



# ONTARIO ENERGY BOARD

**FILE NO.:** EB-2012-0433  
EB 2012-0451  
EB-2013-0074

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**VOLUME:** Technical Conference

**DATE:** June 13, 2013

EB-2012-0433  
EB-2012-0451  
EB-2013-0074

THE ONTARIO ENERGY BOARD

**IN THE MATTER OF** an application by Enbridge Gas Distribution Inc. for: an order or orders granting leave to construct a natural gas pipeline and ancillary facilities in the Town of Milton, City of Markham, Town of Richmond Hill, City of Brampton, City of Toronto, City of Vaughan and the Region of Halton, the Region of Peel and the Region of York; and an order or orders approving the methodology to establish a rate for transportation services for TransCanada Pipelines Limited;

**AND IN THE MATTER OF** an application by Union Gas Limited for: an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Parkway West site; an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the Town of Milton; an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Brantford-Kirkwall/Parkway D Compressor Station project; an Order or Orders for preapproval of the cost consequences of two long term short haul transportation contracts; and an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the City of Cambridge and City of Hamilton.

Technical Conference held at 2300 Yonge Street,  
25th Floor, Toronto, Ontario,  
on Thursday, June 13th, 2013,  
commencing at 9:00 a.m.

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TECHNICAL CONFERENCE  
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A P P E A R A N C E S

|   |   |
|---|---|
| MICHAEL MILLAR  | Board Counsel   |
| COLIN SCHUCH<br>PASCALE DUGAY<br>KHALIL VIRANEY<br>JOSH WASYLYK | Board Staff   |
| FRED CASS<br>SCOTT STOLL<br>EDITH CHIN                          | Enbridge Gas Distribution Ltd.                              |
| CRAWFORD SMITH<br>MARK KITCHEN<br>KAREN HOCKIN                  | Union Gas   |
| JOHN WOLNIK   | Association of Power Producers of<br>Ontario (APPrO)        |
| TOM BRETT   | Building Owners and Managers<br>Association (BOMA)          |
| JULIE GIRVAN<br>MARK GARNER                                     | Consumers Council of Canada (CCC)                           |
| VINCE DeROSE  | Canadian Manufacturers & Exporters<br>(CME)                 |
| ROGER HIGGIN  | Energy Probe Research Foundation                            |
| KENT ELSON<br>JACK GIBBONS                                      | Environmental Defence                                       |
| DWAYNE QUINN  | Federation of Rental-housing<br>Providers of Ontario (FRPO) |
| DAVE RHEAUME<br>AUDRY BAZINET                                   | Gaz Métropolitain   |

A P P E A R A N C E S

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| DAVID POCH                  | Green Energy Coalition (GEC)                     |
| RANDY AIKEN                 | London Property Management<br>Association (LPMA) |
| ROGER BEAMAN                | Markham Gateway                                  |
| JAMES SIDLOFSKY             | Metrolinx  |
| MARK RUBENSTEIN             | School Energy Coalition (SEC)                    |
| MURRAY ROSS<br>LISA DeABREU | TransCanada Pipeline Ltd.                        |
| JAMES WIGHTMAN              | Vulnerable Energy Consumers'<br>Coalition (VECC) |

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1 Thursday, June 13, 2013

2 --- On commencing 9:00 a.m.

3 MR. MILLAR: Good morning everyone. Is it 9 o'clock,  
4 so I would like to get started again. We're going to  
5 reconvene panel Union 1, Union's first panel.

6 I remind everyone we did start a bit early today. We  
7 only have today, we're going to have to do our very best to  
8 get through everyone. We have a number of panels to  
9 follow, so I'll ask for your cooperation in the hope that  
10 we can plow through all of this.

11 Mr. Smith, you had a clarification matter to start us  
12 off.

13 **UNION GAS DISTRIBUTION - PANEL 2, RESUMED**

14 **Mark Isherwood**

15 **Jim Redford**

16 **Paul Rietdyk**

17 **Chris Shorts**

18 MR. SMITH: Thank you, Mr. Millar. I thought  
19 yesterday there was a discussion about the concept of  
20 "around the horn" and the capacity that TransCanada is  
21 transporting and will be transporting going forward, and I  
22 thought it might make some sense for the benefit of the  
23 record to just ask Mr. Isherwood to clarify that. So why  
24 don't I do that?

25 Mr. Isherwood, you were asked about the concept of  
26 around the horn and capacity that TransCanada will be  
27 transporting or may be transporting Albion to Maple. The  
28 question is: What is your expectation as to the gas that

1 will or may be transported on that pipeline by TPCL; and  
2 then, secondly, how does that relate to the gas that Union  
3 and GazMét would like to transport?

4 MR. ISHERWOOD: The around the horn volumes are  
5 volumes that have been flowing since 2004 on the  
6 TransCanada system, essentially backhaul from Dawn through  
7 to Michigan into Manitoba, essentially, and then back  
8 around to Parkway.

9 Those volumes are existing volumes. They have been  
10 flowing, as I mentioned, since 2004. The capacity we're  
11 talking about in terms of Union Gas and Gaz Métro flowing  
12 on the Parkway to Albion, and then Albion to Maple build  
13 are new volumes bringing new access to Dawn for both Gaz  
14 Métro and for Union customers in eastern Ontario.

15 So to the extent that if TransCanada volumes were to  
16 flow on that same path, it would basically occupy the  
17 capacity that is being created and paid for by Ontario  
18 consumers, and it's existing volumes.

19 So the gas benefits we talked about for Union Gas and  
20 Gaz Métro would not be available for our customers in  
21 eastern Ontario and for the customers in Quebec.

22 MR. SMITH: Thank you. Those are the only questions I  
23 had.

24 MR. MILLAR: Thank you, Mr. Smith. Mr. Brett, are you  
25 prepared to proceed?

26 Your microphone is still off, but I am done. Maybe  
27 Mr. Rubenstein could go, if you need a moment.

28 **QUESTIONS BY MR. RUBENSTEIN:**

1 MR. RUBENSTEIN: Thank you very much. That clarified  
2 a number of things. I was wondering -- so, firstly,  
3 yesterday there was discussion - and I think Mr. Millar  
4 used the term "Union's plan B" - if it does not bring  
5 forward a leave to construct later on this year for a  
6 project between Albion and Maple, that it would consider  
7 what you had termed a Parkway to Maple project. Am I  
8 correct?

9 MR. ISHERWOOD: That's correct. And I think I  
10 referred to Union had a project that year that would go  
11 from Parkway to Maple, and we actually did open season on  
12 that project.

13 I should clarify that when we had proposal last year,  
14 we were actually at that point contemplating being able to  
15 use the Parkway to Albion pipeline that Enbridge is  
16 building, just to clarify that.

17 MR. RUBENSTEIN: That was going to be my question.  
18 The original plan was it would be Parkway to Albion to  
19 Maple. So the plan B would not be that path. It would be  
20 directly from Parkway to Maple?

21 MR. ISHERWOOD: To Maple. As I mentioned yesterday, I  
22 think everybody in the room would agree it makes most sense  
23 if you have one pipeline built down the 407 corridor, not  
24 two. But if it had to, we would look at plan B.

25 MR. RUBENSTEIN: Yesterday, Union seemed surprised by  
26 the MOU, the terms of the MOU between Enbridge and  
27 TransCanada for use of the segment A of its plan.

28 I was wondering if we could talk about what Union's

1 expectations were before they saw the MOU. What was their  
2 understanding of the arrangement between TransCanada and  
3 Enbridge and specifically what type of access Union could  
4 potentially have?

5 MR. ISHERWOOD: What surprised us is really the option  
6 2 in the MOU, primarily, the fact that there was  
7 contemplation of a delay, and in fact the provision in  
8 option 2 that talked about TPCL may terminate the volumes  
9 or reduce the volumes from their 2012 open season to allow  
10 for option 2 to happen.

11 Then as Ms. Giridhar mentioned yesterday, the  
12 amendment that was made -- a second amendment was made May  
13 22nd, I believe. TPCL actually contemplated no longer  
14 using that path for the 2012 open season volumes, which  
15 were the new capacities for GMI, Gaz Métro, and Union but,  
16 rather, to use it for their own volumes on the same path,  
17 and essentially force out or fill the pipe before we can  
18 actually get access to it for our customers in eastern  
19 Ontario.

20 MR. RUBENSTEIN: From the evidence of this proceeding  
21 that was filed by Enbridge before the interrogatory  
22 responses, from my understanding, the proposed plan for  
23 segment A was it would be a shared use between TransCanada  
24 and Enbridge. And so my question is: What was Union's  
25 belief about its access, because some of the basic  
26 parameters are still -- or at least seem to me to be the  
27 same, that Enbridge would have access to a certain point,  
28 certain capacity, and then TransCanada would have the rest.

1 I think the split was 40/60.

2 MR. ISHERWOOD: I think our expectation was we would  
3 have open access to the capacity through the TransCanada  
4 open season. When they've elected unilaterally not to  
5 build that piece of pipe and essentially lock out the  
6 volumes of Gaz Métro and Union Gas, and, instead, try to  
7 put their own volumes on the path, that is what we find  
8 objectionable.

9 MR. RUBENSTEIN: Thank you very much. I was wondering  
10 if interrogatory A1.CCC.8 could be put up on the screen.

11 In this question, we were asking about the probability  
12 of failure of a number of things. The first question was  
13 on the Dawn-Parkway system. In answer (a), the second  
14 sentence says:

15 "Based on the last three years of operating, the  
16 probability of failure for a major component is  
17 2.7 percent."

18 I just want to clarify. Is that 2.7 percent per year  
19 or in the life of any major component?

20 MR. RIETDYK: That's per year, so based on an average  
21 of 2,000 operating hours for a particular piece of  
22 equipment.

23 MR. RUBENSTEIN: But that wouldn't be a failure of the  
24 Dawn to Parkway system. That would just be one component?

25 MR. RIETDYK: That's correct. It would be a failure  
26 of a single compressor component within the Dawn to Parkway  
27 system.

28 MR. RUBENSTEIN: So what would be the probability of

1 failure of the Dawn to Parkway system, or I should say - be  
2 more specific what I mean by failure - a failure that would  
3 not allow you to meet your demands at Parkway?

4 MR. RIETDYK: Maybe I'll phrase it in terms of the  
5 reliability of the system. So the loss of critical unit  
6 protection that we have on the Dawn to Parkway system, that  
7 provides us with a 99.9 percent reliability for the system  
8 itself.

9 MR. RUBENSTEIN: So in number (c) we asked the Dawn to  
10 Parkway system with the addition of the proposed Parkway  
11 facilities, and that would include the LCU unit?

12 MR. RIETDYK: That's correct. So I can clarify that.  
13 The 99.9 percent reliability is from Dawn to Parkway. Past  
14 Parkway, we don't have that sort of reliability in place  
15 right now, because we're wholly reliant upon two  
16 compressors that will be fully utilized, both Parkway A and  
17 Parkway B. We don't have LCU downstream of Parkway.

18 MR. RUBENSTEIN: Do you know what the reliability at  
19 Parkway is, then?

20 MR. RIETDYK: We know the reliability of the  
21 individual units are from that end. So we've looked at it  
22 a number of different ways. We looked at the reliability  
23 or the failure rate of Parkway A, which was 3.9 percent.  
24 We looked at the reliability or the failure rate of Parkway  
25 B, which was 6.5 percent.

26 And so that would seem to be in line; a little bit  
27 higher, but in line with the failure rates we've seen on  
28 similar type of equipment across the rest of our system.

