 Union's rationale for the statement in that last paragraph.

17 MS. FLAMAN: For this, I would take you to our
18 interrogatory response to GEC-22.

19 In GEC-22, we talk about the need to consider
20 ratepayer impact and optimize how we achieve compliance.

21 So when we look at how best to do that and consider
22 energy conservation, we know that there is an approved
23 framework that has only been in place for two years, the
24 DSM framework. And if we are to consider energy
25 conservation, we should do so within the well-established
26 framework we have that has mechanisms in it to allow for
27 stakeholder input, measurement and evaluation measurement
28 and verification, and we have a number of different

1 activities that are within that framework that best suit
2 energy conservation.

3 MS. VAN SOELEN: Thank you. Those are all of my
4 questions.

5 MR. QUESNELLE: Thank you very much. We'll take the
6 lunch break at this point and resume at 1:45. Ms. Girvan,
7 will you be up next, or Mr. Quinn?

8 MS. GIRVAN: Mr. Quinn.

9 MR. QUESNELLE: Mr. Quinn? Thank you very much.

10 --- Luncheon recess taken at 12:47 p.m.

11 --- On resuming at 1:51 p.m.

12 MR. QUESNELLE: Okay. Mr. Quinn, you are up next this
13 afternoon.

14 **CROSS-EXAMINATION BY MR. QUINN:**

15 MR. QUINN: Yes, thank you, Chair Quesnelle. Good
16 afternoon, panel. Dwayne Quinn on behalf of FRPO. Just a
17 note of appreciation to Union Staff, talking with them just
18 as they came back in, and I understand that there is a
19 second breakdown of JT1.9 which I think will serve great
20 purpose, so thank you for providing that late last week.

21 I just want to move to the general high level then in
22 terms of the funding. There was a model that was brought
23 up this morning that showed the respective contributions of
24 the gas price and what it was deemed to be, the RNG premium
25 or that to be funded by government, and that's the part --
26 it's the last part I want to focus on.

27 So I want to just again start at a high level. It is
28 funded by the government, but our concern, and I think you

1 would agree with me, is one of the significant contributors
2 to the government funding are the compliance costs from
3 natural gas utilities. Would that be correct?

4 MS. NEWBURY: I can't tell you exactly what our
5 contributions are to CCAP funding, but since most of the
6 compliance obligation in Ontario is held by the two
7 utilities, I would think it's significant.

8 MR. QUINN: I'm satisfied with "significant". Thanks.
9 That's all I -- I'm not looking for a specific percentage.
10 So ultimately, though, if the funds are coming from
11 compliance costs they are being visited in some way on
12 natural gas ratepayers; would you agree with me?

13 MS. NEWBURY: So it is the charges that we are
14 collecting as the compliance entity that would form part of
15 the CCAP funds; yes.

16 MR. QUINN: Okay, so we are -- if we understand the
17 evidence of Union in its application, there's been a
18 perspective that most of the funding is coming from
19 government, but at the same time, that funding is provided,
20 in part, by natural gas ratepayers. Have I connected the
21 dots correctly?

22 MS. NEWBURY: In the context of CCAP funding I believe
23 that's correct, yes.

24 MR. QUINN: Okay. Thank you.

25 So ultimately, though, if the funds are not well spent
26 and emission reductions are not achieved to the targeted
27 levels which would be anticipated, would you agree with me
28 that not meeting the targets would put upward pressure on

1 the price of carbon?

2 MS. NEWBURY: So I'm having a bit of trouble with the
3 context of your question. It's the government that
4 determines how best to allocate the CCAP funding for the
5 purpose of reducing the carbon emissions in the province.

6 MR. QUINN: Yes, and the utilities are asking this
7 Board for funding to pursue initiatives driven towards
8 reducing emissions for Ontario. That's what your
9 application is about in this context; correct?

10 [Witness panel confers]

11 MS. NEWBURY: So we are not asking the Board for
12 funding. We have been working with the government, as
13 discussed in evidence, on a funding proposal that they have
14 endorsed. We are asking this Board for approval of the
15 mechanism in how we are planning to utilize that funding
16 and apply the funding.

17 MR. QUINN: And part of that funding is to develop the
18 RNG market. You spent time with IGUA counsel on the two-
19 and-a-half people of FTE that are involved in RNG market;
20 correct?

21 MS. NEWBURY: Again, in the context of the mechanism
22 and procurement, those roles do not -- they don't play a
23 role. The RFP is being managed through the gas supply
24 department.

25 MR. QUINN: Okay. Well, then let's just raise it to
26 the higher level then. To meet the ultimate purpose of
27 reducing carbon emissions should it not be a concern of
28 this Board as the economic regulator that initiatives

1 undertaken by the utilities are cost-effective, considering
2 all costs of the program?

3 MS. FLAMAN: So to answer your question I'm going to
4 step back. We talked about, this morning, the purpose of
5 the framework and what the framework requires and suggests.
6 And the framework suggests, firstly, that the utilities
7 consider a range of compliance options. They also
8 specifically call out or the framework specifically calls
9 out longer-term planning, saying that it's prudent -- is a
10 prudent and reasonable activity.

11 So we believe that RNG is prudent to pursue, is a
12 market-ready solution that delivers greenhouse gas
13 emissions reductions, and we also have developed an RNG
14 mechanism that will leave our customers net-neutral in
15 response to your question.

16 MR. QUINN: Does net-neutral include their
17 contribution from the carbon cap-and-trade cost that formed
18 the funding basis for the green funds?

19 MS. NEWBURY: When we discussed cost-neutral in the
20 context of the RNG procurement and, in particular, the
21 mechanism, it's relative to the cost they would have
22 otherwise paid for conventional natural gas, including the
23 related emissions cost.

24 MR. QUINN: But if the carbon costs go up, as we were
25 discussing before, Ms. Newbury, that doesn't -- that is
26 visited upon the customer as part of the carbon cap-and-
27 trade cost; correct?

28 MS. NEWBURY: The cost paid by the customer, and in

1 particular Union Gas's customers, is basically an outcome
2 of our procurement strategy, which is strictly
3 confidential.

4 MR. QUINN: Well, I'm not sure that we're going to
5 achieve much then in that regard.

6 MR. QUESNELLE: Mr. Quinn, are you pursuing this line
7 any further? Because perhaps you could step back and
8 explain to the witnesses what the premise is for the
9 question.

10 MR. QUINN: The premise is -- thank you, Chair
11 Quesnelle -- the premise is that we are just concerned
12 about the prioritization of RNG in compliance as part of
13 the overall compliance strategies. There is a significant
14 amount of information on the record, some of which I'll be
15 referring to in a moment, that demonstrates the overall
16 cost of the programs, and we are concerned about the
17 efficacy, as you will see in the next line of questions.

18 When I hear we're held harmless or there is no
19 additional cost, I believe if we are going to think long-
20 term we need to consider the entire cost of the program as
21 it is experienced by ratepayers.

22 MR. QUESNELLE: Okay. Well, thank you, Mr. Quinn.
23 Perhaps that context will assist in your further question.

24 MR. QUINN: Thank you, thank you, sir.

25 So I am not going to pursue the, obviously, the
26 confidential. I respect that requirement. But I did
27 receive an undertaking response that I thought wasn't -- it
28 wasn't as helpful as we'd hoped it would be, but in doing

1 so I realize from the transcript that we did not mark the
2 reference material that I provided last week at the
3 technical conference with an exhibit number, so if I may
4 ask if we could mark that reference as -- for an exhibit
5 number in this part of the proceeding?

6 MR. QUESNELLE: Do you recall what day it was, Mr.
7 Quinn?

8 MR. QUINN: Oh, yes. It's dated April 7th. It was
9 submitted to the Board through the Board secretary April
10 7th, 2018. It was actually used last week. We just
11 unfortunately forgot to mark it as an exhibit last week.
12 But we have copies of it available for you here.

13 MR. QUESNELLE: What conference day? I think there
14 were two days in the conference.

15 MR. QUINN: Yes, the first day Union was on April 9th.

16 MR. QUESNELLE: So just day one of the conference.

17 MR. QUINN: Yes.

18 MS. DJURDJEVIC: We'll make that an exhibit now. So
19 that will be K1.4.

20 **EXHIBIT NO. K1.4: REFERENCE MATERIALS PROVIDED BY MR.**
21 **QUINN ON APRIL 7TH FOR TECHNICAL CONFERENCE DATED**
22 **APRIL 9TH**

23 MR. QUINN: Thank you.

24 MR. QUESNELLE: Yes.

25 MR. QUINN: Ms. Bennett has copies of the reference
26 material, if that's helpful.

27 MR. QUESNELLE: We have it here.

28 MR. QUINN: Thank you.

1 MR. QUESNELLE: I just wanted to tie it back to which
2 day at the technical conference. That was all my question
3 was about, Mr. Quinn.

4 MR. QUINN: Thank you, we'll make sure that we dotted
5 the Is and crossed the Ts this time. Thank you.

6 So Mr. Charles has brought it up on the screen, and if
7 we could just turn to the first page, which is the initial
8 FRPO 1 interrogatory.

9 And we were focussed on -- and it it's in the last
10 sentence of the preamble -- where Union makes the assertion
11 that because it comes from organic sources, the use of RNG
12 does not release any additional carbon into the atmosphere.

13 And in responding to that IR on page 2, Union makes
14 reference to the -- thank you, right at the first full
15 sentence on the page:

16 "This methodology is supported by the inter-
17 governmental panel on climate change, the IPCC."

18 And the specific reference was provided which was very
19 helpful, and I've provided a copy of that reference in just
20 one paragraph, or actually half of a paragraph.

21 If you flip through to the next page, I've
22 highlighted on the right-hand side, the top of the last
23 paragraph, and this is what I want to focus our discussion
24 on and hopefully ask for a more fulsome answer to our
25 request.

26 It reads, "The emissions of CO₂ from the combustion of
27 biomass for energy in the national emissions inventory are
28 currently assumed to have no net RF effect," which says no

1 contribution to climate change, "based on the assumption
2 that these emissions are compensated by biomass regrowth,"
3 and there's a reference again to the original 1996 decision
4 in that area.

5 "However, there is a time lag between the
6 combustion and the regrowth, and while the CO₂ is
7 resident in the atmosphere, it leads to
8 additional RF."

9 Now, reading that in context, I was asking the panel
10 in the technical conference if they could provide -- and I
11 understand there isn't necessarily somebody on this panel
12 because it wasn't last week, somebody to answer the
13 question. But my reading of this section is that when
14 emissions are netted over time, it is due to a regrowth of
15 the biomass that absorbs carbon dioxide from the atmosphere
16 using photosynthesis.

17 I want to ask to please explain how this phenomenon
18 occurs for human or animal waste being converted to
19 methane, and that's the response that was provided in the
20 undertaking. And in the undertaking, I received Union's
21 response referring to what B.C. has looked at for the
22 purposes of RNG.

23 So I guess I'm asking Union again if there would be an
24 opportunity for somebody with some background that would be
25 helpful in providing us a more fulsome answer as to what's
26 the science behind the elimination of emissions from what
27 would be animal or human waste as to the fact that it
28 doesn't regrow?

1 MS. SEERS: Mr. Chair, the government, as I understand
2 it, has already determined that RNG for the purpose of
3 compliance with the cap-and-trade program is emissions
4 neutral.

5 The science behind that is not the subject of this
6 proceeding certainly, and so we'd submit that this line of
7 questioning is very much beyond the scope of what's at
8 issue here and what would be useful to the panel.

9 And as Mr. Quinn rightly notes, there is no one on
10 this panel capable of answering those questions in any
11 event.

12 MR. QUESNELLE: Thank you, Ms. Seers. Mr. Quinn, any
13 response?

14 MR. QUINN: I received a similar concern in discussing
15 this with Enbridge last week, Mr. Chair. And through you,
16 I understand that the decision has been made in the first
17 set of regulations that have been produced. And yet those
18 regulations -- all regulations are in the process of some
19 form of evolution.

20 What I am trying to help the Board understand here is
21 I think there's a serious contradiction between the
22 principles behind the biomass being emissions-free and what
23 may be pursued by the utilities of using agricultural waste
24 or human waste to reduce RNG. And are we going to find
25 out, after subsequent regulations come out about methane
26 emissions, that it may or may not be the best approach for
27 the ultimate purpose of eliminating carbon emissions to the
28 environment.

1 MR. QUESNELLE: Well, maybe I could just ask you, Mr.
2 Quinn, in the context of this proceeding and the previous
3 determinations made by the Board in the scope of this
4 proceeding, how does your concern surface in testing the
5 reasonableness of the cost consequences of the compliance
6 plan?

7 MR. QUINN: In the cost consequences, sir, and I
8 understand that the utility is pursuing initiatives to
9 pursue a lot of new technologies, new market development,
10 one of which is RNG. And our concern is that in
11 prioritizing which programs are being pushed to the -- I'm
12 not sure it's the bottom or the top of the funnel, I guess
13 it's the bottom of the funnel -- are all risks for
14 ratepayers being considered.

15 I'm going to address the funnel here in a moment. But
16 at a high level, this is a fairly significant issue in
17 terms of whether these programs are actually going to
18 deliver what ratepayers are expected to be invested in, and
19 that is programs for which climate change impacts are
20 mitigated.

21 MR. QUESNELLE: Well, Mr. Quinn, I just -- and again
22 in the context of previous Board determinations, in the
23 framework itself, when you suggest that ratepayer risks
24 being considered in the prioritization of the spend, I
25 don't think it's at issue here as to what choices the
26 government is going to make with the monies that it
27 collected as a result of the cap-and-trade program.

28 So if you disagree with that, I think, you know, you

1 can certainly put that in argument. But we wouldn't expect
2 this panel or Union to provide expert witnesses on the
3 choices that the government is making on the spend side of
4 things.