1 MR. RUBENSTEIN: Okay. My last question - and you  
2 don't need to pull you have interrogatory - you were asked  
3 to provide certain material that's were provided to the  
4 board of directors, and the answer was essentially that it  
5 actually was going to the board of directors, but it hasn't  
6 yet?

7 MR. ISHERWOOD: That's correct.

8 MR. RUBENSTEIN: And so I was wondering if you could  
9 undertake to provide -- sorry, to back up, it was going to  
10 go to the board of directors in June?

11 MR. ISHERWOOD: It actually went Monday and Tuesday of  
12 this week.

13 MR. RUBENSTEIN: Can I ask that Interrogatory A1-CCC-  
14 4, by way of undertaking be responded to?

15 MR. ISHERWOOD: That was a copy of the presentation?  
16 That's correct? I'm trying to remember.

17 MR. SMITH: Should we pull up the interrogatory?

18 MR. RUBENSTEIN: Sure. That's probably helpful. A1,  
19 CC 4.

20 MR. ISHERWOOD: We can provide that presentation.

21 MR. MILLAR: JT2.1.

22 **UNDERTAKING NO. JT2.1: TO PROVIDE RESPONSE TO**  
23 **EX1.A1.UGC.CCC.4. INCLUDE UPDATE TO EXTENT UNION**  
24 **BOARD IS AWARE OF TCPL UPDATES.**

25 MR. RUBENSTEIN: Those are my questions.

26 MR. MILLAR: Thank you, Mr. Rubenstein.

27 Mr. Brett, you're prepared?

28 **QUESTIONS BY MR. BRETT:**

1 MR. BRETT: Good morning, panel. My first question is  
2 -- is it Mr. Elie (sic) on the right-hand side? I just  
3 want to make sure I have your name right. I think it's E-  
4 L-I-E?

5 MR. RIETDYK: Sorry, are you referring to me?

6 MR. BRETT: Yes.

7 MR. RIETDYK: My name is Paul Rietdyk.

8 MR. BRETT: I didn't have that right. Sorry. I want  
9 to make sure we've got the right man here.

10 You mentioned yesterday -- and I haven't looked at the  
11 transcript again this morning -- you mentioned yesterday  
12 before we started or as we were starting that you had  
13 arranged for a lease of a compressor from TransCanada, I  
14 believe.

15 And is that compressor that you have leased, arranged  
16 to lease, going to be your LCU compressor? Is that what  
17 you were telling us?

18 MR. RIETDYK: No. I can clarify that for you. What  
19 we've done is arranged for a spare unit in the case of a  
20 failure of one of the Parkway B units, from Rolls Royce,  
21 not from TransCanada.

22 MR. BRETT: I see. Where is that compressor going to  
23 be put?

24 MR. RIETDYK: That compressor sits in reserve in Rolls  
25 Royce's fleet. It's not in our fleet. Rolls Royce has a  
26 program that they offer spare compressors to its customers  
27 in case of these types of failures. We would be able to  
28 access that compressor within five working days.

1 MR. BRETT: Where is it now?

2 MR. RIETDYK: Sorry, it's the engine on the -- it's a  
3 spare engine, so it's not the actual compressor. There's a  
4 number of different components. So it's the RB 211 engine.

5 MR. BRETT: Where is that engine located at the  
6 moment?

7 MR. RIETDYK: It would be located in Mount Vernon.

8 MR. BRETT: Mount Vernon, Ontario?

9 MR. RIETDYK: No, no. In the United States.

10 MR. BRETT: Mount Vernon in DC, in other words, or  
11 Virginia?

12 MR. RIETDYK: Yeah, that's correct.

13 MR. BRETT: George Washington's home. So that's a  
14 piece of it. Is that the -- that's the key piece, then?

15 MR. RIETDYK: That is not equivalent to a loss of  
16 critical unit compressor. That simply provides the ability  
17 to recover from an actual engine failure.

18 But I should emphasize that we can access the  
19 compressor in five days. It would take another four to  
20 five days to install a compressor, so should there be a  
21 failure of the engine itself at Parkway B, the recovery  
22 time would be approximately eight to 10 days to install a  
23 new engine.

24 MR. BRETT: Okay. So it's a mitigation measure rather  
25 than a replacement? It's a --

26 MR. RIETDYK: That's correct. There's nothing that  
27 can replace LCU, because you really need the ability to  
28 respond very quickly to a loss of critical unit at Parkway.

1 MR. BRETT: Just maybe while we're on the subject of  
2 compressors -- because I don't want to lose my way here --  
3 I would like -- you've answered if you turn up BOMA No. 3,  
4 most of my questions actually will be around this one IR.  
5 It's a lengthy one. It's nine pages. And part of it has  
6 to do with questions about the compressors, your Parkway  
7 compressors.

8 If you look first of all at page 3, what you have  
9 there, I just want to make sure I understand the  
10 terminology and what you're telling us or telling me there,  
11 telling BOMA there.

12 I want to look at each of these columns briefly.

13 The column, the first column on the left -- it's the  
14 table on page 3 I'm looking at -- the first column on the  
15 left is the year.

16 The second column, "Total volume required through  
17 Parkway compression," now, that is -- those are volumes are  
18 required to meet your commitments; is that the idea?  
19 Either yours or other people you are compressing gas for?  
20 When you say "total volume required," you mean that those  
21 are --

22 MR. ISHERWOOD: That would be the contracted volume or  
23 expected contracted volume.

24 MR. BRETT: Now, a couple of questions on that. You  
25 have -- there's a big jump there from '14/'15 to '15/'16 of  
26 about 600,000 tJs a day. That is -- what you're getting  
27 there is the additional contract, the contracted volumes  
28 that will come into play with -- that you were talking

1 about yesterday, right? Your own volumes for your eastern  
2 and northern area, the GazMét volumes and some additional  
3 Enbridge volumes?

4 MR. ISHERWOOD: That's correct.

5 MR. BRETT: That also assumes that compressor D comes  
6 in what, in November 1, 2015?

7 MR. ISHERWOOD: That's correct.

8 MR. MILLAR: Then if you go above that, just a small  
9 point, but look at '13/'14, versus '14/'15. Why is there a  
10 decrease there of about 100,000 tJs a day? That seems a  
11 little counterintuitive to me. Do you know what that is  
12 about?

13 You could give me an undertaking if you wish.

14 MR. ISHERWOOD: We probably should on that one.

15 MR. MILLAR: JT2.2.

16 **UNDERTAKING NO. JT2.2: TO PROVIDE RESPONSE AS TO WHY**  
17 **THE LOWER TOTAL VOLUME REQUIRED THROUGH PARKWAY IN**  
18 **2013/2014 (2537 VS 2465).**

19 MR. BRETT: If you look above in answer to (d), just  
20 above the table, on the second line you say:

21 "Please note forecast volumes assume any  
22 available surplus has been sold."

23 I just want to make sure I understand that. That's --  
24 what do you mean by that? Are you saying there that the --  
25 those volumes that you've listed for those days, I mean,  
26 they are very close to 100 percent, particularly for the --  
27 let's take the first three years, '12/'13, '13/'14,  
28 '14/'15. What are you saying when you say "any available

1 surplus has been sold"?

2 Like, what's the surplus and sold to whom,  
3 generically?

4 MR. REDFORD: So to the extent that we had surplus  
5 capacity on the Dawn-Parkway system and specifically  
6 through Parkway, we would assume that we were able to sell  
7 that. So this would be a fully utilized system.

8 MR. BRETT: Effectively you are saying -- that's what  
9 I wanted to get at. I mean, it's sort of -- not quite  
10 tautological, but you are saying it's always going to be  
11 full in those three years, or at least the last two years?

12 '12/'13, you have -- you show at a 93 percent  
13 utilization? That's why I'm...

14 MR. REDFORD: To the extent that there's surplus  
15 capacity, we'll look to sell that capacity.

16 MR. BRETT: Does that mean that the -- oh, I see. The  
17 '12/'13 is really an actual number, essentially, eh?  
18 Sorry, I didn't -- let me just repeat that.

19 I was looking at the 93 percent in '12/'13, and I  
20 guess the answer to that is that's an actual number?  
21 That's the experience you've had?

22 MR. ISHERWOOD: That's our current experience.

23 MR. BRETT: You didn't sell everything for '12/'13,  
24 but you would expect to sell everything for the next couple  
25 of years?

26 MR. ISHERWOOD: I believe when it says "utilization  
27 percent," that's really volumes going through Parkway, not  
28 necessarily the whole system.





1 MR. BRETT: Okay. But then if you go along to Parkway  
2 B maximum horsepower utilization, the numbers are quite --  
3 are quite substantial. They are not 100 percent, but they  
4 are in the 70s and 80s. So that's telling me Parkway B is  
5 the compressor that gets used first?

6 MR. RIETDYK: It gets used most often to meet the  
7 current demands at Parkway; correct.

8 MR. BRETT: And the -- what then is monthly peak  
9 export day?

10 MR. RIETDYK: So that would be the highest exports for  
11 any given month, and that would be the day of the month  
12 where you have the highest --

13 MR. BRETT: By exports, you mean through the  
14 compressors.

15 MR. RIETDYK: That's right, compressed volumes through  
16 the compressors.

17 MR. BRETT: Then if you go over to A, the next column,  
18 "Parkway A average utilization for the month", you get --  
19 let's look at the entry fourth from the bottom, 23 January  
20 2013. You have 6 percent average utilization. You have  
21 zero percentage of maximum horsepower utilization.

22 So how are those numbers reconciled?

23 MR. RIETDYK: Can you repeat the question again?

24 MR. BRETT: Yes. If you look at -- I'm looking at  
25 column 2 and column 4. Column 4 says "Parkway A", that's  
26 the smaller compressor, "average percentage utilization for  
27 the month." That's average for the month.

28 And if you look down -- and let's look along the line

1 that is January 23rd, 2013. You show 6 percent as the  
2 average utilization of that month. I assume that's sort of  
3 a portion of a month.

4 MR. RIETDYK: I understand where you're going now. On  
5 January 23rd, the Parkway A compressor was not utilized,  
6 but for the month it was utilized 6 percent of the time.

7 MR. BRETT: Okay. And January 23rd happened to be the  
8 peak export day for the month of January.

9 MR. RIETDYK: That's correct.

10 MR. BRETT: But notwithstanding that, all of the  
11 necessary horsepower was supplied by B?

12 MR. RIETDYK: For January 23rd, that's correct.

13 MR. BRETT: On that day, yes. Okay. And then the  
14 Parkway B utilization, average utilization, is the same as  
15 we discussed, the same principles we discussed, and it  
16 shows higher utilization rates for most months -- rather,  
17 on most -- yes, most months, it has substantially higher.  
18 And that ties in with what we said a moment ago.

19 What I wanted to do, then, is ask you to compare those  
20 percentage utilizations, say, of Parkway B and Parkway A,  
21 and you can do kind of the mental arithmetic to merge them,  
22 if you like, but compare that with the utilization number  
23 over on table -- on page 3, where you're looking at a  
24 number of like 93 percent in '13.

25 It seems that the number, the utilization figure in  
26 the table on page 3, is a lot higher than the  
27 utilization numbers on page 5. I just wondered why that  
28 is.

1 MR. RIETDYK: So the table on page 5 speaks to the  
2 actual utilization of the compressors for actual winter  
3 conditions for that period of time. On table -- on page 3  
4 in part (d) the percent utilization, the question was  
5 answered as a percentage of utilization on a peak day flow.

6 So in the case of peak day flow, we would be required  
7 to use both Parkway A and Parkway B, and that would be the  
8 projected utilization for that period of time.