5 MR. QUINN: Understood, sir, and I'll leave this line
6 of questioning. I'll register our concerns more directly
7 in our argument. It was encouraged that we pursue this
8 with the government, and we are actively doing that at this
9 time.

10 So I will leave that at this point, sir, except I will
11 just ask one more question about the RFP that I heard this
12 morning on the basis of RNG, and I accept that if this is
13 not considered scope that is acceptable to the Board, but I
14 thought I heard this morning -- we had some discussions in
15 the technical conference, and it is in JT1.26 that we asked
16 about the RFPs that were -- that I understood that Union
17 was in the process of completing.

18 Something came out this morning that I don't think I
19 heard before. But can the panel tell me is that a joint
20 RFP with Enbridge?

21 MS. NEWBURY: The lead-up to the RFP was joint. The
22 timing of the RFP was joint. However again, once the RFP
23 was executed, it became separate.

24 MR. QUINN: When you say was executed, you mean
25 submitted to the market or received for the purposes of
26 choices of what is being pursued?

27 MS. NEWBURY: That's a fair question. When it was
28 issued to the market.

1 MR. QUINN: Issued to the market. Thank you. Then
2 I'm asking just asking on behalf of Union then.

3 We had asked for a range of RNG prices that were part
4 of that RFP and my question -- we asked if you could
5 provide them, since this is in process. And in JT1.6, the
6 information being requested would not be available during
7 the proceeding is the first sentence.

8 So we're asking again if there is any way of providing
9 a range -- if not to us, but to the Board in as strictly
10 confidential.

11 MS. NEWBURY: So to reiterate our response to JT1.26,
12 the information you are requesting just simply won't be
13 available during this proceeding due to the timing of the
14 RFP and the duration of the RFP in how it's being executed,
15 so it's a bit of a -- it is a more complex RFP than just
16 buying gas at a liquid trading point, you know, where we
17 can award that RFP within an hour or two.

18 This RFP is really for proposals to purchase RNG where
19 there is capital and facilities requirements, and that
20 takes quite a bit of time. I can tell you, within Ontario,
21 local producer, those conversations can go on for three to
22 six months before a contract is actually fully executed.

23 So the concern that we have is we don't want to
24 provide information that's commercially-sensitive in the
25 middle of the discussions that are going on with the
26 producers.

27 The other thing is it's as we move through the process
28 and the discussions with the producers that we really get

1 more comfortable with the fact that, were we to provide a
2 range, that the figures are accurate, they are comparable
3 with each other, and they are reflective of the price that
4 Union will pay for RNG, so recognizing that at this point
5 we are strictly asking for approval of the mechanism and we
6 will bring costs forward through a future proceeding, the
7 -- I guess we're -- what we've said is the best place we
8 think to bring forward information on the RFP is our next
9 compliance filing, and we'll provide the information we can
10 to the extent possible in that filing.

11 MR. QUINN: I'll allow the Board, to the extent that
12 they're interested, to pursue anything strictly
13 confidential. But one final question in that area: Would
14 -- and maybe it is a small series of questions, but are
15 there infrastructure costs expected to be associated with
16 those RFPs invested by Union?

17 MS. NEWBURY: So I believe we answered that question
18 in an APPrO IR.

19 MR. QUINN: I'm not looking for the specific level,
20 but is it just a yes or a no?

21 MS. NEWBURY: So there will be facilities costs, but
22 those costs are recovered from the producer.

23 MR. QUINN: From the producer in the contract, but is
24 it funded by government funding ultimately?

25 MS. NEWBURY: So again, the producer will look to
26 cover their costs presumably with a rate of return in the
27 price that they charge us for the contract.

28 MR. QUINN: So, I mean, to be specific, will there be

1 Union Gas infrastructure that would go in place to
2 facilitate the delivery of the RNG into the gas stream and,
3 if so, where would those costs be recovered?

4 MS. NEWBURY: Again, this was answered in APPrO 1.

5 MR. QUINN: If we could scroll down to the answer it
6 would be helpful. I just want to make sure there is an
7 understanding.

8 MS. NEWBURY: In part B, in the question portion of
9 part B, if you scroll up, there was an example given that:

10 "Union may be responsible to extend a pipeline to
11 the RNG production point, install metering,
12 odourization, and quality control equipment, but
13 the facilities required to gather, process, and
14 compress the RNG would be the responsibility of
15 the producer."

16 So our response to that was that is consistent and
17 accurate, that we will install the facilities that attach
18 to our system to ensure they meet our standards and
19 requirements, but again, those costs would be paid for by
20 the producer.

21 MR. QUINN: Okay, thank you.

22 Turning to just one more area, and that is the
23 development of the abatement construct of the funnel. Mr.
24 Rubenstein spent some time with you this morning. I am not
25 going to retread that ground, but in response to different
26 requests but for the similar type of thing, both SEC and
27 FRPO were attempting to understand additional information
28 that went in to support the request that the utilities are

1 making for funding in terms of pursuing the different
2 stages of the abatement construct, and we had understood
3 that nothing was available. JT1.19 and 1.20 say similar
4 things about, they were not available.

5 If you want to turn up JT1.20 at this point. So we
6 were asking about the joint meetings and what was
7 documented from the joint meetings to try to develop the
8 abatement construct.

9 This morning Union emphasized that part of their
10 abatement construct was emphasizing transparency. And I
11 guess, in our view, economic transparency often relates to
12 cost or price.

13 Beyond a single estimate we have for the cost of each
14 of the initiatives, what has Union provided the Board to
15 have confidence that there was some concrete work to
16 estimate the cost of these initiatives?

17 MR. TROFIM-BREUER: So if I may direct you to Exhibit
18 JT1.17. This undertaking refers to work plan documents for
19 all stage 2 initiatives in the funnel, and as was remarked
20 this morning, it's not only about stage 2, it also includes
21 stage 1's initiatives, so in this undertaking you can see
22 the type of work plan that we have available. It shows,
23 you know, some of the key deliverables that are in there,
24 it provides costs, and also spent to date.

25 This is based on the research that was done so far and
26 substantiates how we have been leveraging our modest budget
27 that we are having so far to be able to identify
28 initiatives and also come up with a plan that we are able

1 to pursue as part of the 2018 period.

2 MR. QUINN: And we were looking forward to it, and we
3 did read this into our undertaking last week, but a lot of
4 the projects are either not started or in the initial
5 stages.

6 And I understand the reasoning behind that, because
7 you haven't got the funding approved, but most of the
8 estimates, if not all, are lump sums. There are some
9 broken down into two numbers, but a lot of them are one
10 number.

11 What we were seeking is, obviously there was an
12 estimate made for often three-digit requests for funding,
13 but there isn't any backup as to, how was that calculated,
14 how was that estimated, and what risk do we have in terms
15 of, whether it be scope creep or whether it be -- how does
16 the utilities stay on track with its estimates if the
17 original estimate was not really substantiated with any
18 detail?

19 MR. TROFIM-BREUER: So in the same undertaking,
20 JT1.17, you can also see that we've got reference to a
21 number of schedules that have been put forward. So to your
22 question on how do we stay on track, that's a good way to
23 stay on track.

24 MR. QUINN: That's a time-wise. I guess I was looking
25 at cost-wise. Thank you for the clarification.

26 MR. TROFIM-BREUER: So cost-wise would be the same.
27 As we said, right now we don't necessarily have all the
28 level of details that we are hoping to get to, but the --

1 in terms of the -- in terms of the work plans, as you can
2 see, we have -- in certain cases we have -- in certain
3 cases we actually have based on information that we get
4 from the technology providers, the builders and other
5 parties we're working with, you actually get that actual
6 data that we are -- that we've been using to put together
7 these schedules in the work plan, and we're also reviewing
8 on a monthly basis with our finance department. I meet
9 with somebody in my finance department and I'm ensuring
10 that we are talking about how, you know, we're progressing
11 in terms of planning versus actual spending.

12 MR. QUINN: I'm going to ask one more question then,
13 because I still don't see numbers that are being generated
14 for each of the steps in the project.

15 If the project management steps are not estimated, how
16 can you compare your steps with Enbridge to determine where
17 collaboration might be more cost effective for ratepayers?

18 MR. TROFIM-BREUER: It's a fair question. But as we
19 stated a couple of times today, we are two different
20 utilities. We are working and collaborating in a number of
21 areas where we have an opportunity to do so. We've talked
22 about examples for power-to-gas, we've talked about
23 examples of grounds for speed-bumps where there's projects
24 and we collaborate with them at that level.

25 There are other examples as well. One of the examples
26 was building skins, in which we actually conducted a
27 workshop in collaboration with them, with Enbridge. So
28 that's how we work in terms of making sure that we are

1 sharing resources and that we are not redundant.

2 It is really important, even -- I actually want to say
3 that because it's important to remove the -- to be clear
4 about that. We are collaborating with Enbridge to make
5 sure that we are working and we are not duplicating
6 efforts. So even though, in certain cases, you might see a
7 project that shows on both sides, because of the
8 complementary -- the difference and the complementarity at
9 the same time of both franchises, they are legitimate
10 reasons for us to be able to invest in that particular
11 technology, and those are examples of how we are
12 collaborating together.

13 Once the MAADs application has been -- you know, there
14 is a disposition of that, then we'll be -- we'll see at
15 that moment what are the opportunities in terms of, you
16 know, leveraging and creating synergies, or the synergies
17 that you are talking about.

18 MR. QUINN: Okay, thank you for your answer. Those
19 are my questions. Thank you very much.

20 MR. QUESNELLE: Thank you, Mr. Quinn. Ms. Girvan?

21 MS. SEERS: Mr. Chair, if I may? I should have done
22 this right when we came back from lunch. I apologize.

23 I understand that Mr. Trofim-Breuer would like to make
24 a clarification to one of the answers he provided this
25 morning. So if now is an appropriate time, I will go back
26 to him.

27 MR. TROFIM-BREUER: Thanks a lot for the opportunity.
28 This relate to the conversation we were having with Mr.

1 Rubenstein regarding SEC.11, paragraph (d).

2 I realize I was -- as I was thinking about it after
3 that, and I realized I did provide the information, but I
4 just wanted to make sure that there is clarity around that.

5 So if I may direct you to SEC.11, paragraph (d), and
6 just for the purposes of clarity, if you don't mind me,
7 please I just want to read the paragraph in its entirety.

8 MR. QUESNELLE: Mm hmm.

9 MR. TROFIM-BREUER: So our answer is:

10 "Union must have certainty of recovery in order
11 to pursue new technology initiatives that serve
12 to reduce future GHG emissions and related costs
13 on behalf of ratepayers. Union seeks assurance
14 from the OEB in this proceeding that actual LCIF
15 costs will be deemed reasonable and consistent
16 with the expectations established in the
17 framework, if executed on the basis outlined in
18 Union's application. Union expects that these
19 amounts will not be subject to further review,
20 unless there is a change in circumstances that
21 warrants a review as determined by the OEB when
22 they are filed for disposition."

23 The conversation we were having I think was focusing
24 particularly on the last sentence that I just read. And I
25 think it's really important to clarify for the record that
26 all the costs associated with the LCIF will be subject to a
27 test of prudence at the time of the disposition as part of
28 future proceedings.

1 I'm not sure if I was clear enough, and I just want to
2 make sure that that is clear now. Thank you for the
3 opportunity.

4 MR. QUESNELLE: Thank you. Mr. Rubenstein?

5 MR. RUBENSTEIN: Sorry, if I could just clarify. I'm
6 now a little bit more confused because -- sorry, maybe if I
7 can say back what I think you said. You said there will be
8 a review at the time of disposition for prudence.

9 MR. TROFIM-BREUER: Yes.

10 MR. RUBENSTEIN: But then I read that sentence that
11 you were reading from, and it says:

12 "Union expects that the amounts will not be
13 subject to further review."

14 MR. TROFIM-BREUER: Yes.

15 MR. RUBENSTEIN: So that seems to be the opposite.

16 MR. TROFIM-BREUER: I know. So let me -- as I said a
17 couple of times, I'm a practical person. So let me make it
18 -- give a little bit more of a practical example.

19 What we are trying to say is that we are proposing --
20 we are proposing the -- we are proposing a way to actually
21 address initiatives that are going to the funnel, and we
22 are proposing them based on abatement principles that we've
23 been discussing quite a lot today and we are proposing it
24 based on the way we're selecting the projects and the way
25 we are advancing projects.

26 What our concern is that as we move through that,
27 there may be a change in circumstance that -- or there may
28 be a change that would make look the initiative after-the-

1 fact as if it was not a good investment.

2 And obviously, it is like a -- you know, it is like a
3 game of football. On the Monday morning when you go to
4 work and say I could have done that, I could have done
5 that, I could have done that. But reality is that in the
6 moment, in the heat of the moment in that game, if you are
7 playing by the rules that were established by that game,
8 you are doing your best to advance initiatives in that
9 context.

10 What we want to make sure of is that we're not being
11 questioned on that basis. For example, if there is a
12 technology that we know today that is -- we believe it's
13 good based on the preliminary information that we have. As
14 it progresses, if halfway through there is -- as we deepen
15 the information and our understanding of that, we realize
16 that it's not a good investment, we want to be able to say
17 -- come to the Board and say consistent with the approach
18 proposed, we have pursued this initiative in the process of
19 understanding, researching, and making sure that that would
20 be potentially an initiative that would benefit the
21 ratepayers, we realize, based on this research or that
22 research which we will make available, we realize that's
23 not a good investment, and that's why we stopped.

24 We want to make sure that the efforts and the dollars
25 that were spent on that particular project are not going to
26 be refused. We acted in good faith. We did the best and
27 consistent with the approach that was proposed today, and
28 we believe that this is the right approach.

1 And as we investigate, if we find out that some of
2 them may not happen, we want to have assurance of that.

3 Now, with respect to the -- so, when we get to the
4 proceeding, we will not -- we are going to have a -- we've
5 talked a lot about transparency today.

6 As part of future proceedings, we will come in and
7 present to the Board and the intervenors the work completed
8 to date, to that moment, all the work. And as I said, you
9 know, subject to whatever IP and everything else.

10 We just want to make sure that the principles that
11 were put forward today are going to be looked at from the
12 same perspective, and we are not going to be in a situation
13 where costs are refused just because at that moment we have
14 better information.

15 MR. RUBENSTEIN: I'm confused and maybe the best way
16 is -- in some sense, you are talking about being practical.
17 I talk about -- I'm practical from a legal perspective and
18 a regulatory perspective, which may be different than how
19 you're looking at this from sort of a practical business
20 perspective.

21 So maybe the best is for an undertaking from Union to
22 confirm, or maybe counsel can provide its view on what --
23 from a legal perspective, what is it seeking approval for
24 with respect to the LCIF in this proceeding versus the
25 disposition?

26 MS. SEERS: Mr. Chair, the application, I think is
27 clear -- although maybe not, because there seems to be so
28 many questions about it. But the legal position will of

1 course be provided in the argument in-chief and if Mr.
2 Rubenstein has a legal submission to make in response to
3 that, I would expect to see it in his response.

4 I don't think that's a matter for witness evidence.

5 MR. RUBENSTEIN: Well, I think it is it.

6 MR. QUESNELLE: I'm a little confused myself, Ms.
7 Seers, as to the -- yes, the application is clear. I think
8 this is a clear response to the interrogatory, but it's not
9 lining up clearly with your witness's oral testimony.

10 And I think it may be more than semantics. But it
11 just may be the interpretation of what the prudence review
12 would entail and what that means legally versus where the
13 onus is and what will be presented in a future case and
14 what will be tested in a future case.

15 I think what's being described doesn't quite line up
16 with this response, is my observation. So an undertaking
17 may be a way of nailing down and squaring the two.

18 MS. SEERS: Certainly if that would be helpful to the
19 Board we are happy to do that --

20 MR. QUESNELLE: It certainly would.

21 MS. SEERS: -- so the undertaking will be to...

22 MR. QUESNELLE: Further expand on what the expectation
23 is in a future proceeding with respect to the treatment of
24 evidence on the spending. Help me out, Mr. --

25 MS. GIRVAN: Isn't in this proceeding as well, is what
26 is the applicant seeking in terms of approval?

27 MR. QUESNELLE: That's my question.

28 MS. GIRVAN: Yes.

1 MR. QUESNELLE: Yes.

2 MS. GIRVAN: So this case and --

3 MR. QUESNELLE: What they are seeking now --

4 MS. GIRVAN: Yes.

5 MR. QUESNELLE: -- from a perspective of what will be
6 reviewed in the future case.

7 MS. SEERS: So if I can summarize that -- and jump in
8 if I'm not summarizing all of it correctly -- it's an
9 undertaking to further expand as to the approvals being
10 sought in this proceeding and the approvals that will be
11 sought in a disposition proceeding.

12 MR. QUESNELLE: What you are asking for now, as I've
13 been reading this, is a certain expectation, and the Board
14 would provide that relief here in this hearing as to what
15 its expectations are with the future disposition and what
16 tests would be applied.

17 MS. SEERS: We can certainly do that. Thank you, Mr.
18 Chair.

19 MR. QUESNELLE: Thank you.

20 MS. DJURDJEVIC: That will be Undertaking J1.2.

21 **UNDERTAKING NO. J1.2: TO FURTHER EXPAND AS TO THE**
22 **APPROVALS BEING SOUGHT IN THIS PROCEEDING AND THE**
23 **APPROVALS THAT WILL BE SOUGHT IN A DISPOSITION**
24 **PROCEEDING.**

25 MR. QUESNELLE: Okay. And I think we're ready to
26 proceed, Ms. Girvan.

27 **CROSS-EXAMINATION BY MS. GIRVAN:**

28 MS. GIRVAN: Thank you. That was going to be one my

1 questions, so...

2 Just briefly, if you could turn up Exhibit I, page 8,
3 please, in the main evidence. It's in the -- just above
4 that, below that application. It says "Exhibit" -- I guess
5 it's -- is it Exhibit I or 1? I.

6 MS. SEERS: Exhibit 1.

7 MS. GIRVAN: Oh, Exhibit 1. Okay. Sorry, sorry. And
8 page 8.

9 So this sets out a -- sort of a list of a number of
10 uncertainties that remain with respect to the environment
11 within this -- within which this compliance plan was
12 developed. And I'm looking specifically at the third
13 point, about "full details of the CCAP and GreenON funding
14 required to support potential abatement initiatives
15 outlined in Exhibit 3, tab 4".

16 So, my -- and it says, "significant uncertainty still
17 remains", so I'm aware of the fact that there is within the
18 context of the climate change action plan a low-carbon
19 innovation fund; are you familiar with that, Ms. Flaman?

20 MR. TROFIM-BREUER: Can you please...

21 MS. FLAMAN: Can you specify which low-carbon
22 innovation fund you're --

23 MS. GIRVAN: It is part of the climate change action
24 plan.

25 MR. TROFIM-BREUER: I'm not familiar with that.

26 MS. GIRVAN: Okay, no, it's called the -- anyway, I
27 just wondered if you had sought out any funding from the
28 provincial government in the context of that fund, or maybe

1 you could undertake to --

2 MR. TROFIM-BREUER: No, no, we have not.

3 MS. GIRVAN: You have not.

4 MR. TROFIM-BREUER: In connection with the low-carbon
5 initiative innovation fund, no, we have not --

6 MS. GIRVAN: Okay.

7 MR. TROFIM-BREUER: -- asked for anybody anywhere
8 else.

9 MS. GIRVAN: Okay. That's great. Thanks.

10 And then with respect to the Green Ontario Fund, this
11 is another sort of large initiative undertaken by the
12 government and the IESO. Did you seek any funding through
13 that at all for your initiatives?

14 MS. FLAMAN: Yes, we did, and we provided a listing of
15 that information in an interrogatory -- or an undertaking,
16 I believe, following out of the technical conference.

17 MS. GIRVAN: Okay. And I'm just going back to this
18 low-carbon innovation fund. Are you aware of any other
19 proposals or initiatives that others are undertaking that
20 may potentially overlap with some of your proposed
21 abatement activities?

22 MR. TROFIM-BREUER: If you -- if by "others" you mean
23 Enbridge --

24 MS. GIRVAN: No, I just mean other entities.

25 MR. TROFIM-BREUER: Then no.

26 MS. GIRVAN: So you haven't checked that or you don't
27 know?

28 MR. TROFIM-BREUER: To the extent that we've looked,

1 no, we --

2 MS. GIRVAN: Okay. So there might be other entities
3 out there that are pursuing some of the types of activities
4 that you're doing?

5 MS. FLAMAN: I would expect there is. It's -- we
6 don't have line of sight to how the government chooses to
7 spend its CCAP dollars. We know they're significant, and
8 we know they're interested in promoting energy conservation
9 and energy solutions to facilitate a lower-carbon economy,
10 so I would expect there is.

11 MS. GIRVAN: Okay. And are you working at all with
12 the IESO on any of your activities?

13 MS. FLAMAN: We have been engaged with the IESO to
14 consider collaboration opportunities between ourselves and
15 the LDCs and GreenON. We are looking at ways that we can
16 ensure no duplication of our energy conservation
17 programming, recognizing the substantial amount of dollars
18 that will flow from GreenON into the energy conservation
19 market.

20 MS. GIRVAN: Okay. So you'd agree with me there is a
21 lot going on right now?

22 MS. FLAMAN: Absolutely.

23 MS. GIRVAN: Okay. And I just, I recall that in
24 recent months the federal government has made some
25 announcements regarding funding. Can you explain how that
26 may impact what you're doing?

27 MS. FLAMAN: I'm aware of federal government funding
28 that has been announced. I don't have line of sight to the

1 exact government funding that you are describing right now,
2 though. I can say that we do, from a collaboration
3 perspective, continue to monitor and look for ways to
4 achieve energy conservation and abatement that will ensure
5 no duplication of programming we already offer.

6 MS. GIRVAN: Okay. So, but in the development of your
7 '18 plan you don't know how that may impact -- the federal
8 initiative may impact what you're doing versus what they're
9 doing?

10 MS. FLAMAN: I do not, no.

11 MS. GIRVAN: Okay. Great. Thank you.

12 And earlier I think a comment was made that in looking
13 at new technologies you consider whether you can do it
14 cost-effectively. I think that comment was made earlier.
15 And can you explain to me how you determine cost-
16 effectiveness of these potential technologies that you are
17 proposing to spend money on in 2018?

18 MR. TROFIM-BREUER: The statement from this morning,
19 it's actually cost-effectively -- we are thinking about,
20 you know, about initiative opportunities that we could look
21 at it from a cost-effective, in terms of -- as it relates
22 to our budget, so do we have the funds available to be able
23 to initiate, you know, a market scan, do we have enough
24 funds to be able to initiate the particle demonstration
25 project, what would that take, so that was all in an effort
26 to establish what the framework could be and then being
27 able to --

28 MS. GIRVAN: Okay. So --

1 MR. TROFIM-BREUER: -- develop that.

2 MS. GIRVAN: -- so -- so with respect to the
3 initiatives in your LCIF, you didn't go through a selection
4 and say: These particular ones would be the most cost-
5 effective for us to pursue?

6 MR. TROFIM-BREUER: There is -- yeah...

7 MS. FLAMAN: Sorry.

8 MR. TROFIM-BREUER: So there is a high-level overview
9 of that. What we do in certain cases for certain
10 applications, what we know -- what we do is in conversation
11 with a technology provider we look at where the technology
12 might be.

13 It is pretty commercial at this point, but in terms of
14 where it might be during -- you know, once it's ready --
15 once it's commercialized, and then we compare that price to
16 what that -- what, you know, the application would be,
17 where it's going to be used, so to make it concrete if
18 we're thinking, you know, -- if we're thinking like a
19 micro-generation example, is there a possibility for that
20 unit considering it behaves like a smart furnace, is there
21 a possibility for that unit to have a price that is
22 competitive with an existing furnace, so if that's the case
23 then that would be a way to think, yeah, that would be a
24 cost-effective technology in terms of, you know, it would
25 be competitive, it would compare to that, and it would have
26 all these other additional benefits --

27 MS. GIRVAN: Is the expectation --

28 MR. TROFIM-BREUER: -- how we do it, but it is high-

1 level.

2 MS. GIRVAN: Is the expectation then with something
3 like micro-generation that Union would own these assets?

4 MR. TROFIM-BREUER: So at this point the expectation
5 is for us to be able to identify a diversity of choices
6 that would be available for Ontarians. We have in reach on
7 anyone of these stage 3, where the top process would be
8 articulated around that, whether we should own it or not.
9 This is too early for us.

10 What we want, what we know is that in other
11 jurisdictions, this micro-generation in particular, is
12 being deployed. It has great promise for the ratepayers in
13 what we want to make sure through our pilot demonstration
14 projects is that those technologies are working in Union
15 Gas -- in Ontario.

16 Once we get to stage 3, a reflection process will be
17 done and then we will be able to make a determination. But
18 for us, it is too early to call at this point.

19 MS. GIRVAN: So for something like micro-generation,
20 you are talking about developing a program that you are
21 going to offer your customers? Is that the way this would
22 work?

23 MR. TROFIM-BREUER: Today we are not talking about
24 That. In my group specifically and the micro-generation
25 project that has been identified as part of the LCIF. The
26 purpose of those projects is to demonstrate how they
27 operate in Ontario, how they would operate in Ontario, what
28 would be the process of, you know, deploying them. What

1 would be the insulation requirements, what kind of training
2 requirements would be applicable and things like that. So
3 we're looking at all of those elements.

4 MS. GIRVAN: And again, using that as an example, how
5 do you know that this work isn't being undertaken by
6 potentially a university or a research group? Why is it
7 something especially relevant for Union Gas to be pursuing
8 versus someone else?

9 MR. TROFIM-BREUER: So we know as part of the work
10 that we're doing with the number of experts out there, and
11 actually that's a good way to -- if I can direct you to
12 undertaking JT1.31, there is a description there. I'm just
13 going to summarize it for the benefit of the conversation,
14 and in the interest of time as well.

15 So this undertaking describes how, in the case of
16 micro-generation, we started from a technology scan, a
17 market scan. We've involved a number of experts in the
18 field to be able to inform our opinion about whether or not
19 we should we pursue the micro-generation project.

20 Some of the experts we've talked to, and actually one
21 that is notable there is Dr. Entchev. He is the senior
22 scientist at NRCAN. He is one of the leading global
23 experts in micro-generation, so much so that the
24 International Energy Agency has tasked him to lead a task
25 force. He has been looking at micro-generation since 2009,
26 and that's just an example.

27 MS. GIRVAN: So there are other people pursuing these
28 initiatives.

1 MR. TROFIM-BREUER: My point is that if you look at
2 evidence, you can see that there is a lot of work that has
3 been done so far indeed. The attached appendix is
4 providing a good insight on that.

5 But what you also come to a conclusion very quickly to
6 is there is no demonstration project that has been
7 conducted in Ontario yet in that form.

8 And that is important to -- you know, even though the
9 technology holds a lot of promise, it is really important
10 to demonstrate it in the context of this jurisdiction. And
11 that's why we've proceeded to do these tests.

12 MS. GIRVAN: Thank you. I don't think you need to
13 turn this up, but within the SEC compendium, there is a
14 list of the various projects that you are proposing with
15 the LCIF in 2017 and 2018 and there is also -- and that's
16 at 12 and 13 of the compendium. And then at 57 and 58,
17 they set out -- there is a list of the Enbridge projects.