9 MR. BRETT: Okay, that's helpful. Now, just going  
10 back to yesterday again, Mr. Isherwood, you talked about  
11 the requirements that you would have to move gas beyond  
12 Parkway, and I believe -- I know these numbers are in  
13 evidence and I know they are in the transcript -- I think  
14 they are in the transcript from yesterday.

15 I just wanted to confirm. You said that you would  
16 have -- first of all, you would have your own demands for  
17 your eastern and northern area for going forward, and you  
18 said that was about \$100,000 gJs a day?

19 MR. ISHERWOOD: 110.

20 MR. BRETT: 110. Then you said there was GazMét, a  
21 requirement that you had to -- or an interest expressed at  
22 least from GazMét, and perhaps a contract, an interest --  
23 GazMét was going to require 268,000, was that -- or 278?

24 MR. REDFORD: 258,000 gJs, and that is contracted.

25 MR. BRETT: That's contracted between you and GazMét  
26 at this stage?

27 MR. REDFORD: Correct.

28 MR. BRETT: Contracted in the sense of contracted from

1 Dawn to Parkway?

2 MR. REDFORD: That's correct.

3 MR. BRETT: Okay. And then you said that the other --  
4 Enbridge has asked, has requested, to move 400,000 of their  
5 current M12 -- move the delivery point from Parkway  
6 suction, which of course doesn't go through compression, to  
7 Parkway discharge, which means they are going to put it  
8 through compression.

9 Now my question is: What is your understanding of the  
10 reasons that Enbridge wished to make that switch?

11 MR. REDFORD: It is directly associated with the GTA  
12 project. Enbridge's GTA project one of the flexibilities  
13 that they were looking for was entry point flexibility into  
14 their system and the ability to diversify supply in the  
15 distribution system in the GTA.

16 So they were going to move the 400 a day that's  
17 contracted Dawn-Parkway, the incremental contracts on Dawn-  
18 Parkway, as well as shift 400 from suction to discharge, so  
19 to speak, so that they could move 800,000 gJs a day to the  
20 Albion point. It was part of their gas supply management.

21 MR. BRETT: Focusing for the moment on the existing  
22 400 that they are buying or they're taking delivery of now  
23 at Enbridge suction, your understanding is they simply want  
24 to have that come in at Albion rather than Enbridge  
25 suction, because it diversifies their entry points? And  
26 I'm...

27 MR. REDFORD: That's correct. The reason that they  
28 were looking at taking the 400 a day of incremental, as

1 well as the shift to Albion, was to --

2 MR. BRETT: No, I'm going to deal with the incremental  
3 just in a moment, but on the shift, now, in that case did  
4 you agree to change the delivery point?

5 MR. REDFORD: Yes.

6 MR. BRETT: And if you wish, could you have refused to  
7 change the delivery point?

8 MR. ISHERWOOD: I think the way our system operates,  
9 Mr. Brett, is the Dawn-to-Parkway toll or tariff is the  
10 same whether you go to the suction side or the discharge  
11 side. It's the same toll. The only customer that takes  
12 gas at the suction side is Enbridge, and they have a fairly  
13 large contract, actually, going into their system off the  
14 suction side, but to the extent the customer needs  
15 additional capacity on the discharge side to diversify, as  
16 Mr. Redford mentioned, we would accommodate that.

17 MR. BRETT: You are saying it's a good customer. They  
18 have a lot of -- the capacity is going to be on the Dawn-  
19 to-Parkway in any event, upstream, and so you would do what  
20 you could to accommodate them in that sense? You would  
21 have no reason to sort of not allow them, not permit the  
22 change?

23 MR. ISHERWOOD: We have no reason to do that, and in  
24 the context of them trying to reinforce the GTA, I think  
25 it's the thing that they have asked us to do.

26 MR. BRETT: Was it your understanding, as well, that  
27 they wished to move that gas to compression because they  
28 wished to either -- well, they wished to relieve the

1 pressure, relieve the pressure on the lines -- the line  
2 leading away from Enbridge Parkway, into the central part  
3 of the operation?

4 MR. ISHERWOOD: Our understanding -- and I think some  
5 of this came out yesterday, as well, with the Enbridge  
6 panel, but 400 of it is going from suction side to  
7 discharge side. The 400 on the suction side that's  
8 shifting, part of that will be replaced by the 200,000 a  
9 day that Enbridge is contracting with TPCL from Niagara to  
10 Parkway.

11 MR. BRETT: That's my understanding, or that would be  
12 my inference, yes.

13 MR. ISHERWOOD: 200 is made up that way, and I  
14 understand the other 200 is for future growth within the  
15 GTA.

16 MR. BRETT: Right. It would be for -- well, it's  
17 existing gas; it's a gas they are already using. And the  
18 200, as we understand it, or at least as I think is clear  
19 from the evidence, the Enbridge suction gate station is at  
20 capacity at the moment, right? So the 200, the other 200  
21 of the 400 that's been shifting is existing gas that they  
22 are already using in their system, right?

23 MR. ISHERWOOD: The 200 they're shifting that is not  
24 being replaced, it's gas that's currently being used or its  
25 capacity is currently being used today.

26 MR. BRETT: So it's not for growth as such. Really  
27 it's for -- it's to reroute some of their existing gas in  
28 through another entry point, effectively?

1 MR. ISHERWOOD: It's the whole strategy of  
2 diversifying entry points, and again, Enbridge is probably  
3 in a better position to talk to that, but --

4 MR. BRETT: I understand that. Okay. Then, as you  
5 say, the 200,000, your understanding is the other 200,000  
6 of the shift is the gas that they were going to bring up  
7 your -- bring in from Niagara and through TransCanada's  
8 domestic line, or Hamilton line?

9 MR. ISHERWOOD: Correct.

10 MR. BRETT: I just -- glad you raised the 400 new  
11 incremental, because I sort of lost that a little bit in  
12 the dust. That 400,000 is something -- is an amount they  
13 have already contracted for on Dawn-to-Parkway? The second  
14 400,000?

15 MR. REDFORD: The 400,000 of incremental Dawn-Parkway  
16 transport, they have contracted for that.

17 MR. BRETT: When was that contracted for?

18 MR. REDFORD: For November 1st of 2015.

19 MR. BRETT: 2015?

20 MR. REDFORD: Yeah.

21 MR. BRETT: So they are basically --

22 MR. ISHERWOOD: That was actually contracted through  
23 the 2012 open season that Gaz Métro and Union also  
24 participated in. So it's all three companies participated  
25 in the same April, May 2012 open season.

26 MR. BRETT: So you sort of contract from each other,  
27 as part -- is that the idea?

28 MR. ISHERWOOD: No, the open season was held, and Gaz

1 Métro entered the open season. Enbridge entered the open  
2 season --

3 MR. BRETT: It's your open season?

4 MR. ISHERWOOD: It's our open season, yes. And Union,  
5 we can't contract ourselves, but we also required the  
6 capacity for ourselves, as well.

7 MR. BRETT: That was 2012 open season for delivery  
8 2015 at Dawn, from Dawn-to-Parkway?

9 MR. ISHERWOOD: That's correct.

10 MR. BRETT: Now, just, if I may, going for a moment  
11 back, switching back to the discussion you had a little  
12 yesterday on the sort of new, fast-breaking event or  
13 whatever we want to call it, of TransCanada's situation,  
14 your situation, the open -- you referred to an open season  
15 a moment ago in talking with Mr. Smith, I guess. In any  
16 event, you were saying that what you sought with respect to  
17 the -- this was answering your question about your -- the  
18 question about your expectations. I guess it was Mr. -- it  
19 was the second questioner.

20 You said -- you were asked about your expectations for  
21 what sort of access you would have to the Albion, to the  
22 Albion pipeline, the joint pipeline, the pipeline that was  
23 originally conceived as a joint project between Enbridge  
24 and TPCL.

25 And you said that you would expect that -- as I  
26 paraphrase -- that you would be able to get access for the  
27 gas that you had -- the contract, essentially, or the  
28 commitment that you had made to TransCanada in their open

1 season for -- to move gas along that route.

2 My question was: What open season was that? I just  
3 want to make sure I get these open seasons sequentially  
4 straight. That's...

5 MR. ISHERWOOD: Union Gas held an open season last  
6 spring, in April, and it ended early May, for both Dawn-to-  
7 Parkway as well as Dawn-to-Maple.

8 MR. BRETT: Dawn-to-Maple and Dawn-to-Parkway?

9 MR. ISHERWOOD: Right. And that was really to address  
10 the fact that there was a very large constraint that's  
11 blocking the ability of Ontario and Quebec customers to get  
12 back to Dawn.

13 And at that point, TPCL was not prepared to build, and  
14 we have already said that if they won't build, then Union  
15 will because that constraint is very important for Ontario  
16 and very important for Quebec customers, as well.

17 So we did the open season, and TPCL actually had their  
18 parallel open season. Shortly after we launched ours, they  
19 launched theirs, so it would have been in the April, May  
20 time frame, as well.

21 MR. BRETT: April, May of 2012?

22 MR. ISHERWOOD: Correct. And both Gaz Métro and Union  
23 agreed that to the extent that TPCL was willing to build  
24 and no longer block the path, that we would be prepared to  
25 enter the open season. And the advantage it actually  
26 offered was their capacity would be available in 2014,  
27 which meant the \$100 million-plus that the two companies  
28 would be able to pass on to their customers would be

1 available in 2014.

2 Mr. BRETT: That was 400,000 gJs a day?

3 MR. ISHERWOOD: I think the Gaz Métro and Union  
4 volumes combined would add to 368.

5 MR. BRETT: 368?

6 MR. ISHERWOOD: 368,000.

7 MR. BRETT: This is the same...

8 MR. ISHERWOOD: The same exact number.

9 We were notified in September that TransCanada would  
10 not be able to build in 2014; they delayed it to 2015,  
11 which meant that that \$130 million of savings would not be  
12 available to our customers in eastern Ontario and Quebec.

13 MR. BRETT: The 130 million being the measure of?

14 MR. ISHERWOOD: It's both the Gaz Métro savings that  
15 they've calculated, as well as the savings that we've  
16 calculated for our customers.

17 MR. BRETT: Gas savings as a result of doing it this  
18 -- okay.

19 MR. ISHERWOOD: Natural gas savings. As I mentioned  
20 yesterday, we were further notified in April that the -- we  
21 will no longer be building.

22 MR. BRETT: So in this circumstance, then, is it your  
23 intent in this proceeding to essentially seek access to  
24 that Enbridge line?

25 In other words, without getting into all or the  
26 possible variations on the theme but to put it at a high  
27 level, to ask the Board to condition approval of that line  
28 on open access to you and GazMét, to at least the extent of

1 the 368?

2 MR. SMITH: I think it's fair to say, Mr. Brett, that  
3 Union is in the position of evaluating its options,  
4 including the positions it will take in relation to the  
5 approvals that ought to be granted by the Board.

6 MR. BRETT: You are not saying -- really, at this  
7 stage you are saying you haven't really decided what you  
8 will do, but that you're not ruling out what I just said?

9 MR. SMITH: Not ruling anything out or in.

10 MR. BRETT: Okay. Those are my questions. Thank you.

11 MR. MILLAR: Thank you, Mr. Brett. Mr. Quinn, did you  
12 want to go next?

13 **QUESTIONS BY MR. QUINN:**

14 MR. QUINN: Yes, thank you, Mr. Millar. Before I  
15 proceed, I was interested in the discussion that you were  
16 having with Mr. Brett related to BOMA 3, and I don't know  
17 that we need to refer to it, but it should be fairly handy.  
18 If we can just bring that back up?