18 And it just seems to me that -- I think you said
19 earlier that you didn't really see overlap that you were
20 working. But when I sort of look at the categories --
21 carbon capture, ground source heat pump, micro-generation,
22 biomass conversion, RNG -- I see that both Union and
23 Enbridge are doing those initiatives.

24 Can you explain to me why that's not duplication?

25 MR. TROFIM-BREUER: Yes. With respect to, for
26 example, ground source heat pump power-to-gas, did I
27 explain a little bit earlier that there are a number of
28 studies that we need to do as they relate specifically to

1 the Union Gas franchise, and that we are not starting
2 anything and we are waiting to leverage Enbridge's
3 experience in that example.

4 There is another example that I think is also very
5 important, when it comes down to micro-generation. So in
6 Ontario we have -- especially in winter, we can have very
7 significant temperature differences between, let's say,
8 Windsor and Red Lake, Ontario, on the same day.

9 In Windsor, you could be the most southern point in
10 Canada and you could be -- you know, in one very cold
11 winter, one winter they had minus 5, in Red Lake, Ontario,
12 you might be at minus 25.

13 The reason why this is important is very simple. A
14 technology will perform differently in these different
15 franchises. And for this reason, I think it is very
16 important to test the technology and test the different
17 cases that could be applicable.

18 With that in mind, in our conversations with Enbridge
19 when we are looking at the different combinations possible,
20 yes -- and I did mention that a little bit earlier.

21 At the higher level, it might appear as if we're
22 working on the same thing. But when you are going into the
23 detail, what you can realize is that there are certain
24 climate, for example, differences. There are certain
25 franchise differences that are requiring a specific
26 assessment in that particular context. And the
27 conversation with Enbridge, enables us to ensure that we
28 are doing that without duplicating effort.

1 MS. GIRVAN: Okay, thank you. I just have a question
2 that I'm going to ask on behalf of Mr. Aiken and this is
3 for you, Ms. Newbury.

4 There's an undertaking, JT1.21, if we could bring that
5 up?

6 It is a fairly technical question and I think what
7 he's asking me is that I don't think the answer was given
8 in its entirety.

9 So it says to provide which facility-related gas
10 charges or gas costs have a variance account or deferral
11 account associated with them.

12 So then you go down to the unaccounted for gas,
13 compressor fuel and blow downs, and buildings and line
14 heaters. And the question was really do any of those -- so
15 for each of the three related gas uses shown in the
16 response, please indicate if there's a deferral or variance
17 account associated with the cost of gas.

18 So UFG for example; you have a deferral account around
19 UFG, or a variance account? I'm fine with an undertaking.

20 MS. NEWBURY: I was going to say we don't have a rates
21 person on the panel.

22 My understanding is that gas cost variances flow
23 through the EPGA and from there, they are allocated to
24 facility and customer.

25 I was just going to say if that answer was provided as
26 part of JT1.9, but if not we would --

27 MS. GIRVAN: It was, but the question was really for
28 each of the three related uses in that response, please

1 indicate if there is a deferral or variance account
2 associated with the cost of gas.

3 MS. SEERS: We'll have to take an undertaking in
4 response to that question.

5 MS. GIRVAN: Okay. And could you also provide the
6 estimated annual volume for each of the three gas uses
7 shown?

8 MS. SEERS: My apologies. Could we take this one step
9 at a time? I just want to have the undertaking down.

10 So the undertaking --

11 MS. GIRVAN: I'll repeat it. For each of the three
12 related gas uses shown in the response, which are
13 unaccounted for gas, compress fuel and blowdowns and
14 buildings and line heaters, please indicate if there is a
15 deferral or variance account associated with the cost of
16 gas.

17 MS. SEERS: We'll do that. Thank you.

18 MS. GIRVAN: Okay. And just, I have one more addition
19 to that. Please also provide the estimated annual volume
20 for each of the three gas uses shown that total the 3.5
21 petajoules for its facility-related fuel requirements.

22 MS. SEERS: We'll do that also, if available.

23 MS. GIRVAN: Great. Thank you.

24 MS. DJURDJEVIC: That will be Undertaking J1.3.

25 **UNDERTAKING NO. J1.3: FOR EACH OF THE THREE RELATED**
26 **GAS USES SHOWN IN THE RESPONSE, WHICH ARE UNACCOUNTED**
27 **FOR GAS, COMPRESS FUEL AND BLOWDOWNS AND BUILDINGS AND**
28 **LINE HEATERS, TO INDICATE IF THERE IS A DEFERRAL OR**

1 VARIANCE ACCOUNT ASSOCIATED WITH THE COST OF GAS; TO
2 PROVIDE THE ESTIMATED ANNUAL VOLUME FOR EACH OF THE
3 THREE GAS USES SHOWN THAT TOTAL THE 3.5 PETAJOULES FOR
4 ITS FACILITY-RELATED FUEL REQUIREMENTS.

5 MS. GIRVAN: So just quickly, with respect to the RNG,
6 something that I've been thinking about, why not wait until
7 we know the results of the provincial election before
8 signing any RNG contracts?

9 MS. NEWBURY: So all of the discussions that we're
10 having with the producers again are about developing the
11 RNG market in Ontario and starting to work now toward
12 projects that would come into service between 2019 and
13 2021.

14 Because we are making all of the RFP contingent on
15 government funding, again, we don't see the relationship
16 with the election as being significant or material. Again,
17 we could wait, but again, what are we waiting for, would be
18 my question, because the outcome of the election is not
19 going to be necessarily the determinant factor. It is the
20 decisions of the party in government, and we don't know
21 again when we would get information on potential changes
22 that could come from the election or not come from the
23 election, so from our perspective, we are moving ahead and
24 we are -- again, because we don't have reason to believe
25 that anything would materially change as a result of the
26 election, we are proceeding.

27 MS. GIRVAN: Okay. So for example, what if government
28 funding wasn't available but you'd already signed the

1 contracts with the suppliers?

2 MS. NEWBURY: The contracts will be signed conditional
3 on government funding.

4 MS. GIRVAN: Okay. All right. Great. Thank you.

5 Could you please turn to the SEC compendium and page
6 30, please? So I just want to be clear as to what Table 1
7 tells us. And I believe it tells us -- and there was some
8 discussion earlier -- that for Enbridge, sort of by the end
9 of 2018 there will be eight incremental FTEs associated
10 with cap-and-trade; is that correct?

11 MR. DANTZER: I'm sorry, did you say for Enbridge?

12 MS. GIRVAN: Yep.

13 MR. DANTZER: So that would be the average incremental
14 staffing requirement --

15 MS. GIRVAN: Okay.

16 MR. DANTZER: -- over the years.

17 MS. GIRVAN: And then for Union it's 12.5?

18 MR. DANTZER: Correct.

19 MS. GIRVAN: Okay. Great. Would you agree with me
20 since the merger between Spectra and Enbridge Inc. some
21 people have lost their jobs at Union Gas? This is an
22 ongoing process as a part of the rationalization?

23 MS. FLAMAN: Right now I can't speak to job losses at
24 the Enbridge Inc. level. I can reiterate, which we've
25 spoken to this morning, that until the MAADs application we
26 continue to operate as separate entities, and so as Union
27 Gas employees we are part of the Union Gas entity, not
28 associated with Enbridge Inc.

1 MS. GIRVAN: Okay. Could you tell me, I guess through
2 an undertaking, the amount of FTEs before the merger
3 between Spectra and Enbridge and the amount of FTEs today?

4 MS. SEERS: Mr. Chair, perhaps Ms. Girvan could help
5 us understand what FTEs she's referring to. Are they at
6 the --

7 MS. GIRVAN: For Union Gas. I think there is some
8 information on the record in the merger proceeding along
9 those lines. I just don't have it in front of me.

10 MS. SEERS: Can you restate the question, or perhaps
11 Ms. Girvan could restate the question, being clear about
12 FTEs at which level and in --

13 MS. GIRVAN: Sure.

14 MS. SEERS: -- relation to --

15 MS. GIRVAN: So the --

16 MS. SEERS: -- what in relation to cap-and-trade?

17 MS. GIRVAN: Sure, I'm looking for the number of FTEs
18 at Union Gas prior to the merger between Enbridge Inc. and
19 Spectra and an estimate of the FTEs today at Union Gas.

20 MS. SEERS: Specific to cap-and-trade, I take it?

21 MS. GIRVAN: No, in the company overall.

22 MS. SEERS: And I'm having trouble understanding the
23 relevance of FTEs in the company, more generally. We're
24 here to talk about cap-and-trade --

25 MS. GIRVAN: Okay, well, a way to look at it is you
26 are asking for ratepayer funds to hire more people with
27 respect to cap-and-trade at the same time when you are
28 reducing your overall work force.

1 MS. FLAMAN: For clarity, we are not seeking
2 additional FTEs. We have the FTEs that are part of our
3 compliance plan. There are no additional FTEs being
4 requested.

5 MS. GIRVAN: You've had 12.5 additional.

6 MS. FLAMAN: That's forecasted, and we forecasted --
7 we are updating our outlook to 11.25 -- 11 and a quarter.
8 So I'm not sure I'm understanding the question either
9 relevant to the cap-and-trade hearing...

10 MS. GIRVAN: Is there any way I can get an undertaking
11 to get those FTEs?

12 MS. SEERS: Again, Mr. Chair, from where we're
13 sitting, the number of FTEs in the company more generally
14 is not relevant to this proceeding. The information with
15 respect to FTEs that are incremental to cap-and-trade is
16 already before the Board, and that's the information that
17 we would submit is relevant to this proceeding. Any
18 information about the company as a whole we would submit is
19 not relevant.

20 MR. QUESNELLE: I think Ms. Girvan's line of questions
21 and the -- and there's been other lines of questions which
22 I think the witness panel has entertained -- is around the
23 -- any synergies that may exist due to the merger, and so
24 if there is light that can be shed on synergies in other
25 areas that would be demonstrated by having the before and
26 after FTE count at Union, I think that would be
27 informative. You -- there is obviously arguments that
28 could be made as to why it's not, but I think the

1 information that Ms. Girvan is looking at and when looking
2 at the overall synergies that may be available, and there
3 have been several questions as to why synergies are not
4 being sought after in this area.

5 MS. SEERS: Okay. If I could ask Ms. Girvan to repeat
6 the question once more to make sure we have the --

7 MS. GIRVAN: The number of FTEs at Union Gas prior to
8 the merger between Enbridge Inc. and Spectra and the
9 current number of FTEs today.

10 MS. SEERS: We'll do that. Thank you.

11 MS. GIRVAN: Thank you.

12 MS. DJURDJEVIC: That's Undertaking J1.4.

13 **UNDERTAKING NO. J1.4: TO PROVIDE THE NUMBER OF FTES**
14 **AT UNION GAS PRIOR TO THE MERGER BETWEEN ENBRIDGE INC.**
15 **AND SPECTRA AND THE CURRENT NUMBER OF FTES TODAY.**

16 MS. GIRVAN: Just going through my questions to see
17 what's been covered off by others.

18 Okay, those are my questions. Thank you.

19 MR. QUESNELLE: Thank you, Ms. Girvan.

20 Mr. Brett, you are up next. Do you want to get
21 started for ten minutes or so and then we'll have a break?

22 MR. BRETT: Sure.

23 MR. QUESNELLE: Okay. Thank you.

24 Cross-Examination by Mr. Brett:

25 MR. BRETT: Okay. Thank you, Mr. Chairman, Panel.

26 Good afternoon, panel. You have copies of my
27 compendium, I believe. I left them with your counsel at --
28 over the noon hour.

1 MR. QUESNELLE: We'll have it marked while it's being
2 handed out, Mr. Brett.

3 MS. DJURDJEVIC: Yes. That will be Exhibit K1.5.

4 MR. QUESNELLE: Thank you.

5 **EXHIBIT NO. K1.5: BOMA CROSS-EXAMINATION COMPENDIUM**
6 **FOR UNION PANEL 1.**

7 MR. BRETT: Could you turn up initially page 3 of the
8 compendium. The number is on the top left corner of each
9 page. You should look at that number, not the actual page
10 numbers of the individual documents, okay? So it's got a
11 -- it is page 3. Do you have that; yes. This is an
12 excerpt from the report of the environmental commissioner
13 of Ontario's annual energy conservation progress report.
14 It was published in August of '17, and it deals with the
15 2016-17 years.

16 And I just want to read a brief section from it and
17 ask you to comment on it. And if you want to comment by
18 way of undertaking, that's fine.

19 But if you look down at the left-hand side of the
20 page, not the last paragraph but the second last paragraph,
21 she's talking about costs and benefits and the TRC ratio,
22 and how that relates to cap-and-trade. So that's the
23 subject that, as you know, has been the subject of a lot of
24 conversation at the technical conference and will, I
25 suspect, be the subject of a fair amount of conversation
26 tomorrow.

27 But what she says here is:

28 "Costs and benefits can also be looked at from

1 the perspective of the utility. How much does
2 the utility need to pay to save a cubic metre of
3 gas? Now, in simple terms, the total DSM program
4 cost in 2015 was 68.173 million (including the
5 cost of initiatives that did not have directly
6 measurable gas savings, but excluding shareholder
7 incentives."

8 And the total cumulative gas savings were
9 2,433,699,754. It sounds awfully precise, cubic metres.

10 So she's taking the 2015 numbers because probably
11 that's the most recent numbers she had at the time she
12 wrote this.

13 So she says in the final sentence in that paragraph:

14 "The non discounted cost per cubic metre of gas
15 saved is 2.8 cents per cubic metre."

16 She goes on to say:

17 "Put into the context of Ontario's carbon price
18 as established by its new cap-and-trade program,
19 2.8 cents per cubic metre would be equivalent to
20 paying \$15 per tonne CO₂ equivalent over the
21 lifetime of the conservation measure. This price
22 is lower than the market price of GHG allowances
23 which was established at just over \$18 per tonne
24 CO₂ equivalent in Ontario's first two auctions."

25 Here she's referring to the initial two auctions in
26 2017 and presumably to the clearing price which the
27 government summarily announced.

28 So my first question is: Are you -- subject to check,

1 are you -- do you agree with those numbers? Are you okay
2 with those numbers as being a fair representative -- as
3 being accurate and fair? And I speak particularly of the
4 gas savings for 2015, the cost per -- the non discounted
5 cost of 2.8 cents, and then the conversion of that sort of
6 the mathematics or the formula of the conversion from 2.8
7 cents to \$15 per tonne over the lifetime of the
8 conservation measures. Would you take that, subject to
9 check, as accurate?

10 MS. FLAMAN: Sure, yes.

11 MR. BRETT: And then in the -- if you go over to the
12 other side of the page, in her conclusion she says:

13 "These results suggest that utilities should
14 examine spending more on conservation beyond
15 their approved DSM budgets as part of their cap-
16 and-trade compliance plans. Over the long term,
17 more conservation may be a less expensive way to
18 meet cap-and-trade compliance obligations than
19 purchasing allowances. Although this is not
20 guaranteed (the incremental cost of conservation
21 tends to increase as more conservation programs
22 are implemented), this will benefit gas
23 customers who bear the full burden of the cost of
24 purchasing cap-and-trade allowances. In other
25 words, when conservation is cheaper for customers
26 than cap-and-trade allowances, it should be
27 turned to first."

28 Are you all right with that? Do you agree with that

1 assessment?

2 MS. FLAMAN: To comment on this assessment, what I
3 would like to do is step back and emphasize that as we
4 consider our compliance plan, we need to consider ratepayer
5 impact. Ratepayer impact was certainly considered in the
6 2015 to 2020 DSM framework, and we know that cost
7 effectiveness is also a guiding principle of the compliance
8 plan.

9 Firstly, I'd like to point out that we have, directed
10 by the framework, an abatement -- that we are required to
11 consider abatement, and we do so with energy conservation.

12 We have a well-established DSM program that delivers
13 significant energy conservation, as the environmental
14 commissioner has acknowledged here. We're good at it, I'd
15 say.

16 To step back, though, what she's also talking about is
17 a measure in here called TRC, which is the one that you've
18 referenced. And if you look at the framework, the cap-and-
19 trade framework on page 22, it says that it's premature to
20 use TRC right now. It's early days for the cap-and-trade
21 framework, and so the cap-and-trade framework acknowledges
22 that and points us to a principal tool called the marginal
23 abatement cost curve or the MACC.

24 We have used the MACC to do our assessment of energy
25 conservation abatement and I can say that based on our use
26 of the MACC, DSM has more than met the opportunity
27 identified by the MACC, which is a realistic assessment of
28 energy conservation potential in the market.

1 I would say that if we wanted to look at more energy
2 conservation, certainly the correct framework to do that is
3 the DSM framework. We have, as I've said, a well-
4 established framework that offers us evaluation,
5 measurement verification. We have set out how we should
6 look at our different programming scorecards, those kind of
7 things, and to try and establish energy conservation
8 outside of the -- outside of the DSM framework, would
9 result in duplication of effort and further ratepayer
10 impact.

11 MR. BRETT: Thank you for that. Now, you have not
12 included any -- you have not included, other than the Green
13 Energy Fund collaborative that you have, which is part of
14 your client's plan, you have not included any additional
15 DSM in your compliance plan, correct, in this year?

16 MS. FLAMAN: So to clarify, it is the green initiative
17 plan.

18 MR. BRETT: I said excluding that. You did include
19 the green initiative. But other than that, you don't have
20 any DSM programs in your compliance program -- your
21 compliance plan for 2018, right?

22 MS. FLAMAN: As I noted, we use the MACC.

23 MR. BRETT: Sorry, I'm not looking for why have you.
24 I'm just asking a yes or no question. You don't it?

25 MS. FLAMAN: No additional energy conservation
26 measures within our compliance plan.

27 MR. BRETT: Fine. As I understand it, there are three
28 reasons why you don't and I'm going to -- I'd like to take

1 you through each of the reasons, and you can correct me if
2 you don't think one of my reasons is valid.

3 The first reason it seems to me that you give is that
4 you would somehow contravene in some fashion the six-year
5 DSM framework, that you would somehow violate that
6 framework if you were to have put additional CDM programs
7 in this plan in 2018. Is that a fair way to state it?

8 MS. FLAMAN: No, actually it's not. As I said
9 earlier, we use the marginal abatement cost curve to do our
10 assessment of energy conservation opportunity as set out in
11 the framework and using that tool, we did find that DSM out
12 more than deliveries the opportunity that the MACC has
13 identified.

14 Further, we've said that DSM offers the best
15 opportunity to look at energy conservation. It's well-
16 established, and duplicating that again would not benefit
17 the ratepayers.

18 MR. BRETT: All right. You had the -- you agree with
19 me, though, that you had the -- you are talking to the
20 question of cost-effectiveness, which I'll come to in a
21 moment, but would you agree with me that you had the right
22 -- that you could have, had you so chosen, to include DSM
23 measures in your 2018 plan? There was nothing -- no
24 regulation, no policy, no law that says you couldn't have
25 done that. Had you chosen to, you could have put some CDM
26 in your 2018 plan, but you decided not to; right?

27 MR. GINIS: We could have done that, yes, but as Ms.
28 Flaman has mentioned, I don't think we could have done that

1 in a manner that was compliant with the cap-and-trade
2 framework. That's because --

3 MR. BRETT: Sorry, why is that? In what way would
4 your putting CDM into the -- into this plan not be
5 compliant with the cap-and-trade framework?

6 MS. SEERS: Mr. Chair, if I may, before Mr. Brett goes
7 on, there is a lot of interrupting of witnesses going on,
8 and I would ask that Mr. Brett be directed to allow the
9 witness to complete their answer before moving on to
10 another question.

11 MR. BRETT: Why don't you complete your answer if you
12 wish. And then you can add on, perhaps, answering my
13 question, the question I just asked you.

14 MR. GINIS: So as Ms. Flaman noted, the OEB developed
15 a MACC for this purpose specifically for the 2018 cap-and-
16 trade compliance plan and for the rest of this cap-and-
17 trade framework. That MACC was made available to us last
18 year and, as noted, it is the principal tool to be used for
19 abatement assessment in this framework. When we did our
20 assessment -- we've had conversations about this at the
21 technical conference. Comparing our DSM framework to the
22 abatement opportunity identified in the MACC, our DSM
23 program surpassed that abatement amount overall, and I
24 think that goes to show that our DSM framework is quite
25 large. We've been doing it for over 20 years now, and the
26 2015 to 2020 DSM framework itself has OEB-approved budget
27 over six years of approximately \$700 million.

28 So it's true we haven't had an incremental abatement,

1 and that is because we are already pursuing the abatement
2 that has been identified in the MACC through our DSM
3 programs.

4 MR. BRETT: So you have -- you're pursuing these other
5 alternatives, but you -- the cap-and-trade framework that I
6 was referring to is the cap-and-trade framework that the
7 Board set out in 2016.

8 Do you agree with me that -- leaving aside the MACC
9 for a moment. MACC is sort of sui generis -- but looking
10 at the Board's framework that we -- when we speak of the
11 Board's framework we speak of the document that was
12 published and came out in 2016, would you agree with me
13 there is nothing in that document that would have precluded
14 you from including some CDM in this year's compliance plan;
15 right? There is nothing in that document that says you
16 can't do that.

17 MR. GINIS: Again, no, and I think I've stated that,
18 that there is an opportunity to do that, but I think it's
19 important to note that that same framework points to the
20 MACC as the tool that will be used to assess whether or not
21 there should be incremental abatement through this
22 framework, and as I've explained, our DSM framework
23 compared to that MACC abatement opportunity is greater than
24 that.

25 MR. BRETT: And let me ask you then -- just give me a
26 moment here. I don't know, sir, if you want to...

27 MR. QUESNELLE: You can finish this line of questions,
28 Mr. Brett. You want to finish this line of questioning --

1 MR. BRETT: Yes, yes, it -- just let me just finish
2 this up.

3 You -- now, I take it that if -- notwithstanding your
4 comments on the MACC for a moment, and I might -- I might
5 say that I think the issue of the MACC may be dealt with
6 again by folks that are more familiar with it than I am,
7 but let me -- although I've read it, and read it more than
8 once, but let me say -- ask you this: Notwithstanding your
9 concerns about what's in the MACC, if the Board were to
10 invite you in this decision to submit CDM projects for the
11 balance of 2018 and perhaps -- and invite you to in your
12 2019 submission, which is due August 1st, to include
13 projects and CDM in that submission, I take it that you
14 would have no -- you would not have a reluctance to do that
15 based solely on the fact that it -- that it is off-base the
16 DSM framework? In other words, let me perhaps just add one
17 clarification so we kind of get to the chase here.

18 There are two other points that I think you have made
19 parenthetically, and I'm not going to get into them right
20 until after the break, but there are two other reasons that
21 you've given in my judgment why you don't, at this time --
22 and the operative phrase "at this time" -- why you don't
23 want to put -- why you haven't put CDM into your compliance
24 plan, other than the first one, which is the issue with the
25 framework.

26 The second one is that you're -- you have stated that
27 there are many, many programs being launched by Green
28 Ontario and that you are concerned that some of those

1 programs will duplicate exactly what you were doing, and
2 that will cause confusion, and that will not serve
3 ratepayers' interests. Now, that's reason two.

4 Reason three is the cost-effectiveness reason. You're
5 saying: We use the MACC as the tool. We thought that was
6 the appropriate tool to use. We didn't really enquire into
7 whether the MACC had captured all of the relevant factors
8 that should be used in a comparison, but we just -- we
9 concluded that on the basis of the MACC these would not be
10 -- additional CDM at this time would not be cost-effective.

11 Now, leaving that aside for a moment, going back to my
12 question: If the Board were to invite you to -- if the
13 Board were to invite you to put forward in 2018 and 2019
14 more DSM programs, provided that they were determined to be
15 cost-effective in this proceeding, and provided that you
16 had some assurance that the Government of Ontario wasn't
17 going to tomorrow morning introduce a program that
18 duplicated what you were doing, but rather you were able to
19 make the kind of arrangement with the Government of Ontario
20 that you have made with the Green Fund program, where you
21 supplement -- where they supplement what you're doing, but
22 where you get the ability to claim those abatement credits,
23 I take it you'd do that? You wouldn't be adverse to adding
24 more programs, more CDM programs, either '18 or in
25 particular '19, because we haven't -- we haven't got to '19
26 yet? That's...

27 MS. FLAMAN: So I, in answer to your -- in answer to
28 your understanding of your question, I think what I'd like

1 to emphasize is a couple of things. Firstly, when we
2 consider the compliance plan before us today, the 2018
3 compliance plan, and when we will look at the 2019/2020
4 compliance plan, we will consider ratepayer impact and
5 risk. Those are two keys for us. And cost-effectiveness
6 is another guiding principle of the cap-and-trade framework
7 that we must consider when we look at our compliance plan,
8 be it 2019 or 2018.

9 From that perspective you talked about adding more
10 DSM, I believe, and we have done, and to your point, we've
11 looked at the cost-effectiveness of the DSM that we have.
12 We've used the tool that the Board has identified as the
13 principle tool to be used. It is not one that we just
14 chose. We -- it was in a letter provided to us on July
15 20th quite clear that we should use that tool, so we did,
16 to assess whether or not there was any additional
17 incremental DSM, energy conservation measures available.

18 And as we considered ratepayer impact, which is
19 something the Board did in its 2015 to 2020 decision, we
20 looked at what impact that would have, and finally, and to
21 your point, GreenON is a risk, and we need to be realistic
22 about what we can deliver with energy conservation. Energy
23 conservation requires customer uptake and we know that the
24 market right now is having between -- I believe it's two to
25 four billion dollars, subject to check, of CCAP funding
26 entering the market on a variety of energy solutions,
27 including energy conservation.

28 MR. BRETT: One last question, and then I'll finish

1 this line of questions.

2 The fact that there is more money coming into the
3 system, that the government of Ontario -- and hopefully
4 they'll continue, because it is ratepayers' money that has
5 been put in there into that fund through allowances, as has
6 been pointed out several times.

7 That itself is not a reason for you not pursuing your
8 own CDM, is it, unless you have reason to think that what
9 the government is doing is going to exactly duplicate what
10 you were doing? I mean, if you were able to determine that
11 the government's activities were going to be in another
12 areas of CDM and other areas of building efficiency, or in
13 other areas all together, however many billion dollars they
14 have in the system isn't a reason for you not to have CDM
15 in yours, is it? What's the connection there?

16 MS. FLAMAN: The connection is risk. So as we look at
17 our compliance plan, we need to consider ratepayer impact
18 and risk. First, we need to be compliant, and then we need
19 to look at ratepayer impact and risk.

20 So as we consider what energy conservation measures
21 may be available, we look to the Board's tool, the MACC, to
22 tell us what's possible. We found that DSM is exceeding
23 the opportunity provided -- that the MACC identifies in a
24 realistic scenario and with that, as we considered risk and
25 what's possible, we deemed there was no prudent incremental
26 energy conservation measures available.

27 MR. QUESNELLE: Ms. Flaman, it may be obvious to you,
28 but for the record, risk of what?

1 MS. FLAMAN: Risk of uptake of energy conservation
2 Measures. So the market, for instance, adaptive
3 thermostats. GreenON recently announced \$40 million for
4 the installation of adaptive thermostats in the residential
5 market. Our whole program is only \$60 million, so that
6 market for adaptive thermostats would be what I would call
7 saturated at this time.