19 I'm speaking specifically to January 23rd, this past  
20 year. One of the nice things in -- for utilities to  
21 actually have a really cold day to see how its system  
22 operates on that cold day. What I didn't hear, and maybe  
23 it's embedded in here, so if it is, maybe you can tell me,  
24 but does Union know what the heating degree days were on  
25 January 23rd, 2013.

26 MR. RIETDYK: I don't have that information with me  
27 right now.

28 MR. QUINN: I respect that, and so maybe by way of

1 undertaking, if Union could provide the heating degree days  
2 for January 23rd, and I'm just going to expand upon that,  
3 if I may, Mr. Millar, before we take an undertaking number,  
4 to provide whether the interruptibles were on or off that  
5 day, and then based upon projecting from whatever the  
6 heating degree days were on the day to whatever peak day  
7 would be, based upon Union's typical analysis, what  
8 percentage utilization Union would project for a peak day  
9 for the numbers that were provided in that table?

10 MR. ISHERWOOD: Just a point of clarification, Mr.  
11 Quinn, I guess. Volumes going through Parkway end up  
12 anywhere from Kapuskasing to Boston. Which heating degree  
13 days do you want us to use?

14 MR. QUINN: Good point. Union has submitted  
15 information on weather methodology, but current Board-  
16 approved weather methodology with expectations for what  
17 Union would plan for in its system going into the 2013  
18 winter, so the peak days you would use when you were doing  
19 your system planning for that winter.

20 MR. RIETDYK: So what we've planned for is actually  
21 identified in the table in page 3 in (d). That would be  
22 the percent utilization of those plants, and even coming to  
23 this coming winter we're projecting that we'll need both  
24 Parkway A and Parkway B in order to compress volumes on a  
25 cold winter day; not just a peak day, but a cold winter  
26 day.

27 MR. QUINN: I can appreciate that there is some  
28 variability around it, but what we have here is actual

1 degree heating days and actual utilization. So I would  
2 like if Union would, by way of undertaking, provide us the  
3 heating degree days, interruptibles on or off, and then  
4 project that to a 44 degree day interruptibles off in terms  
5 of what your analysis could project utilization to be.

6 Clearly, if you want to put some caveats on it in  
7 terms of the weather methodology used or assumptions that  
8 go into that, that would be respected, also.

9 MR. RIETDYK: We could certainly provide you with the  
10 actual conditions on January 23rd, Mr. Quinn. When it  
11 comes to actually doing system design, we're required to  
12 meet all of our firm obligations for those particular days.  
13 There's no direct correlation between what happened on  
14 January 23rd and what we would expect to see on a peak  
15 winter day.

16 MR. QUINN: Actually, you may have given us a helpful  
17 way of looking at this, Mr. Rietdyk. You know what your  
18 obligations were in terms of firm obligations. You also  
19 have information as to what was actually nominated.

20 So to the extent that there was an under-nomination  
21 relative to your expectation for those firm contracts, you  
22 can embed that also in the analysis and say, if all of  
23 those firm obligations had to be met, then this is what we  
24 would project as utilization.

25 MR. RIETDYK: We'll undertake to provide you with  
26 those conditions on that particular day.

27 MR. QUINN: Thank you, Mr. Rietdyk.

28 MR. MILLAR: JT2.3. Obviously it's a lengthy

1 undertaking, at least in terms of words, so we may have to  
2 let the transcript speak for itself on that.

3 **UNDERTAKING NO. JT2.3: TO ADVISE HEATING DEGREE DAYS**  
4 **ON JANUARY 23, 2013; WERE INTERRUPTIBLES ON OR OFF;**  
5 **AND WHAT PERCENTAGE UTILIZATION WOULD UNION PROJECT**  
6 **FOR THIS DAY.**

7 MR. QUINN: I think Mr. Rietdyk and I understand one  
8 another. We had the pleasure of serving together some  
9 decades ago together at Union Gas, so I think we're on the  
10 same page here.

11 Just in that regard, I guess I'm going to start off  
12 with a high-level question, and then I don't know who may  
13 be on Union's later panel, so you can move me to the next  
14 panel that's appropriate.

15 I did want to ask about a FRPO interrogatory, ask our  
16 scoreboard operator to get up FRPO 22, if you would,  
17 please? It's Union.A1.FRPO.22.

18 Union had provided information for us, and I would  
19 appreciate that the printing is quite small, but if you can  
20 just turn it up, I'm not sure we're going to have to get  
21 into any of the detail here. I think that will be  
22 appreciated by most.

23 What I wanted to show in this picture I'll get to in a  
24 moment, first off, does Union use a transient or steady-  
25 state simulation for its transmission needs?

26 MR. RIETDYK: For the Dawn-Parkway system, I assume  
27 that is what you are referring to, we use the transient  
28 state simulation.

1 MR. QUINN: Do you use also that for any of the other  
2 transmission laterals that come off the Dawn-Parkway  
3 system?

4 MR. RIETDYK: Yes, we do.

5 MR. QUINN: And those laterals would have operating  
6 pressures down to maybe maximum operating pressures of 275  
7 pounds?

8 MR. RIETDYK: No, not at the inlets of the various  
9 stations. The constraint is actually at Parkway, which is  
10 500 pounds on the suction side, or at the Kirkwall take-  
11 off, which is 650 pounds.

12 MR. QUINN: Maybe I should clarify my question. Do  
13 any of those laterals that come off have operating  
14 pressures that would be in the range of 275 pounds?

15 MR. RIETDYK: No, they don't.

16 MR. QUINN: Thank you. Now, moving on to the  
17 specifics, schematically you can see this in the schematic  
18 that is provided. If you focus on the Brantford to  
19 Kirkwall, that is the loop that Union is applying for in  
20 this proceeding, the remaining 48 inch; is that correct?

21 MR. RIETDYK: That's correct.

22 MR. QUINN: Downstream, though, of Kirkwall, it shows  
23 three lines, and if we're looking at those lines simply,  
24 the one line that's missing is the 42 inch that -- so you  
25 have three lines. You do have 48 between Kirkwall and  
26 Parkway, but you do not have a 42 inch?

27 MR. RIETDYK: That's correct.

28 MR. QUINN: So this may relieve some. If we can move

1 to the next interrogatory, 23, in that interrogatory we  
2 asked about providing data on how adding an additional loop  
3 of pipe between Dawn and Kirkwall would be preferential to  
4 expanding facilities capacity between Kirkwall and Parkway.

5 There is a provision of a figure that -- 8.4, and I  
6 don't think you need to turn it up, but I guess what I was  
7 looking for was a comparison of the value of 48 inch  
8 between Brantford and Kirkwall and 42 inch between Kirkwall  
9 and Parkway.

10 Would you be able to expand upon that by way of  
11 undertaking to show the lower cost per unit of capacity  
12 when you compare those two alternatives?

13 MR. RIETDYK: You are just looking at for the detail  
14 in terms of why this is the least cost alternative?

15 MR. QUINN: Yes, by comparing it to a 42 inch on a  
16 path, that I think is already on the record, is more in  
17 demand these days between Kirkwall and Parkway.

18 MR. RIETDYK: We can do that.

19 MR. QUINN: Thank you.

20 MR. MILLAR: JT2.4.

21 **UNDERTAKING NO. JT2.4: TO PROVIDE COMPARISON OF COSTS**  
22 **AND VALUES BETWEEN 48 AND 42 INCH PIPE BETWEEN**  
23 **BRANTFORD AND KIRKWALL**

24 MR. QUINN: Staying at the high level again, we had a  
25 lot of discussion yesterday about emerging issues, and I  
26 respect that Union does not have -- is not privy to all the  
27 information that would be required to analyze Enbridge's  
28 position in the matter, but I want to take it to a higher

1 level.

2           There was discussion about the value of using the  
3 opportunity of segment A and building it -- I think Mr.  
4 Isherwood's words were build as big as possible, but  
5 because what's been on the record here is the alternatives  
6 of 36 and 42, I was wondering, by way of undertaking, if  
7 Union could do some simple calculations for its system.

8           And just to demonstrate on a percentage basis what the  
9 incremental capacity is, I know Enbridge has some on the  
10 record relative to its capacity that it projected for 36  
11 and 42, but I would like you to take it a step further and  
12 cost out, just at a high level engineering cost assessment,  
13 what the incremental cost is of going from 36 to 42.

14           So what I'm asking for is basically an undertaking  
15 that would say: Here's the incremental capacity we get,  
16 building bigger, and here's the percentage increase in  
17 costs associated with access in that capacity.

18           I think that would just be helpful for everybody to  
19 see the value of providing a pipe of bigger size while we  
20 have the opportunity.

21           MR. SMITH: Mr. Quinn, I think what you are asking us  
22 to do is cost out the increase in the cost of building the  
23 Enbridge pipeline segment A from 36 inches to 42 inches.

24           And without commenting on the appropriateness of that  
25 question to Enbridge, which will still have three panels up  
26 for discussion later today, I don't think that's an  
27 appropriate committee to ask of Union.

28           MR. QUINN: I was trying to give us context, Mr.

1 Smith, that I thought would be helpful for people to  
2 understand why Mr. Isherwood would say build it bigger  
3 because of the incremental costs, but I --

4 MR. SMITH: As I say, I'm not commenting on the  
5 appropriateness of the question. I'm just commenting on  
6 the appropriateness of it to Union.

7 MR. QUINN: I will defer, and hopefully we'll get some  
8 satisfaction from our friends at Enbridge later.

9 Going to another point that was brought up yesterday  
10 that I know you touched on with your panel this morning,  
11 Mr. Smith, I wanted to just go back around the horn, and by  
12 technology that's available to us today, I think Ms. Brown  
13 has that.

14 I just want to display it, but I'm going to ask if  
15 Union would put it on the record as an undertaking.

16 Will we be able to have that brought up?

17 Now, would you take this, subject to check, panel,  
18 that this is a slide that Union presented to the Ontario  
19 Energy Board in the Natural Gas Market Review in 2010?

20 MR. ISHERWOOD: Subject to check.

21 MR. QUINN: So what's displayed here -- and again, a  
22 picture being more than worth than a thousand words, I  
23 think, in this case -- is what Mr. Isherwood was helping us  
24 understand, is two paths from Dawn to Parkway; one, the  
25 direct path that we're all familiar with, and two is the  
26 round-the-horn path that -- I think the record is pretty  
27 good in terms of describing what goes on there.

28 What we're struggling with was the economics. How

1 would that be economic? I know there's been different  
2 people's assessment of that, but I would like to ask, Mr.  
3 Isherwood, if you would be able to, by way of undertaking,  
4 using the 2012 rates that were in place, what the commodity  
5 and fuel gas costs would be of going Dawn-to-Parkway using  
6 a TPCL service, by path one, the Dawn-to-Parkway path, and  
7 path two, the around-the-horn path. Would you be able to  
8 provide us that assessment, to compare the commodity and  
9 fuel gas costs for around-the-horn, relative to the direct  
10 path?

11 MR. ISHERWOOD: We did some of those calculations for  
12 -- in the TPCL main line case last summer. Be happy to  
13 share that. I can't remember if we used '12 tolls or 2013  
14 tolls, but it was definitely discussed at some length at  
15 that hearing. We can definitely share that pretty easily.

16 MR. QUINN: That would be acceptable. I want  
17 everybody to understand what the relative costs are. So if  
18 from your recollection you have that in that, I would be  
19 satisfied.