8 MR. QUESNELLE: Thank you. Mr. Brett?

9 MR. BRETT: This would be a good spot.

10 MR. QUESNELLE: Let's take our afternoon recess.
11 We'll reconvene at twenty to 4:00. Thank you.

12 --- Recess taken at 3:24 p.m.

13 --- On resuming at 3:50 p.m.

14 MR. QUESNELLE: Mr. Brett.

15 MR. BRETT: Thank you, sir. I just have one other
16 area that I want to investigate a bit. If you turn up
17 BOMA's compendium to page 4, please. And this topic is the
18 GIF-funded home reno rebate.

19 And I think if you look at the -- I'm going to look at
20 both page 4 and 6, but if you look at the -- at BOMA, this
21 is actually a response to an interrogatory from last year's
22 case, as it happens, and we asked about the GIF-funded home
23 rebate program, and I think we confirmed -- and it was a
24 \$42 million program, \$42 million worth of government
25 funding for the three years, '16, '17, '18, correct?

26 MR. GINIS: That's correct. That was the original
27 agreement. In the past, I believe, three or four weeks we
28 signed an extension with the government for an additional

1 15 million, and that was included in the response to your
2 undertaking 4, the attribution agreements.

3 MR. BRETT: I see, okay. So you now have -- it is now
4 \$67 million government -- and that is for the -- that money
5 is for, what, the balance of 2018, or is it -- is the extra
6 15 million allocated by year?

7 MR. GINIS: It is, subject to check, for the 2018 year
8 to do an incremental 4,000 homes on top of the original
9 12,000.

10 MR. BRETT: Okay. And your budget, your CDM budget
11 for '16, '17, '18 for your home reno rebate offering, which
12 was the foundation for this, I'll call it topping up --
13 it's a little more than that, but what were your budget
14 numbers for the home reno program for '16, '17, '18? I
15 don't recall those offhand. Around 8 million or something?
16 Do you have that, or could you --

17 MR. GINIS: I don't have that in front of me. No.

18 MR. BRETT: Could you provide that by way of
19 undertaking? I mean, I can look it up. I'll look it up.
20 That's just...

21 Okay. Now, if you look at the bottom -- can you
22 scroll down to the bottom of page 4, please? At the bottom
23 you will see the statement:

24 "Homes that participate in the enhanced home reno
25 rebate offering and their associated GHG emission
26 savings will be attributed to either Union's DSM
27 portfolio or the GIF based on the following
28 rules."

1 And then turn over to page 6 of the -- last year's IR,
2 and this is the area I want to focus on quite narrowly for
3 a moment here.

4 Here are the rules. Now, just -- so as to understand
5 this and perhaps just refresh everyone's memory, the way
6 this GIF supplement to your home reno program worked was,
7 as you described -- actually, you described it back on page
8 4 of the compendium, but the way it works is you -- is they
9 effectively put more funds into some of the categories of
10 retrofit that you were already funding under your home reno
11 program, and they added additional items that you had not
12 been funding to that point; correct? That's a bit of a
13 broad -- that's accurate, is it not?

14 MR. GINIS: Generally. I think it's described on
15 page 4. There's three bullets of what the funding was used
16 for.

17 MR. BRETT: Yeah, all right. So let me look -- go
18 back and look at this attribution, and this is, by the way,
19 this is the subject -- or this is one part of, I gather,
20 your broad agreement that you have with the government that
21 covers this, and you refer to that -- you refer to that
22 agreement back on page 4:

23 "Through the Government of Ontario's GIF, Union
24 has entered into an agreement with the Ministry
25 of Energy to receive funding..."

26 Et cetera, et cetera.

27 But going back to page 6, the way this works, I just
28 want to make sure I understand this correctly, because it

1 is a little bit complicated. The scope of their funding is
2 a little broader than your program. It deals with homes
3 outside of the Union's franchise area. So if you look at
4 -- here are the four points, the attribution points: 100
5 percent of the result from homes outside of your franchise
6 area will be attributed to the GIF and 100 percent of the
7 homes within Union's franchise area that use a primary
8 heating option other than natural gas will be attributed to
9 the GIF. No surprises there. 100 percent of the results
10 directly related to the smart thermostat will be attributed
11 to the GIF.

12 Now, I believe that was their program, and I take it
13 that the reason for that is that you didn't, at least at
14 that time, have your own smart thermostat program as part
15 of the home reno program, but leave that for a moment.

16 And then for all other results -- this is the one I
17 want to focus on:

18 "There will be a two-phased approach to attribution each
19 year. During phase I 80 percent of the results will be
20 attributed to Union and 20 percent will be attributed to
21 the GIF. If at any point in a given year Union exhausts
22 its DSM funding..."

23 And I take that to be your own DSM funding, your rate
24 funding supported by your ratepayers as part of your DSM
25 program:

26 "...or elects to stop using DSM funds for the
27 enhanced home reno rebate offering, phase 2 of
28 attribution will begin. During phase 2, 100

1 percent of the offering's results will be
2 attributed to the GIF..."

3 So -- "and it will be reset every January 1st of each
4 year".

5 And if you look down below at the little paragraph,
6 the last sentence -- let me just read this:

7 "Union tracks all customer savings and costs from
8 the enhanced home retrofit program regardless of
9 whether the homes are attributed to Union's DSM
10 portfolio or the GIF. Homes attributed to
11 Union's DSM portfolio..."

12 And that would be the basis of the 80/20, I take it,
13 up above:

14 "...will count towards Union's DSM resource
15 acquisitions scorecard and shareholder incentive.
16 Homes attributed to the GIF will not count to
17 either of those."

18 So is that -- do you have -- are you still on the
19 80/20 part of the plan? In other words, you still have
20 your own resources that you're putting into this that are
21 being matched by the government, or more than matched, but
22 supplemented by the government? Do you know?

23 MR. GINIS: So that detail is provided in the
24 undertaking that we provided. It's confidential, but we
25 did include that agreement so that you can see all that
26 information. But at a high level, this is one program,
27 right, so we had our existing --

28 MR. BRETT: I'm asking just about this question.

1 MR. QUESNELLE: Mr. Brett, can you let him answer the
2 question?

3 MR. GINIS: Thank you.

4 This is one program. And I'm referring to this
5 program, the home reno rebate program. The government
6 added funding, as I've mentioned, to the program, so there
7 is still one program.

8 The program has funding now through DSM, and it also
9 has funding through the provincial government. What this
10 attribution agreement lays out is how the results from the
11 program, because there is one program, are going to be
12 attributed either to the DSM scorecard or to the Green
13 Investment Fund, and therefore not on the DSM scorecard.

14 MR. BRETT: And that's what I'm asking about. I'm
15 asking you to confirm that my understanding of what you've
16 written here in last year's IR response, never mind the
17 confidential document -- this was an IR from last year
18 that's public. I'm asking you, what does this mean? Does
19 this mean that so long as you have your funds in the
20 project, as well as the government's funds, that the
21 savings -- both the savings and the cap-and-trade credits
22 go to Union? Is that the case? That's what that -- is
23 that what that means? If you don't know or if you can give
24 an undertaking, that would be fine.

25 MS. FLAMAN: So if I understand the question, I
26 believe what we can say is that the Green Investment Fund,
27 this agreement and the attribution agreement sets out that
28 80 percent of the results from the home reno rebate program

1 will be accredited to our DSM programming, as our DSM
2 program supports those efforts, and it's a DSM program.

3 As you talk about the cap-and-trade piece that's for
4 GIF, which is the Green Investment fund, the piece that we
5 need to know is that it delivers, subject to check, in the
6 order of 7 million M-cubeds of savings.

7 So that piece is the piece that I would say is
8 relevant to the cast cap-and-trade compliance plan; it's
9 the piece that is delivering incremental abatement.

10 The attribution piece is there. We've shared it and I
11 believe is probably more to scope of the DSM framework.

12 MR. BRETT: Thank you. Just for clarity, the amount
13 of emission credits that you have in your compliance plan,
14 that's in your evidence of 7-million-odd units, that is
15 derived from the portion of the savings that are attributed
16 to Union under the attribution agreement. Is that -- that
17 is the case, I take it?

18 MR. GINIS: No, I don't think you've characterized
19 that correctly.

20 There are savings from the Green Investment Fund
21 program that are attributed to the Ministry of Energy, and
22 what Ms. Flaman is referring to is our emissions forecast.
23 We are including that as a reduction in our forecasted
24 volumes.

25 Our DSM volumes are also there. It is another line
26 item because we expect to execute in 2018 our DSM program,
27 so therefore there will be savings. So it is merely shown
28 on that emissions forecast schedule because we expect there

1 to be savings there, whether it's through our DSM programs
2 or through a program that -- well, it's the same program
3 but funded through the Ministry.

4 MR. BRETT: I think that's what I said, but just --
5 you are saying that the forecast of the savings from the
6 GEF is based -- is linked to the forecast of the savings in
7 natural gas, and those savings in natural gas that are
8 realized through your home energy retrofits/GIG effort are
9 also forecast. That is, I take it, what you are telling
10 me; it's done on a forecast basis.

11 I think what you said back to me is what I said to you
12 actually.

13 MR. QUESNELLE: Are we in agreement then, Mr. Brett?

14 MR. BRETT: I think we are in agreement on that point,
15 yes.

16 The only other question that I have for you in this
17 area is do you have -- you administer this program, as we
18 discussed in the technical conference. Now, do you have
19 employees that are actually responsible for administering
20 this program? Those are employees of Union and how many
21 would you have that actually do this program?

22 I mean I realize it is a joint effort of -- this
23 program started with your home reno program and then the
24 government superimposed on top additional funding. But you
25 run it, as I understand it.

26 So how does that work? Do you have your own people?
27 Are some of your FTEs devoted to running the program?

28 MR. GINIS: That's correct.

1 MR. BRETT: How many of them are there that do that?

2 MR. GINIS: Like I said, there is one program. We
3 have the same individuals working on both programs, but
4 their administration costs or their FTE costs are also
5 attributed partly to DSM or partly to the Green Investment
6 Fund.

7 MR. BRETT: Okay. So you have people that are paid
8 for by the -- whose salaries are paid by your budgets that
9 do this. Do you get any compensation from the government
10 for doing this? What type of compensation do you get if --
11 does the government give you any kind of compensation for
12 providing the administration of this program?

13 MR. GINIS: I think I answered that in the technical
14 conference and it's is still no, there is no compensation
15 to Union to run this program on behalf of the government.

16 MR. BRETT: So the government of Ontario doesn't give
17 you any money under the GIF, under the cap and under the
18 attribution agreement to actually administer this program,
19 market this program, or anything in the way of overhead.
20 Is that what you're telling me?

21 MR. GINIS: Well, there is funding to run the program,
22 yes

23 MR. BRETT: That's what I'm asking. I'm asking if
24 part of the funding to run the program -- let's put it a
25 clearer way.

26 You are getting funds to actually pay out as part of
27 the program, and I'm asking are you also getting funds to
28 run the program, to administer the program?

1 MS. FLAMAN: To clarify, the program -- the GIF
2 dollars support administration of the program by Union Gas.
3 So there is administration dollars included in the funding
4 that we receive to allow for us to build on our home reno
5 rebate program, and offer addition incentives and ranges
6 out to the market.

7 It does not, though, if you are talking about margin,
8 generate a margin for Union Gas. Again, I would suggest
9 that I'm not sure how that's relevant for the DSM framework
10 regardless or -- sorry, for the cap-and-trade framework
11 regardless. But that does answer your question.

12 MR. BRETT: All right. That's fine. Those are my
13 questions, sir.

14 MR. QUESNELLE: Thank you, Mr. Brett. We have OSEA,
15 Ms. Vince.

16 **CROSS-EXAMINATION BY MS. VINCE:**

17 MS. VINCE: Thank you. I just moved so I can see the
18 panel now. My name is Joanna Vince, and I am counsel for
19 the Ontario Sustainable Energy Association. I just have a
20 few questions for you today.

21 The first is if we could pull up Exhibit B, Staff 31.
22 If you go to page 3, this is Union's response to one of the
23 interrogatories from Staff.

24 Union states that it didn't incorporate several of the
25 -- let me start at part 3 on page 3. There are a number of
26 conservation programs that were assessed by Union that were
27 identified under the MACC as an opportunity for residential
28 measures, but they were not included in the cap-and-trade

1 abatement program because they'd either been denied by the
2 OEB in previous DSM hearings, or because they had a poor
3 TRC plus cost effectiveness.

4 I'm just wondering if you can identify from the list
5 which of those are the low priority because of the poor TRC
6 cost effectiveness?

7 I don't know if you can do that today, or if you have
8 to give an undertaking.

9 MS. FLAMAN: We can't point to it today, although I
10 would again draw the panel's attention to page 22 of the
11 cap-and-trade framework that says that we shouldn't use TRC
12 as our -- within -- as we consider energy conservation
13 measures within the cap-and-trade framework.

14 Specific to this list of differing measures, I don't
15 have the TRC plus information for each of those measures
16 today, no.

17 MS. VINCE: Is that something that could you undertake
18 to provide?

19 MS. SEERS: Perhaps Ms. Vince could assist us in
20 understanding the relevance of providing that information,
21 given what the cap-and-trade framework says about not using
22 TRC.

23 MS. VINCE: I think just given that the letter that
24 went out last Friday that says Union and Enbridge were both
25 looking to have the TRC reassessed to include costs of
26 carbon, it would be interesting to see which one of these
27 did not pass under the existing TRC.

28 MS. SEERS: Right, and that letter was a suggestion in

1 terms of what might be included in the DSM as part of the
2 DSM framework.