20 MR. ISHERWOOD: Okay.

21 MR. QUINN: Can I can get an undertaking?

22 MR. WASYLYK: Yeah. That will be JT2.5.

23 **UNDERTAKING NO. JT2.5: USING 2012 RATES, TO PROVIDE A**  
24 **COMPARISON OF COMMODITY AND FUEL GAS COST SERVICE**  
25 **AROUND THE HORN VS DIRECT PATH FROM DAWN TO PARKWAY**

26 MR. QUINN: Thank you. Now, I think we can move off  
27 of that.

28 There was also some discussion yesterday -- and I want

1 to make sure it's on the record, because if segment A is  
2 built under the current situation, there was a question  
3 about how that gas would be used.

4 From Union's knowledge, is there a pipe from Maple to  
5 Albion currently?

6 MR. ISHERWOOD: From Albion to Maple? Or either way,  
7 I guess; it can go both ways.

8 Currently, there is not. So there needs to be segment  
9 A, Parkway-to-Albion, built. Union's current work with Gaz  
10 Métro is to build to a pipeline from Albion to Maple.

11 MR. QUINN: Thank you. I just want to make sure we're  
12 clear on that.

13 Then lastly -- and Mr. Smith, you can chime in here,  
14 as I'm sure you're willing to do -- there were a lot of  
15 discussions yesterday about the changing dynamics, and I  
16 respect nobody's got a crystal ball and they're  
17 negotiations that are sensitive.

18 Would you be willing to consider, by way of  
19 undertaking, providing Union's current thinking and  
20 position relative to conditions that the Board may apply to  
21 any approvals in this proceeding, and the rationale behind  
22 why Union would expect that those conditions would be  
23 helpful in the public interest?

24 MR. SMITH: Mr. Quinn, as I indicated to Mr. Brett, at  
25 this stage, given the recency of the news, Union is still  
26 considering its position, and that position in this  
27 proceeding I'm sure will become known. But I don't think  
28 that we can do that by way of undertaking, particularly

1 given the timing associated with undertakings, which is  
2 next Tuesday.

3 MR. QUINN: I accept the timing, and at this point I  
4 understand from our discussions with Enbridge yesterday  
5 that they will be reporting to the Board prior to the  
6 settlement conference.

7 And I'll ask the question of the panel, but, Mr.  
8 Isherwood, do you anticipate Union will be able to define  
9 its position for the Board before the settlement conference  
10 as an assistance us to in scoping the issues before that  
11 proceeding, for the hearing?

12 MR. SMITH: Sorry, just one moment, Mr. Quinn.

13 Yes, we'll do that that.

14 MR. QUINN: Okay. Those are my questions. Thank you  
15 very much.

16 MR. MILLAR: Thank you, Mr. Quinn.

17 Mr. DeRose, did you have anything for this panel?

18 MR. DeROSE: No.

19 MR. MILLAR: Mr. Garner? Approximately how long do  
20 you have? I just want to get a time.

21 Is there anyone else in the back row who still has  
22 questions? Dr. Higgin, you have just a few minutes; is  
23 that right?

24 And Mr. Viraney, you had just a couple of minutes, and  
25 that will be it for this panel? Thank you.

26 **QUESTIONS BY MR. GARNER:**

27 MR. GARNER: I think this will be quick, because I  
28 think we've covered all the ground. I just want to make

1 sure that I'm -- with all the things that are changing,  
2 I've got a clear picture in my mind what is going on, and I  
3 know some of it is up in the air.

4 And I also appreciate that Mr. Smith may -- he's  
5 prudently indicating you're still assessing your position.

6 But this is what I've heard, and I just want to ask  
7 you. You've told us since yesterday that you will not  
8 build the Brantford-Kirkwall until you get a pathway from  
9 Parkway to Maple; is that correct?

10 MR. ISHERWOOD: Both the Union Gas volumes and the Gaz  
11 Métro volumes obviously definitely need the path between  
12 Parkway and Maple established. Without that pathway  
13 established, we would defer the construction of the  
14 Brantford-to-Kirkwall line.

15 As I mentioned yesterday, our plan is to build the  
16 path from Albion to Maple in 2015, so our plan is still to  
17 build Brantford-to-Kirkwall in 2015, but if for unknown  
18 reasons we get delayed then Brantford-to-Kirkwall will get  
19 delayed, as well

20 MR. GARNER: So you plan to build -- in the absence of  
21 TCPL building Albion-to-Maple, you will build Albion-to-  
22 Maple?

23 MR. ISHERWOOD: Yes.

24 MR. GARNER: And as you said yesterday, I asked you  
25 why TPCL would contract on segment A of Enbridge's proposed  
26 project in the absence of a path that they own themselves  
27 from Albion to Maple, and you explained the issue about  
28 around the horn and the economics for TPCL to do that.

1 MR. ISHERWOOD: Yes.

2 MR. GARNER: Notwithstanding I think your -- if I have  
3 this right, your position that that pathway is not  
4 particularly economic for Ontarians and Quebec consumers of  
5 gas?

6 MR. ISHERWOOD: So the TPCL volumes are existing  
7 volumes. It brings no benefit to Ontario consumers; it  
8 brings benefit to TransCanada, but not to Ontario  
9 consumers.

10 The pathway that Union Gas wants to build between  
11 Albion and Maple brings incremental capacities that helps  
12 both eastern Ontario and Quebec customers.

13 The issue we have here is that Union Gas, Enbridge and  
14 Gaz Métro were in open seasons in 2012. TPCL has  
15 approached Union Gas recently to see if they could  
16 essentially jump into the capacity that would otherwise  
17 have been built for Union and Gaz Métro customers.

18 Our response back to them was by ignoring our existing  
19 contractual obligations to Enbridge and GMI, you would be  
20 queue-jumping. You'd be essentially getting volumes ahead  
21 of customers that were legitimately in the 2012 open  
22 season. We would likely be having open season sometime  
23 shortly in 2013, and we would welcome their participation,  
24 and there would likely be a 2016 or a later build.

25 MR. GARDINER: Thank you. I want to go back now to  
26 the pathway, the issue of the pathway. As I also  
27 understand it, your concern right now with the proposal  
28 that you've seen just recently between TPCL and Enbridge is

1 that the segment A part of that potential path excludes  
2 your participation in it?

3 MR. ISHERWOOD: It excludes our participation, and it  
4 provides full control and access by applying to  
5 TransCanada, and they have no obligation to build to serve  
6 the needs of the Ontario-Quebec customers.

7 MR. GARNER: And this isn't a question for you, but  
8 the understanding so far that we have in the record is that  
9 Enbridge takes the position that STAR, or the Board's  
10 access rules to transmission lines, don't apply in the case  
11 of this project, and that's one of your concerns, that that  
12 doesn't apply to this project?

13 MR. ISHERWOOD: Our belief, STAR does apply.

14 MR. GARNER: Your belief is STAR does apply?

15 MR. ISHERWOOD: Yes.

16 MR. GARNER: In the absence of getting access to  
17 segment A of the Enbridge project, and as you pointed out  
18 building from Albion to Maple, as I understood the evidence  
19 yesterday you gave, you would have to twin the pipe on  
20 segment A.

21 You would have to build along basically that same  
22 route and build another pipeline in the same corridor. Is  
23 that where you would be doing it, or -- I mean, I know  
24 you're not doing it, but is that where you would probably  
25 have to build?

26 MR. ISHERWOOD: I'll defer to Mr. Rietdyk.

27 MR. RIETDYK: We would have to complete an  
28 environmental assessment to establish what the appropriate

1 path for that pipeline between Parkway and Maple would be.

2 MR. GARNER: There is no other obvious choice for you  
3 to take, other than the one where there is already going to  
4 be, I think, now two pipes going down that corridor?

5 MR. RIETDYK: As Mr. Isherwood mentioned earlier, we  
6 did a preliminary assessment early last year on that path  
7 and it did seem like the logical path would be the 407  
8 corridor to Albion, and then north from there to Maple.

9 MR. GARNER: So in the scenario where that pathway is  
10 built or a similar path built from Parkway to Albion, in  
11 your view, what would be the value of the excess capacity  
12 now built on segment A of Enbridge's line? What value  
13 would that bring to the Ontario gas market?

14 MR. ISHERWOOD: I think the best option for Ontario is  
15 to have one line that meets the needs of all customers.

16 MR. GARNER: Thank you. Those are my questions.

17 MR. MILLAR: Thank you, Mr. Garner.

18 **QUESTIONS BY DR. HIGGIN:**

19 DR. HIGGIN: Roger Higgin. I have a question which  
20 could be in A1 or it could be in A2, and as long as I get  
21 it answered, I can defer to that. I think Union knows what  
22 the IR is, so I'll go with whatever that decision is.

23 Do you want to ask it now, or do you want me to put it  
24 to A2?

25 MR. SMITH: I don't know what it is, sorry.

26 DR. HIGGIN: Mark knows. Can you turn up Energy Probe  
27 I.A1.1? A lot of ones in there. Then looking to get an  
28 answer to this question, and in preface I would say that

1 the site development and land costs, 90.6 million, we asked  
2 for those --

3 MR. ISHERWOOD: Is this an A1 or A2 question?

4 DR. HIGGIN: This is an A1; A1-EP-1. It's on the  
5 screen. The question is we didn't get a response to this  
6 that we felt was what we were looking for. Whether that  
7 was a misunderstanding, we don't want to go there.

8 Basically, we would like to see this information.  
9 Now, just to repeat, you did provide some partial  
10 information to LPMA regarding allocation of these costs in  
11 some of its IRs. So what we would request is that you do a  
12 best efforts to provide this information, and whether or  
13 not you should allocate between just land area as one  
14 option as an allocator - you've done that for LPMA - or  
15 whether there should be different allocators. We don't  
16 know. Anyway, we would like you to provide an attempt at  
17 this information, please.

18 MR. SMITH: Why don't we ask that question of panel 2?  
19 I believe the appropriate witness is on that panel.

20 DR. HIGGIN: You would rather have it with panel 2?

21 MR. SMITH: Yes.

22 DR. HIGGIN: Okay, then.

23 MR. MILLAR: Thank you, Mr. Higgin. Mr. Viraney?

24 **QUESTIONS BY MR. VIRANEY:**

25 MR. VIRANEY: This is -- the reference is A1.CCC.4,  
26 and that is with respect to approval of the projects. The  
27 response is Union is requesting board of directors'  
28 approval of the Parkway West project.



1 I'm just looking at the table, and it seems that the  
2 utilization seems to be alternating, so you have Parkway B  
3 being utilized most of the time, but when that is not, you  
4 have Parkway A utilized.

5 So, for instance, June 8, 2011 you have Parkway A at  
6 70 percent, and Parkway B at zero.

7 Is there a specific reason that they do not run  
8 simultaneously, or is that only just one compressor is  
9 required?

10 MR. RIETDYK: For these particular flow conditions,  
11 only one of the compressors was required.

12 MR. VIRANEY: So I see from 2010 to 2013 that's -- in  
13 most cases, that's the scenario. It just alternates. In  
14 fact, in very rare cases they are both being utilized?

15 MR. RIETDYK: That's correct. But we are projecting,  
16 based on the increase in flows for this coming winter, that  
17 we will require both compressors be utilized at the same  
18 time.

19 MR. VIRANEY: Thank you. Those are all my questions.

20 MR. MILLAR: Thank you, Mr. Viraney. Is that it for  
21 panel Union 1? Okay. Thank you, panel. You are excused.

22 Mr. Smith, are you prepared to call your second panel?

23 MR. SMITH: I just have to round them up.

24 MR. MILLAR: Are they in the room?

25 MR. SMITH: They are downstairs.

26 MR. MILLAR: Why don't we take a very quick break? Is  
27 ten minutes sufficient?

28 MR. SMITH: Yes.

1 MR. MILLAR: Ten minutes. Thank you.

2 --- Recess taken at 10:08 a.m.

3 --- On resuming at 10:20 a.m.

4 MR. MILLAR: Why don't we go back on the air?

5 Mr. Smith, would you like to introduce your panel?

6 **UNION GAS DISTRIBUTION - PANEL 1**

7 **Greg Tetreault**

8 **Rich Birmingham**

9 **Michelle George**

10 **Dave Hockin**

11 MR. SMITH: I would very much like to introduce my  
12 panel, and maybe I'll ask them to do that.

13 So starting from closest to me, Mr. Tetreault, can you  
14 introduce yourself, and then go down the list, name and  
15 position, please?

16 MR. TETREAULT: Greg Tetreault, manager of rates and  
17 pricing and regulatory affairs.

18 MR. BIRMINGHAM: Rick Birmingham, vice president of  
19 regulatory lands and public affairs.

20 MS. GEORGE: Michelle George, director of major  
21 projects.

22 MR. SMITH: Mr. Hockin?

23 MS. HOCKIN: Dave Hockin, manager, strategic  
24 development.

25 MR. SMITH: Just one preliminary matter, Mr. Millar.  
26 I had asked Mr. Birmingham if you could -- some of this is  
27 in the record already, but if you could please summarize  
28 for me the approvals that Union is seeking in this

1 proceeding, and the rationale for those approvals.

2 MR. BIRMINGHAM: Thanks, Mr. Smith. Union's requests  
3 in these applications are really intended to achieve two  
4 objectives. One is the reasonable assurance of cost  
5 recovery, and the second is the timely recovery of net  
6 revenue requirement in rates; that is, when the projects  
7 come in service.

8 In this context, you'll know from the evidence that  
9 these projects are the largest in Union's history, and each  
10 one of approximates our total historical annual capital  
11 budget.

12 So to achieve these objectives, the applications have  
13 been made under three sections of the act; under section 90  
14 and 91 for the leave-to-construct approvals, and under  
15 section 36 for recovery in rates.

16 Now, turning first to the request under section 90 and  
17 91, should the Board grant these requests, Union would then  
18 have reasonable assurance of cost recovery. And I can say  
19 that because the Board has never denied rate recovery for  
20 any project where a leave-to-construct has been granted.

21 But the Board's approvals in this respect do not  
22 address the timing of that rate recovery. Consequently, to  
23 meet the objective of the timely recovery in rates, Union  
24 is also requesting section 36 approval, to recover the net  
25 revenue requirements of the projects when they come into  
26 service.

27 So Union is planning to file an application for a  
28 five-year incentive regulation mechanism within the next

1 month. The net revenue requirements of these projects are  
2 very significant by any measure, and we cannot afford to  
3 wait on cost recovery until the next cost of service  
4 rebasing proceeding. Therefore, we're requesting a rates  
5 decision that would permit rate adjustments when the  
6 projects come into service, and then Union would plan to  
7 build that allowance into our incentive regulation  
8 framework proposal, for consistency.

9 In summary, we want to avoid the circumstance where  
10 leave-to-construct could be granted, but rate recovery  
11 would be delayed until the cost of service proceeding,  
12 which in our proposal would be 2019. And that would mean  
13 that we would not be able to do the projects.

14 One further point on the issue of timing. Union's  
15 requesting both leave-to-construct approvals and rates  
16 approvals in this proceeding, because it's efficient to do  
17 so. You'll know from the evidence that all the necessary  
18 information has been filed here so we can avoid the  
19 duplication of evidence in a rates application.

20 If we were granted leave-to-construct approval now but  
21 the rates approval decision were delayed until the  
22 incentive regulation application, we would to have suspend  
23 the projects in the interim, and that suspension would  
24 likely delay the in-service dates for the projects, which  
25 is why we've put all of those requests into these  
26 applications.

27 And that concludes my comments.

28 MR. SMITH: Thank you, Mr. Birmingham.

1 Ms. George, my understanding is you have a slight  
2 correction to A3.CCC19; is that correct?

3 MS. GEORGE: That's correct. So the A3.CCC.19, the  
4 last sentence that starts with: "The cost estimates in EB-  
5 2013-0074..." should read:

6 "Schedule 9.1 is based on a feasibility estimate,  
7 and as such was assigned a 20 percent  
8 contingency, and schedule 9.2 is based on a pre-  
9 budget level estimate, and as such was assigned a  
10 15 percent contingency."

11 MR. SMITH: Thank you. Those are the preliminary  
12 questions.

13 **QUESTIONS BY MR. MILLAR:**

14 MR. MILLAR: Thank you, Mr. Smith. I didn't have any  
15 questions, but maybe I'll start us off by following -- I  
16 just want to clarify a few things I just heard from Mr.  
17 Birmingham.

18 Mr. Birmingham, if I understood you correctly, the  
19 reason you are seeking section 36 approval at this time is  
20 because it's likely you will be under IRM when the projects  
21 actually come into service? Did I understand that  
22 correctly?

23 MR. BIRMINGHAM: That's one of the reasons, yes.

24 MR. MILLAR: Were there other reasons?

25 MR. BIRMINGHAM: Yes. One of them is that all of the  
26 data is here, so it's efficient for the Board to be deal  
27 with all of the impacts from the projects; they can deal  
28 with the leave-to-construct, environmental issues, they can

1 deal with the rate impacts. And then all the parties know  
2 what the impacts are going to be from these projects.

3 MR. MILLAR: And that may be true, but you would agree  
4 with me typically in a leave-to-construct, you don't  
5 include a section 36?

6 There's nothing prohibiting it, but typically the  
7 Board would look at the rate impacts in the next rates  
8 case.

9 MR. BIRMINGHAM: That is typical, but these are not  
10 typical projects.

11 MR. MILLAR: Understood. Could you tell me where --  
12 as I understand, your current IRM term is coming to an end?

13 MR. SMITH: It has come to an end.

14 MR. BIRMINGHAM: Our current incentive regulation  
15 framework ended in 2012. We did a cost of service rebasing  
16 proceeding for 2013, and we will be proposing another  
17 multi-year incentive regulation framework within the next  
18 month.

19 MR. MILLAR: When do you intend to file that with the  
20 Board?

21 MR. BIRMINGHAM: Within the next month.

22 MR. MILLAR: I'm not sure if you can answer this or  
23 not. Will that proposed IRM plan include provisions, for  
24 example, for capital modules?

25 MR. BIRMINGHAM: It would include a possible pass-  
26 through for capital projects that are not in the normal  
27 course of business, and the criteria around those projects  
28 would include the Parkway project.



1 room at the break, and it seems we may not have a whole lot  
2 for this panel. Do we have a volunteer to go first? Mr.  
3 Aiken?

4 **QUESTIONS BY MR. AIKEN:**

5 MR. AIKEN: I don't have a lot of questions. And they  
6 all focus around the response to LPMA No. 7 under issue A-  
7 3.

8 First question is in part (c), and this follows up to  
9 what Mr. Birmingham just stated. The last paragraph says  
10 that you're going to be filing an update to the evidence by  
11 the end of June to modify your rate implementation  
12 proposal, and that in that evidence update you'll propose  
13 to build in the annual costs associated with Parkway west  
14 effective January 1st, 2014.

15 When you do that, can I ask you that you include three  
16 sets of tables? The first two would be like attachment 1  
17 to this response, which shows the total revenue requirement  
18 by year, if there's any change from what has been filed.

19 The second would be similar to attachment 2. That  
20 shows the revenue requirement by rate class, and the third  
21 one would be attachment -- the third attachment that would  
22 show the percentage change in the average rate by rate  
23 class, by year.

24 MR. SMITH: Yes, we can do that.

25 MR. MILLAR: I'm sorry, that will be JT2.6.

26 **UNDERTAKING NO. JT2.6: TO UPDATE TABLES TO**  
27 **EX1.A3.UGC.LPMA.7 BASED ON APPLICATION UPDATES TO BE**  
28 **FILED.**

1 MR. AIKEN: My other question centres around  
2 attachment 2 and the numbers in there. I'm looking  
3 specifically at the changes between 2015 and 2016. If you  
4 go to line 26, it's between these two years where the  
5 revenue requirement goes from 5 million to 15 million,  
6 which I take it reflects the majority of this project  
7 coming into service in late 2015, early 2016.

8 My questions focus on the first 11 lines, Union south,  
9 where we see the reduction in the revenue requirement going  
10 from 1.9 million to 1.6 million, roughly.

11 The question is, if you look at the rate M1 between  
12 2015 and 2016, virtually no change in the revenue  
13 requirement impact, but then you look at the other rate  
14 classes, like M2, M4, 7, 9 and all the T1 through T3  
15 classes. The revenue requirement actually goes from a  
16 reduction in the revenue requirement to an increase in the  
17 revenue requirement.

18 Then the third one I want to point out is rate M5,  
19 where the reduction in the revenue requirement actually  
20 increases between 2015 and 2016.

21 My question is: What is driving those three different  
22 outcomes? In other words, you've got -- the residential  
23 are staying basically flat, the M5s are getting a bigger  
24 reduction in the revenue requirement, and all the other  
25 classes in the south have -- most of them are going from a  
26 reduction in the revenue requirement to an increase.

27 What in the cost allocation model is driving those  
28 three different outcomes?

1 MR. TETREAULT: I think the simple answer, Mr. Aiken,  
2 is the change in income taxes from 2015 through to 2016 and  
3 2017. So on attachment 1 of this IR response, you'll see  
4 the income taxes in 2015 are a reduction in costs of  
5 approximately \$33.7 million. And you can see, as you move  
6 to '16 and '17, that reduction decreases over time by  
7 approximately \$1.7, \$1.8 million. So in terms of how we --

8 MR. MILLAR: Your microphone is off.

9 MR. TETREAULT: In terms of how we've functionalized  
10 income taxes in the cost study, that functionalization  
11 follows rate base. As the tax reduction decreases over  
12 time, you see the variances that you are seeing across the  
13 three rate classes that you mentioned.

14 So there's no change in methodology between years in  
15 the cost allocation study. It's largely related to how  
16 taxes themselves have changed over that period of time.

17 MR. AIKEN: Is that the reason why the rate M1 between  
18 2016 and 2017, that's where the M1 seems to catch up with  
19 the reduction in the revenue requirement?

20 MR. TETREAULT: Yes, that's correct.

21 MR. AIKEN: Thank you. Those are my questions.

22 MR. MILLAR: Thank you, Mr. Aiken. Who would like to  
23 go next? Mr. Higgin.

24 MR. MILLAR: Microphone?

25 **QUESTIONS BY MR. HIGGIN:**

26 DR. HIGGIN: He just turned me off. Can we go back to  
27 A1-Energy Probe-1, please?

28 MR. KITCHEN: I'll take the question.

1 DR. HIGGIN: Thank you. It also may be handy to have  
2 A2-LPMA-6, the answer to that, because we'll need to refer  
3 to that. So we were asking for allocations of the costs of  
4 land and site development, and, as we said earlier, we may  
5 have a misunderstanding of the approach.

6 So what I would like to turn to is LPMA No. 6 and part  
7 (b) of that response, if we could look at that. What I  
8 would like you to do is to allocate not only the land  
9 costs, but also the site development costs, by the same  
10 approach, which I believe is area based, and then, as  
11 required, to modify the revenue requirement as you have  
12 done in response to EP-18 for the Kirkwall project, having  
13 made those changes. Is that clear undertaking that you  
14 could do?