3 With respect to cap-and-trade, again the framework --
4 perhaps Mr. Charles could pull it up. I believe it's page
5 22. It's already -- so the framework on page 22 says:

6 "Most stakeholders that commented on the issue of
7 compliance plan assessment were generally
8 supportive of the OEB's approach. Some
9 environmental groups felt that the cost-
10 effectiveness test should be based on total
11 societal costs and benefits, TRC, total resource
12 cost or SCT, societal cost test, and that the OEB
13 should require utilities to undertake abatement
14 where it is less costly than the procurement of
15 allowances. Given the newness of the cap-and-
16 trade program the OEB considers it premature to
17 apply the TRC or SCT to the utilities' compliance
18 plans at this time. The OEB will consider the
19 use of additional tests such as the TRC or SCT
20 after gaining experience with the assessment of
21 compliance plans."

22 And so again, given this, we would submit that it's
23 not relevant for Union -- or it wouldn't be useful to the
24 panel for Union to be providing information based on a test
25 that the Board has already said at this time it will not be
26 considering.

27 MR. QUESNELLE: Ms. Vince.

28 MS. VINCE: I'm not necessarily looking for the

1 results of the test, just which of the activities did not
2 pass because of that test. I mean, if you look at the page
3 that you've just cited, part of it is -- the second-last
4 paragraph talks about "after gaining experience with the
5 assessment", and I think part of gaining the experience is
6 understanding what measures were not able to pass that
7 test.

8 MR. QUESNELLE: Ms. Vince, just to run that forward,
9 that they provide the information as to what to pass the
10 test or not, and I'm just trying to think of how that
11 information would lead to a testing of the reasonableness
12 of the applications before us on the reasonableness of the
13 cost consequences of the existing plans.

14 MS. VINCE: So I think that part of understanding this
15 plan is understanding if the test that we're applying and
16 the assessments we're applying are working or are effective
17 to assess the costs of the project -- or of the measures
18 and the carbon savings of those measures, so I think in
19 that way it is part of evaluating this plan, but also the -
20 - how the framework is being applied.

21 MR. QUESNELLE: So are you suggesting that part of the
22 scope of this proceeding is to review the lens in which
23 we've laid out in the framework and applying it as we go
24 through?

25 MS. VINCE: Well, I think the framework itself talks
26 about gaining experience and understanding the assessments
27 that are being applied. As we go through this, this is a,
28 you know, fairly new process. We've only done it once.

1 This is now the second time through, so I think it's
2 gaining that experience.

3 MR. QUESNELLE: I understand. Any comment, Ms. Seers?

4 MS. SEERS: Well, Union, of course can only apply the
5 test that the Board puts forward and that in putting
6 forward this plan has complied with the framework as it
7 exists.

8 I would suggest that it's not -- it is actually not
9 part of this proceeding at all to take a look at whether
10 the framework should be changed. Whether that will be part
11 of a subsequent proceeding I don't know, but as of this
12 time the Board's task is to assess the reasonableness of
13 the compliance plan against the framework as it exists in
14 the framework, as it exists says don't use TRC, and so
15 again I would question the relevance of the information
16 that Ms. Vince is asking for.

17 MR. QUESNELLE: Thank you.

18 MS. VINCE: I guess if I could just make one more
19 comment back, maybe taking it back down to the hearing, so
20 the response from Union is that they were excluded because
21 of TRC assessment or TRC costs. But you haven't identified
22 which one, so you've brought it into the answer. I'm just
23 asking you to specifically highlight which of them that
24 comment applies to in the bigger list.

25 MR. POCH: Mr. Chairman, if I could just interject for
26 a second in the hopes of being helpful. In light of this
27 discussion about whether, you know, the TRC shouldn't come
28 into it because of the framework, it might save time if

1 Union would at least provide the results on -- with the UCT
2 or PACT, P-A-C-T, tests, which are the ones analogous to
3 the ones they have used before, compliance options like
4 RNG, and that, I think, would be perhaps more relevant to
5 this proceeding, and would also give my friend a sense of
6 which ones are performing well and which ones aren't.

7 MR. QUESNELLE: Ms. Vince?

8 MS. VINCE: That would be acceptable.

9 MR. QUESNELLE: Okay. Mr. Poch just made a proposal
10 to address -- coming at it a different way. Ms. Seers, I
11 don't know if you -- I don't know if you were distracted.

12 MS. SEERS: If we could have just one moment, that
13 would be very helpful. Thank you.

14 MR. QUESNELLE: Thank you.

15 MS. SEERS: I actually understand that Mr. Ginis can
16 speak to this. Perhaps that will assist, and if not, we
17 can deal with any further matters subsequently. Thank you.

18 MR. QUESNELLE: Thank you. Mr. McGill (sic)?

19 MR. GINIS: So if you are looking for the UCT test or
20 the PACT test results, because that is relevant to this
21 framework, it is in the MACC, it is included there, for
22 these measures specifically, so I would just refer you to
23 table 15. It covers -- yeah, it covers several pages,
24 starting at page 42, and you will see the results whether
25 it's negative or positive for that specific measure.

26 MS. VINCE: Okay. That's fine. Thank you.

27 MR. QUESNELLE: Thank you, Mr. Poch.

28 MS. VINCE: Okay. Moving to my next question, so it's

1 at Exhibit -- if we look at Exhibit JT1.17. And if we can
2 just scroll down to some of the work plans and timing.

3 So a number of the pilot programs and the reports that
4 are set out in this section show that there's work being
5 done in 2018. Some of them go into 2019.

6 I am just wondering if there are any of the measures,
7 I guess specifically the stage 2 measures, that Union
8 expects to be moving forward with and maybe towards market
9 by the end of 2018.

10 MR. TROFIM-BREUER: No, we are not expecting that.

11 MS. VINCE: Okay. And then, so these will all be then
12 in future years. And what I'm wondering is relating to
13 timing. As you realize -- or as you go through the process
14 and you decide that there are abatement measures that you
15 want to implement, do you press pause on them until the
16 next compliance plan comes out and incorporate them then,
17 or once you recognize that they are feasible do you start
18 moving forward with them?

19 MR. TROFIM-BREUER: So as mentioned a little bit
20 earlier, it is too early for us to call at this point. We
21 will have a better sense of what would be the best
22 approach, probably starting in, you know, in 2019, because
23 by then we would have some of these projects, would have
24 completed at least one measurement and verification period,
25 and based on that the relevant data required to make an
26 informed decision will be available.

27 MS. VINCE: Okay. Those are all my questions. Thank
28 you.

1 MR. QUESNELLE: Thank you, Ms. Vince.

2 Dr. Higgin.

3 DR. HIGGIN: Mr. Chairman, just to enquire whether you
4 are going to go for a hard stop or whether you want to go
5 beyond 4:30.

6 MR. QUESNELLE: Just looking at your estimate here, we
7 have about 20 minutes. Are you still on track for about 20
8 minutes?

9 DR. HIGGIN: Yes.

10 MR. QUESNELLE: Let's do that then. Thank you.

11 **CROSS-EXAMINATION BY DR. HIGGIN:**

12 DR. HIGGIN: Okay. So I have questions in two areas
13 of the compliance plan. One is on the potential for
14 increased residential DSM, which we've had some discussions
15 on, and basically the other piece is on RNG, so I've
16 provided to counsel, I believe, and the reporter some of
17 the references that I will be using. I don't know whether
18 you have them ready to look up.

19 Some of these have been covered, so I may not go to
20 every one, but if you were ready I thought that would
21 assist the process, okay?

22 So my -- on the DSM I looked for a high-level estimate
23 of Union's approved DSM and related the GHG component for
24 two-15 to 2020. And I found one in EB-2016-0296,
25 Exhibit 3, page 25.

26 So you may not have to look up that, but confirm what
27 it says there. What it says is as follows:

28 "Union's two-15 to 2020 DSM approved in EB-2015-

1 0029 is expected to achieve more than 15 billion
2 cubic metres of lifetime natural gas savings
3 equivalent to approximately 29 metric million
4 metric tonnes of CO₂ equivalent reductions."

5 That is what it says.

6 MR. QUESNELLE: Dr. Higgin, we are having a hard time
7 finding it here.

8 DR. HIGGIN: Yes, I was hoping the witnesses would be
9 familiar with this as background.

10 MR. QUESNELLE: We are just trying to pull it up
11 there. You say page 25?

12 DR. HIGGIN: Yes.

13 MR. QUESNELLE: Okay, we've got the exhibit. I'm not
14 seeing it any way.

15 DR. HIGGIN: Maybe I've got the wrong quote. I pulled
16 it out.

17 MR. QUESNELLE: Maybe I'm just not catching it there.
18 Okay. Is it there?

19 DR. HIGGIN: What I'm trying to get, Mr. Chair, is
20 just a high-level overall estimate of the approved DSM plan
21 and what are the GHG related to it, and those are the
22 numbers that I came up with. To repeat, 15 billion cubic
23 metres and 29 MT of CO₂ equivalent.

24 MR. QUESNELLE: I'm just trying to help. Have the
25 witnesses got that before them? Can they follow along?

26 MS. FLAMAN: We don't have it before us. But subject
27 to check, would agree with those ...

28 DR. HIGGIN: Can you confirm that it hasn't changed?

1 The baseline approved program hasn't changed since that
2 time?

3 DR. HIGGIN: I'm happy to have a undertaking, Mr.
4 Chairman, since we are on time, if they want to confirm
5 that.

6 MR. GINIS: I can't see the reference, but I believe
7 what you are referring to is what would have been approved
8 as part of our 2015 to 2020 DSM plan at the time, so
9 probably 2015 or 2016. So that would be in the ballpark.

10 I would just add caveats that it is forecasted at that
11 point, so it doesn't necessarily mean that --

12 DR. HIGGIN: I think it important, Mr. Chairman, that
13 now we are at this point in time in 2018, whether that is
14 still the plan that has been approved by the Board. I
15 think it is important to the discussion that goes on about
16 DSM and --

17 MR. QUESNELLE: Well, if the question that can be
18 answered now.

19 DR. HIGGIN: Would you like to confirm that by an
20 Undertaking, or would you say that's it?

21 MR. GINIS: I can confirm that that was the forecast
22 at that time.

23 DR. HIGGIN: No, I'm asking if it's the same today for
24 -- you know, at this point in time. Never mind 2015, but
25 now, is that the same forecast?

26 MR. QUESNELLE: Have you updated your expectations
27 from that point in time?

28 MR. GINIS: To clarify, you are asking for to us

1 update our forecast for the plan as of what we know at this
2 point?

3 DR. HIGGIN: I'm asking if that is currently the
4 relevant numbers that we should be considering as the
5 baseline for your DSM and for your estimates of greenhouse
6 gas reductions.

7 That's what I'm asking for. So whatever that means,
8 yes, updates or whatever.

9 MR. GINIS: I think it can be used. I just added that
10 caveat that obviously it was the forecast back then and
11 things can change. But yes, that's reasonable to use.

12 DR. HIGGIN: Okay, good. That was easy.

13 MR. QUESNELLE: That's twenty minutes holding up
14 there.

15 DR. HIGGIN: Right. I thought this would be an
16 accepted fact and we would all go from there. Sorry, sir.

17 So can we look then at your volume forecast for 2018?

18 Let's go back and look specific yearly forecast and
19 that is at EB-2017-255. And it's Exhibit 2, schedule 1 and
20 the table says in there.

21 Do you have that? We can perhaps pull it up.

22 So I just wanted to understand the basis for the --
23 particularly general service class, okay, the forecast of
24 98 million cubic metres of savings for the GS.

25 And to understand the basis of that forecast, is that,
26 shall we say, consistent with the plan and the forecast, or
27 is it incremental because I see some words that say you've
28 enhanced the programs?

1 MS. FLAMAN: It is consistent with the DSM program,
2 the 98 -- subject to check, the 98 million M-cubeds.

3 However, as you talk about enhance, if you are looking
4 at it with respect to the Green Investment Fund and the
5 seven million, that would be in incremental. So the 98
6 million is the amount that is being delivered by our DSM
7 program.

8 DR. HIGGIN: That's shown as a separate line and it's
9 not the baseline, which is where I'm looking at. So you're
10 saying it is consistent with your forecast, it is not
11 higher significantly, or lower than your forecast for 2018?

12 MS. FLAMAN: Yes.

13 DR. HIGGIN: Thank you. So, I'd like to try and get
14 on the record; it would help me. What is the overall
15 forecast of your approved DSM plan and greenhouse emissions
16 over the period 2015 to 2020, the baseline? That would
17 certainly help me understand where we are with respect to
18 that. If you have comments, such as any caveats or if you
19 have any other things to add about that, that would be
20 appreciated. Can you point me to that five-year forecast?

21 I'm happy to have an undertaking to provide the
22 numbers; that would be very fine.

23 MS. FLAMAN: We don't have those five-year numbers
24 here with us today.

25 DR. HIGGIN: Could you provide an undertaking to
26 provide that? So just to repeat, it would be the forecast
27 of the DSM program -- approved programs, without the GIF or
28 any enhancements, the baseline, and then add an estimate

1 from that using the conversion factors of the greenhouse
2 gas emissions equivalent.

3 MS. SEERS: We'll do that.

4 DR. HIGGIN: Thank you.

5 MS. DJURDJEVIC: That will be undertaking J1.5.

6 **UNDERTAKING NO. JT1.5: TO PROVIDE THE FORECAST OF THE**
7 **DSM APPROVED PROGRAMS, WITHOUT THE GIF OR ANY**
8 **ENHANCEMENTS, THE BASELINE, AND THEN ADD AN ESTIMATE**
9 **FROM THAT USING THE CONVERSION FACTORS OF THE**
10 **GREENHOUSE GAS EMISSIONS EQUIVALENT; TO HAVE THE**
11 **RESIDENTIAL SECTOR AMOUNTS TO DATE AND FORECAST AND**
12 **FORECAST FOR THE WHOLE SIX YEARS, 2015 TO 2020,**
13 **SHOWING THE RESIDENTIAL SECTOR M-CUBEDS LIFETIME**
14 **SAVINGS; TO PROVIDE THE GREENHOUSE GAS EMISSIONS**
15 **ESTIMATE BASING ON THE USUAL CONVERSION FACTOR,**
16 **ACCEPTED CONVERSION FACTOR**

17 DR. HIGGIN: I'd like to move quickly now to the
18 residential sector, so I am coming from a high level and
19 going to the residential sector.