15 MR. HOCKIN: What is the reference for EP-18 you  
16 referred to? What issue is that?

17 DR. HIGGIN: It is the response to -- Energy Probe 18  
18 is a schedule. Which issue? Sorry, it's A-4, if you could  
19 turn that up. See schedule -- the attachment 1 to that?

20 MR. HOCKIN: So just so the undertaking is clear,  
21 Energy Probe 1 asked: How are the costs allocated? And we  
22 respond they are all allocated to Parkway West.

23 LPMA 6 proposed a methodology, says -- you know, based  
24 upon the site, and so we estimated at about 15 percent. So  
25 what you are asking us to do is to answer Energy Probe 1  
26 assuming 15 percent of the roughly \$90.6 million allocated  
27 between Parkway West and Parkway D, and we can do that.

28 Then the follow-up you are asking for is to revise

1 schedule -- or Energy Probe 18 to do the revenue  
2 requirement based upon those numbers?

3 DR. HIGGIN: That's correct. That would be the  
4 undertaking.

5 MR. TETREAULT: Yes, we'll do that.

6 MR. MILLAR: JT2.7.

7 **UNDERTAKING NO. JT2.7: TO REVISE ANSWER TO ENERGY**  
8 **PROBE 18 TO DO THE REVENUE REQUIREMENT BASED ON 15**  
9 **PERCENT**

10 DR. HIGGIN: That's all my questions for this panel.  
11 Thank you.

12 MR. MILLAR: Thank you, Mr. Higgin. Who is next? Mr.  
13 Quinn?

14 **QUESTIONS BY MR. QUINN:**

15 MR. QUINN: Yes. Thank you, Mr. Millar. Good  
16 morning, panel. I think I'll be brief again, because this  
17 is in this nature of the evolution of these projects, as  
18 we've come to learn over the last few days. So we'll turn  
19 them up for the benefit of reference, but FRPO 28 and 29 --  
20 A3, sorry. A3-FRPO-28 and -29.

21 I had asked about the rate implications of the  
22 projects. I probably should do this. In 2009, you had  
23 gone through the cost impacts, and that was helpful.

24 But I guess what I would like to ask by way of  
25 undertaking, to the extent that segment A is built at 36  
26 and there is no link between the end of segment A and  
27 Maple, with the projects that Union would undertake, like  
28 this LCU, what would be ultimate rate impacts be, again, in

1 that scenario with no link between the end of segment A and  
2 Maple?

3 Is that something you can provide for us by  
4 undertaking?

5 MR. SMITH: I'm just not sure I understand the  
6 question.

7 MR. QUINN: The questions were asked about Brantford  
8 to Kirkwall as an example. What we've heard over the last  
9 couple of days, Brantford to Kirkwall would not be done,  
10 would not be constructed if there is no ability to get from  
11 Albion to Maple.

12 So that would kind of be stripped out of all the  
13 projects that are in front of us. So what I was wanting to  
14 just be able to evidence for the Board is what the  
15 resulting rate impacts would be if Union went with the  
16 remaining projects that it believes would need to be done  
17 in a scenario where there was no link between Albion and  
18 Maple.

19 MR. BIRMINGHAM: So, Mr. Quinn, is it simply redoing  
20 the response to FRPO 29, but excluding the cost of  
21 Brantford to Kirkwall?

22 MR. QUINN: To be specific, 28. 29 shows the cost  
23 allocation impacts, which will certainly go in there, but  
24 28, if you can see from the table, there is a break-out of  
25 the respective rate classes.

26 MR. TETREULT: We can do that, Mr. Quinn.

27 MR. QUINN: Thank you very much, Mr. Tetreault.

28 Those are my questions.

1 MR. WASLYK: JT2.8.

2 **UNDERTAKING NO. JT2.8: TO REVISE FRPO 28 TO EXCLUDE**  
3 **COSTS OF BRANTFORD-KIRKWALL PIPELINE**

4 MR. MILLAR: Thanks, Mr. Quinn.

5 Mr. Brett, are you prepared to go?

6 MR. BRETT: Yes.

7 MR. MILLAR: Your microphone.

8 **QUESTIONS BY MR. BRETT:**

9 MR. BRETT: Seems like we're going very quickly here  
10 now.

11 Mr. Birmingham, you mentioned that you are going to  
12 file your IRM proposal in the next month, which would mean  
13 some time by the middle of July, right?

14 MR. BIRMINGHAM: Certainly no later than that, yes.

15 MR. BRETT: Maybe earlier?

16 MR. BIRMINGHAM: We are planning to file by the end of  
17 June, but these things have a way of getting a little bit  
18 beyond us sometimes.

19 MR. BRETT: Now, if you did file by the end of June,  
20 and let's assume that the proceeding went to a hearing, you  
21 would, from your perspective, as best you can see it now,  
22 you would expect that hearing to take place in the fall, in  
23 the sort of October, November time frame?

24 MR. BIRMINGHAM: Roughly, yes.

25 MR. BRETT: A decision, I guess, by -- the Board would  
26 be asked to make a decision, I suppose, by the end of the  
27 year, if at all possible, because this plan would start on  
28 the 1st of January, 2014?



1 MR. BRETT: True. Now, Mr. Birmingham, you've been  
2 leading an effort in the last couple of weeks to have a  
3 series of discussions with the major intervenors; I don't  
4 know whether it's all the intervenors, but it seems to be  
5 most of the intervenors in the IRM case, to try and make  
6 some progress on the major components of the IRM program;  
7 is that correct?

8 MR. BIRMINGHAM: We have engaged in stakeholder  
9 consultations over the last several months, yes.

10 MR. BRETT: And you've engaged in them and  
11 particularly in a rather intensive basis in the last couple  
12 of weeks; is that fair? Including full-day meetings on  
13 Monday and Tuesday of this week?

14 MR. BIRMINGHAM: Yes. Yes.

15 MR. BRETT: Hopefully, those discussions will aid and  
16 abet arriving at a settlement; is that fair?

17 MR. SMITH: Mr. Brett, there is no resolution, and I  
18 don't think it's particularly appropriate to be discussing  
19 the content of the discussions, other than to observe that  
20 there were discussions.

21 MR. BRETT: I think that that is really all I'm trying  
22 to establish, that there have been a series of lengthy  
23 discussions, intense discussions led by Mr. Birmingham,  
24 involving some, if not quite all, of the intervenor that  
25 would likely be in the case, and we have established that.

26 So what I -- my next question is this: Mr.  
27 Birmingham, with respect to the Parkway West project, what  
28 does the current -- your current understanding of when

1 construction would begin on that project?

2 Ms. George, perhaps?

3 MS. GEORGE: Our plan is to start construction this  
4 fall, with site preparation on the new Parkway West site.

5 MR. BRETT: So you would start this fall on  
6 preparation of the site. When would that be, roughly?

7 MS. GEORGE: October 1st is our planned start date.

8 MR. BRETT: When you say "site preparation," you mean,  
9 like, clearance and starting to put water and -- just  
10 describe for us what you mean by "site preparation."

11 MS. GEORGE: Is it to clear the site, start to put in  
12 the utilities, as well as some of the early -- it's called  
13 early civil work. So preparing the site to build the  
14 compressors in 2014.

15 MR. BRETT: Approximately how much money would you  
16 think you would be spending in -- from October 1st to the  
17 end of December on the site, in preparing the site,  
18 approximately?

19 MS. GEORGE: There is an IR that asked how much we  
20 would be spending, and we answered it up until November 1st  
21 for the project, and this is for the whole project for  
22 Parkway West. The answer was about \$40.2 million.

23 MR. BRETT: This is from when to when?

24 MR. BRETT: It's from what we've already spent until  
25 the end of November.

26 MR. BRETT: What have you already spent?

27 MS. GEORGE: I don't have that information with me.

28 MR. BRETT: Could you perhaps give an undertaking on

1 -- for Parkway West and the Brantford-Parkway separately,  
2 of what you have already spent on each of those projects,  
3 what you would intend to spend between now and October 1st,  
4 and what you would intend to spend, approximately, between  
5 October 1st and December 31st? Would that be possible?

6 MR. BIRMINGHAM: Yes, we can do that.

7 MR. BRETT: Thank you very much. Those are my  
8 questions.

9 MR. WASLYK: That will be JT2.9.

10 **UNDERTAKING NO. JT2.9: TO PROVIDE CURRENT SPEND,**  
11 **INTENDED SPEND BETWEEN NOW AND OCTOBER 1ST, AND**  
12 **INTENDED SPEND FROM OCTOBER 1ST TO DECEMBER 1ST FOR**  
13 **PARKWAY WEST PROJECT**

14 MR. MILLAR: Who do we have left for this panel? Mr.  
15 Rubenstein?

16 MR. RUBENSTEIN: I just have one question. You don't  
17 need to bring up these interrogatories.

18 From what I understand from an interrogatory response,  
19 the budget development follows a four-step process: your  
20 magnitude estimate, your feasibility estimate, then to your  
21 pre-budget estimate and your budget estimate; am I correct?

22 MS. GEORGE: That's correct.

23 MR. RUBENSTEIN: And the Parkway West projects, you  
24 provided at the pre-budget estimate stage?

25 MS. GEORGE: That's correct.

26 MR. RUBENSTEIN: But the Brantford-to-Kirkwall costs  
27 are at the feasibility estimate stage?

28 MS. GEORGE: That's correct, with the correction that

1 I just made, that Brantford-to-Kirkwall, the pipeline,  
2 which is schedule 9.1, is at the feasibility level  
3 estimate. Parkway D, which is schedule 9.2, is at the pre-  
4 budget level similar to Parkway West.

5 MR. RUBENSTEIN: So for the pipeline phase, when will  
6 that move to a pre-budget phase?

7 MS. GEORGE: I would expect that to move to a pre-  
8 budget phase by the end of the year.

9 MR. RUBENSTEIN: But you're asking for the cost  
10 consequences to be approved for these projects in this  
11 proceeding, and the Board will have to make a determination  
12 based -- at least on the pipeline costs -- on the  
13 feasibility estimates?

14 MR. BIRMINGHAM: That's correct, Mr. Rubenstein.

15 That's also one of the reasons why we are requesting  
16 the establishment of the deferral account, to make sure  
17 that we capture any variances plus or minus, that can then  
18 be trued up at a later time.

19 We recognize that we are asking for rate recovery  
20 approval and leave-to-construct approval well in advance of  
21 when we would normally ask, and because of that, we're  
22 putting it in the deferral account to make sure that no one  
23 is harmed or benefit from variances that occur as we go  
24 through time.

25 MR. RUBENSTEIN: Those are my questions.

26 MR. MILLAR: Thank you, Mr. Rubenstein. Mr. Garner.

27 **QUESTIONS BY MR. GARNER:**

28 MR. GARNER: Good morning. I want to talk about the

1 Brantford-Kirkwall piece and what we've talked about, and  
2 that piece, as I understand it, it's \$96 million of this  
3 project? That's correct, isn't it?

4 MS. GEORGE: That's correct.

5 MR. GARNER: What we heard earlier from Union Gas was  
6 that in the absence of a pathway between Parkway and Maple,  
7 Brantford-Kirkwall could not or would not proceed; correct?

8 MR. SMITH: If that's what you heard earlier, then  
9 that's what you heard earlier.

10 MR. GARNER: What I'm wondering about is that as I  
11 understand that pathway, it had two aspects to it. One was  
12 the segment A with Enbridge, but the other was TPCL  
13 building from Albion to Maple, which we understand is not  
14 going to occur, but we heard from Union Gas they would  
15 build that segment instead of TPCL.