20 And again, what I would like to address are two
21 things: where we are with the residential sector over the
22 period and the forecast, the savings for just the
23 residential sector which is a component of the GS, but the
24 residential sector. So that would be the first question.
25 Do you have information that would assist me in terms of
26 the residential sector so that we can focus in and say
27 based on the plan, the approved plan, we have achieved so
28 many million cubic metres and we've saved so many tons of

1 greenhouse gas equivalent.

2 Do you have information on that for the residential
3 sector programs?

4 MS. FLAMAN: We would have to pull that together as
5 part of the undertaking that we just took that would
6 include that information.

7 DR. HIGGIN: That would be helpful, thank you. So
8 then I would like you to turn up please...

9 MR. QUESNELLE: Dr. Higgin, can you just...

10 DR. HIGGIN: Sorry, I thought it was the same
11 undertaking, sir.

12 MR. QUESNELLE: It's just that Ms. Seers has a
13 question.

14 MS. SEERS: Just for clarity, I just want to make sure
15 that we have the language of the second part very clearly.
16 So if I could just ask Dr. Higgin to repeat the specific
17 question, that would be helpful.

18 DR. HIGGIN: Yes, so I'd like to have the residential
19 sector forecast -- well, amounts to date and forecast and
20 forecast for the whole six years, 2015 to 2020, showing the
21 residential sector M-cubeds saved --and I assume we are
22 talking about lifetime savings as opposed to annual?
23 That's the framework. I believe that that's how we look at
24 the whole thing, right?

25 MR. GINIS: We can provide it in lifetime.

26 DR. HIGGIN: Yes. And the other would be the
27 greenhouse gas emissions estimate basing on the usual
28 conversion factor, accepted conversion factor. Thank you.

1 MS. SEERS: We'll do that. Thank you.

2 DR. HIGGIN: So then if I could ask you to turn up
3 JT1.8, that's the undertaking to Mr. Wasylyk of Board
4 Staff, and I just have a couple of questions here.

5 MS. SEERS: Before we move on, can we mark that
6 letter?

7 MR. QUESNELLE: I think it was going to be under
8 the --

9 MS. SEERS: Under the same one. So the latter part is
10 also under J1.5.

11 DR. HIGGIN: So just to say, could you please turn up
12 JT1.8? And I had a couple of questions related to that.

13 And if you look at the response, there is an extract
14 there that deals in table 1 with the MACC estimates for
15 residential sector, space heating, and residential domestic
16 hot water; do you have that table? Table 1.

17 MR. GINIS: Yes.

18 DR. HIGGIN: Thank you. So what I'm trying to do,
19 very straightforward, is to go across to the right-hand
20 column and say, okay, here we have MACC estimates for the
21 residential sector only for 29 million cubic metres
22 effective, right? Is that -- do you understand -- have I
23 got the units correct?

24 MR. GINIS: Yes, well, that's the annual M cubed
25 savings from 2018 to 2020, so it's three years' worth of
26 savings.

27 DR. HIGGIN: Three years. Now, this is the key that I
28 wanted to come back to. What I'm trying to do is relate

1 that to the overall DSM plan savings over the same period.
2 Okay? So how would we do that? Can you assist me? Here's
3 a suggestion. You could, for example, say our planned
4 projection is that for two-18 to 2020 we would say X as
5 being how much is built into our plan. So I'm trying to
6 compare that to this estimate.

7 MR. GINIS: Yes, I think we have done that, so at
8 Exhibit 3, tab 4, Appendix A -- we don't need to go to
9 that, but that is our original evidence where we did that
10 analysis, where we compared the back opportunity to our
11 forecasted DSM savings over that same period of time. And
12 then further information to that is provided at Exhibit B,
13 Staff 30.

14 DR. HIGGIN: However, I couldn't find the residential
15 sector.

16 MR. GINIS: It's -- if we go to Exhibit B, Staff 31 --

17 DR. HIGGIN: Ah, okay, that's where it is.

18 MR. GINIS: -- page 7.

19 DR. HIGGIN: And that breaks out the residential
20 sector; correct?

21 MR. GINIS: That's correct, it shows the residential
22 DSM savings from 2018 to 2020 forecasted.

23 DR. HIGGIN: Okay, just to keep us out of suspense,
24 what was the difference?

25 MR. GINIS: Well, I think that's described, actually,
26 throughout --

27 DR. HIGGIN: Okay.

28 MR. GINIS: -- Exhibit B, Staff 30 --

1 DR. HIGGIN: We're going to look at --

2 MR. GINIS: -- went into quite a bit of detail.

3 DR. HIGGIN: Now, the other thing that is puzzling to
4 me a bit is residential hot water. Now, as I understand
5 your position, as you responded to Mr. Wasylyk, that the
6 home retrofit program, which is the bulk of the
7 residential, takes a whole-house approach, and therefore
8 you don't have specific information on domestic hot-water
9 savings and potential. Am I correct in making that
10 assumption?

11 MR. GINIS: That's correct.

12 DR. HIGGIN: Okay. So then the question is: How do
13 we understand whether you are achieving the potential for
14 domestic hot-water reductions through your current DSM
15 programs and also whether there is potential? I know it
16 says it's very expensive, \$117, for additional DHW savings.

17 MR. GINIS: So the analysis that we did, we looked at
18 the residential sector as a whole and compared it to our
19 residential -- sorry, the residential results in the MACC
20 and compared it to the residential forecast for our DSM
21 programs. That's at the highest level, and this is the
22 discussion that we had with Mr. Wasylyk at the technical
23 conference.

24 We also looked at the lowest level, which would be by
25 measure, and the MACC doesn't provide a savings abatement
26 opportunity by measure, but it simply identifies what all
27 the measures are, and it is was actually the table that we
28 were looking at earlier.

1 So what we did -- and this is described at Exhibit B,
2 Staff 31 in more detail -- is compare that list of those
3 measures identified in the MACC to the list of measures
4 that we currently have available through our DSM program to
5 identify any gaps, and those details are provided at
6 Exhibit B, Staff 31.

7 DR. HIGGIN: Okay. So other than aerators and other
8 water conservation measures, leaving aside those, talking
9 about energy now, does Union provide incentives for
10 domestic hot-water conservation in its residential program?

11 MR. GINIS: We do, yes, as part of our home reno
12 rebate program, it is a whole-home program, so there is
13 building envelope upgrades available, incentive upgrades,
14 so for insulation there is also for the equipment, for
15 space heating, which would be the furnace, and there's also
16 an incentive available for a high-efficiency water heater.

17 DR. HIGGIN: So you do have an incentive for that.
18 Okay.

19 MR. GINIS: That's correct.

20 DR. HIGGIN: Now, you don't provide the water heaters,
21 it's third parties that provide those; is that correct?

22 MR. GINIS: That's correct.

23 DR. HIGGIN: And so the incentive then goes to the
24 third-party service provider or to the homeowner? Which...

25 MR. GINIS: It goes to the homeowner as part of that
26 program.

27 DR. HIGGIN: Okay. Thank you.

28 So I had one clarification on your RNG. There has

1 been a lot of discussion on that, and we'll come back to
2 it, I'm sure, again, and it is just on the application
3 itself.

4 If you look at the application, and at paragraph 5 of
5 the application, if we could pull that up. And I'm looking
6 at subsection C.

7 MS. FLAMAN: Yes, we can see that.

8 DR. HIGGIN: You see that. Thank you.

9 So my question is I'm confused as to whether you are
10 still seeking that approval in this proceeding or whether
11 you've withdrawn that request for that approval?

12 MS. NEWBURY: So to answer your question, with respect
13 to -- I believe the question was answered through
14 procedural order number 2, where the Board has stated on
15 page 4 of that that:

16 "The OEB has determined that the RNG procurement
17 and funding model does not require approval. The
18 model provides that ratepayers will not be
19 allocated any costs arising from the incremental
20 costs of gas associated with the procurement of
21 RNG now or in the future, pursuant to any
22 contract entered into by the proponents for such
23 supply. The proponents would have to obtain OEB
24 approval for any allocation of such costs to
25 ratepayers."

26 So my interpretation of that is that the Board has
27 said that the mechanism for which we are seeking approval
28 does not explicitly require approval, but the cost

1 consequences do, and they will be part of a future
2 proceeding.

3 DR. HIGGIN: So you are withdrawing that request
4 because of that procedural order? Is that my
5 understanding?

6 MR. QUESNELLE: Perhaps, Ms. Seers, if you could
7 clarify?

8 MS. SEERS: Yes, that is correct. We are -- in light
9 of Procedural Order No. 2, that request is no longer
10 applicable.

11 MR. QUESNELLE: Could we just clarify then, because I
12 think what may have driven Dr. Higgin's confusion on that,
13 I think.

14 Ms. Newbury, had you mentioned earlier -- is this what
15 you were referring to when you said we are seeking approval
16 of the mechanism in the conversation around the NRG?

17 MS. NEWBURY: So again, the component of RNG
18 procurement that was included in this proceeding was the
19 mechanism.

20 MR. QUESNELLE: All right.

21 MS. NEWBURY: That was the point I was making, and not
22 so much the RFP and the outcomes of the RFP and that kind
23 of thing.

24 MR. QUESNELLE: But just the mechanism that we are
25 discussing right now, that I believe is now being withdrawn
26 or seeking that.

27 MS. NEWBURY: Correct.

28 DR. HIGGIN: Thank you. So my follow-up question: Are

1 there any cost consequences to the ratepayers from the
2 mechanism? And I think we will explore that in a minute.
3 But are you going to perhaps turn up your JT1.9 and have a
4 look at that, please?

5 I'm focusing right on the third paragraph of the
6 response, where it says:

7 "If the gas cost component of the RNG price is
8 different than the reference price set in rates
9 as part of the QRAM process, the difference will
10 be between those two and the reference price will
11 be recovered or refunded in PGVA deferrals as a
12 prospective adjustment in each QRAM."

13 That sounds to me like a cost consequence.

14 MS. NEWBURY: It is important to distinguish between
15 the cost of gas and the deferral accounting.

16 So the deferral account captures the difference
17 between the reference price and the -- I'm going to make
18 sure I get the right terminology.

19 All right. So if you go to page 3 of 4 in the first
20 paragraph, the third sentence where it says:

21 "Union reflects the Dawn reference pricing rates
22 and the difference between the Dawn reference
23 price and the total cost of gas supply in the
24 portfolio is recovered through a rate
25 adjustment."

26 So basically what we're saying is the RNG contract at
27 the fixed price is part of the total cost of gas supply
28 calculation for the portfolio, and it is the difference

1 between that and the reference price that gets recovered
2 through the deferral.

3 So again, we had quite a conversation on this
4 previously where again the table above line 9, the
5 important number is the one over on the far right-hand side
6 that demonstrates that the actual cost to customers is the
7 forecast cost, and therefore there is no variance related
8 to RNG in the deferral account.

9 DR. HIGGIN: That's because the RNG price is a fixed
10 price?

11 MS. NEWBURY: Correct.

12 DR. HIGGIN: And a fixed volume. And so if that
13 differs from the cost of gas, the average weighted-average
14 cost of gas, the WACG, then there would be a difference,
15 because you are talking about the weighted-average cost of
16 gas, which is the portfolio price. That's what I'm coming
17 to.

18 And that's one component. How small it changes the
19 over all WACG. Am I wrong?

20 DR. HIGGIN: If you'd like to take an undertaking to
21 look at this issue -- or you want to do it now?

22 MS. NEWBURY: I'm actually looking for the evidence
23 reference, because this was clearly outlined in the
24 evidence on which the Board made that determination.

25 So I am just looking to provide you with the exact
26 evidence reference.

27 DR. HIGGIN: Okay, that would be fine. I'm going to
28 put this to Enbridge, because we are running out of time.

1 But they did provide an undertaking that you have seen, I'm
2 sure, that explains this in more detail. So I'm happy to
3 have the reference.

4 MS. NEWBURY: So it is in evidence in Exhibit 3, tab 4
5 -- and I apologize. I cannot find the exact reference, but
6 I know we did talk about it in the last paragraph of Board
7 Staff 6, where we've said -- I'll let that get pulled up,
8 where we said the impact associated with actual prices for
9 gas and/or carbon being higher or lower than what it is
10 forecast as expected to be in the material.

11 So again, we recognize hindsight being 20/20, there
12 could be a difference between actual and forecast, but we
13 expect it to be very minimal. And we also recognize that
14 RNG procurement is making a very small portion of our gas
15 supply in cap-and-trade compliance plans, and to give you
16 an indication of that, as a percentage of our system
17 portfolio, if we were to procure the volume outlined in
18 Board Staff 8 -- which I believe is .49 pJs a year based on
19 \$50 million of funding at a \$16 RNG cost -- it would make
20 up .3 percent of our system portfolio.

21 DR. HIGGIN: Thank you. So are you saying -- it's not
22 material is the response? Thank you. Those are my
23 questions.

24 MR. QUESNELLE: Thank you, Dr. Higgin. Ms. Grice,
25 were you planning on attending tomorrow? We're past the --
26 was the -- the previous answer is that Dr. Higgin concluded
27 that that was the answer. So I think we're fine. Okay.

28 And Ms. Grice we'll see you in the morning?

1 MS. GRICE: Yes, you will. Thank you.

2 MR. QUESNELLE: Thank you. If there's nothing else
3 then that we have to discuss today, we'll adjourn and we'll
4 start at 9:30 tomorrow morning. Thank you.

5 --- Whereupon the hearing adjourned at 4:48 p.m.

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