16 What I'm wondering about is timing of this project  
17 now, Brantford to Kirkwall, and why it's still relevant to  
18 get Board approval for it at this time if Union Gas has to  
19 first build another pipe between Albion and Maple, or  
20 potentially between Parkway and Maple, whichever way it  
21 turns out.

22 MR. BIRMINGHAM: Maybe I can take that one, Mr.  
23 Garner. Our view is the market needs the constraint at  
24 Maple to be relieved. As you heard Mr. Isherwood talk  
25 about, we think it's in the best interest of Ontario that  
26 the Parkway to Albion line be an open access pipeline and  
27 that Union and GMI proceed to build the Albion to Maple  
28 piece to meet the market demands.



1 project, a project from, let's say, Albion to Maple,  
2 there's no planning for that at this very moment inside of  
3 Union, given the events are unfolding, as we termed; is  
4 that correct?

5 MR. SMITH: No, that's incorrect.

6 MS. GIRVAN: That's incorrect?

7 MR. SMITH: As you were advised by the first panel, an  
8 environmental assessment is under way, and that work along  
9 that path is being undertaken as we speak.

10 MR. GARNER: That's right. Thank you, Mr. Smith, for  
11 reminding me of that. Thank you. Those are my questions.

12 MR. MILLAR: Thank you, Mr. Garner. Do we have  
13 anything else for Union panel number 2? Hearing nothing,  
14 the panel is excused. Thank you very much.

15 Mr. Smith, are you prepared to call panel number 3?

16 MR. SMITH: Let me ask around.

17 MR. MILLAR: We're actually ahead of schedule.

18 MR. SMITH: We are missing one person.

19 MR. MILLAR: Should we adjourn for 5 minutes?

20 MR. SMITH: Five minutes.

21 MR. MILLAR: Five minutes. Thank you.

22 --- Recess taken at 10:54 a.m.

23 --- On resuming at 11:01 a.m.

24 **UNION GAS DISTRIBUTION - PANEL 3**

25 **James Redford**

26 **Mark Isherwood**

27 **Michelle George**

28 MR. MILLAR: Union's third panel that's now taken

1 their seats. Mr. Smith, would you like to introduce them?

2 MR. SMITH: Thank you, Mr. Millar.

3 We have, again, Mr. Redford, Mr. Isherwood, and  
4 continuing Ms. George.

5 MR. MILLAR: I have not had an opportunity to canvass  
6 the room. I don't think Staff has any questions for this  
7 panel.

8 Do we have a volunteer to go first? Dr. Higgin?

9 **QUESTIONS BY DR. HIGGIN:**

10 DR. HIGGIN: This is Roger Higgin for Energy Probe.

11 I would just like to follow up on the status on the  
12 LCU, and if you could turn up A4.EP.20?

13 Now, since that one refers extensively to Staff 22,  
14 then let's go to Staff 22, because that's where the real  
15 answers are. So let's go to Staff 22, A4, 22.

16 What I would like to do, if you've got that up, is  
17 just to get an update on the status here of the LCU, the  
18 new U's costs and so on, either by discussion on the record  
19 or by an undertaking. I can go either way.

20 MS. GEORGE: As we've explained in the answer to A-4,  
21 Staff 22, we have made a decision to -- for our LCU, as  
22 well as our Parkway D, to move forward with purchasing the  
23 new units, based on our analysis that we went through to  
24 look at potential use units from TPCL.

25 DR. HIGGIN: Thank you. So what about the cost  
26 impacts of that decision? Can you update us on those  
27 costs?

28 MS. GEORGE: Our cost estimates that have been filed

1 assumed the new units, so the costs will not change based  
2 on that analysis.

3 DR. HIGGIN: Okay. I think that's all, then. If the  
4 costs haven't changed, then that's a complete answer.  
5 Thank you very much. Thank you.

6 MR. MILLAR: Those are your questions?

7 DR. HIGGIN: Yes.

8 MR. MILLAR: Mr. Viraney, you actually did have a  
9 question for this panel?

10 MR. VIRANEY: Yes, I do. I'm just looking at A-4,  
11 Staff 22. That's the same IR that Dr. Higgin was referring  
12 to. I'm looking at page 3, item 6.

13 And it says you have received bid proposals for new  
14 compressor packages at both Parkway C and Parkway D,  
15 included a significant multi-unit discount for each of the  
16 compressors.

17 So does that change the cost of the compressor as  
18 compared to the original application, considering that you  
19 are getting a significant discount?

20 MS. GEORGE: That discount was also assumed as part of  
21 our current cost estimates. So it won't change what was  
22 filed as part of Parkway West and the Brantford-to-Kirkwall  
23 application.

24 MR. VIRANEY: Thank you.

25 MR. MILLAR: Thank you, Mr. Viraney.

26 Who would like to go next? Do we have no more  
27 questions for this panel? No one at all? Okay. Thank you  
28 very much. That was short and sweet. The panel is

1 excused.

2 Mr. Smith, do you have panel 4 ready?

3 MR. SMITH: They're on their way. Yes, they are  
4 ready.

5 MR. MILLAR: Why don't we just do a switch-out without  
6 a formal break and keep on trucking?

7 Why don't I canvass the room while they're coming up?  
8 Raise your hand if you have a question for panel 4. Okay.  
9 We have at least one set of questions. Anyone else? It  
10 better be good.

11 [Laughter]

12 MR. MILLAR: Mr. Smith, are you prepared to introduce  
13 your panel?

14 **UNION GAS DISTRIBUTION - PANEL 4**

15 **Paul Colwell**

16 **Michelle George**

17 **Gerry Mallette**

18 MR. SMITH: Yes, I am. I'll ask them to introduce  
19 themselves. It's Mr. Colwell, Ms. George and Mr. Mallette.

20 Starting with Mr. Colwell, can you please introduce  
21 yourself?

22 MR. COLWELL: Paul Colwell.

23 MR. SMITH: And position, sir?

24 MR. COLWELL: Paul Colwell. I manage the engineering  
25 design group for major projects.

26 MR. SMITH: Sorry, perhaps we could do that a little  
27 slower.

28 MR. COLWELL: Paul Colwell. I manage the engineering

1 design group with major projects at Union Gas.

2 MS. GEORGE: Michelle George, director of major  
3 projects.

4 MR. MALLETTE: Gerry Mallette, principal project  
5 manager.

6 MR. SMITH: Thank you. I have no preliminary matters.

7 MR. MILLAR: Ms. Grice?

8 **QUESTIONS BY MS. GRICE:**

9 MR. GRICE: Thank you. I'm Shelley Grice, consultant  
10 for Energy Probe, and I have one question. The reference  
11 is Energy Probe Interrogatory No. 46.

12 MR. SMITH: Issue, please?

13 MS. GRICE: I'm sorry, Issue C-1.

14 In that interrogatory, part (d), there were --

15 MR. SMITH: Just one moment.

16 MS. GRICE: C-1, Energy Probe 46.

17 MR. SMITH: Thank you.

18 MS. GRICE: In the response to part (d), it says:

19 "It has also been determined that the proposed  
20 Brantford-Kirkwall pipeline will cross lands  
21 managed by Infrastructure Ontario and thus may  
22 require a category B class environmental  
23 assessment under the class EA process."

24 My question is: I just wondered how long that class  
25 EA would take, and whether or not the current project  
26 schedule could accommodate this, and if not, then what the  
27 impact would be on the schedule.

28 MR. MALLETTE: The assessment will take about five

1 months to complete. It has not yet begun. And the  
2 schedule can accommodate that.

3 MS. GRICE: Thank you. And I just thought of one more  
4 general question.

5 Whether or not Union has any pending environmental  
6 approvals that could impact the current project schedule or  
7 the planned in-service date, if there is anything that  
8 needs to be highlighted?

9 MR. MALLETTE: I don't believe so. The schedule is  
10 quite robust. There is time to do all the environmental  
11 studies and obtain the permits that are necessary.

12 MS. GRICE: Great. Thank you.

13 MR. MILLAR: That's all, Ms. Grice?

14 MS. GRICE: That's it. Thank you.

15 MR. MILLAR: Anyone else for Union panel number 4?  
16 Come on, Dwayne, you must have something?

17 [Laughter]

18 MR. MILLAR: It looks like no.

19 MR. QUINN: I don't have anything, Mr. Millar, but I  
20 want to welcome Mr. Colwell and say we won't go so easy on  
21 him next time.

22 MR. MILLAR: Last chance for panel 4. Mr. Brett?

23 **QUESTIONS BY MR. BRETT:**

24 MR. BRETT: One question, really, and that is to Mr.  
25 Colwell. I apologize in advance for -- you mentioned that  
26 the environmental assessment -- did I hear you say it was  
27 underway, the class environmental assessment?

28 MR. COLWELL: No, it has not yet begun.

1 MR. BRETT: It hasn't started yet?

2 MR. COLWELL: That's correct. That's the class D  
3 environmental.

4 MR. BRETT: The one you were asked about by Ms. Grice  
5 a minute ago?

6 MR. COLWELL: That's correct.

7 MR. BRETT: That hasn't started yet. Is that because  
8 you don't know whether or not you must do it? Or is that  
9 because you haven't started?

10 MR. COLWELL: That's correct. We need to identify  
11 whether or not we're crossing Infrastructure Ontario land  
12 and whether or not they will require that class assessment.

13 MR. BRETT: When do you think you'll be able to  
14 establish whether you are crossing Ontario land,  
15 Infrastructure Ontario land?

16 MR. COLWELL: We're -- upon the completion of the  
17 regulatory process, we will be entering into negotiations  
18 with all landowners to acquire the necessary land rights.  
19 We will be talking with Infrastructure Ontario and  
20 determine at that time whether or not they require that  
21 particular environmental assessment.

22 MR. BRETT: I see. So you wouldn't start those  
23 discussions until you had approval under this process; is  
24 that right?

25 MR. CALDWELL: That's correct.

26 MR. BRETT: Until you had leave to construct?

27 MR. CALDWELL: That's correct.

28 MR. BRETT: Okay. But you're saying that, in any

1 event -- let's assume, for sake of argument, you got leave  
2 to construct. I guess it is not an issue if you don't, but  
3 if you did, then you would go and have these conversations,  
4 and then if you had to do the environmental assessment, it  
5 would be a five-month estimate, but you're saying that the  
6 existing schedule that you filed in evidence already  
7 incorporates that five months?

8 MR. CALDWELL: Yes, it does.

9 MR. BRETT: Thank you.

10 MR. MILLAR: Thank you, Mr. Brett. Anything else for  
11 panel 4? Okay. Thank you, panel 4. You are excused.  
12 What I'm going to suggest is we stand down for a few  
13 minutes. I know Enbridge is looking to see when its  
14 witnesses can be available. And maybe we can also take a  
15 few minutes just off the record to discuss how long the  
16 parties have for that. So we can work out when we want to  
17 come back. So let's stand down for a few moments and we'll  
18 decide our next steps. Thank you.

19 --- Luncheon recess taken at 11:12 a.m.

20 --- On resuming at 12:46 p.m.

21 MR. MILLAR: Good afternoon. Why don't we resume?

22 I think we are ready to go now with what is  
23 technically Enbridge's panel 3, although it's coming up  
24 before panel 2. It's for issues A-2, A-3 and D-5.

25 Mr. Cass or Mr. Stoll, would you like to introduce the  
26 panel, if there's no preliminary matters?

27 **ENBRIDGE GAS DISTRIBUTION - PANEL 3**

28 **Byron Madrid**





1 MR. POCH: That's what I'm asking. You've got  
2 economic forecasts which are general -- these are  
3 forecasters that work, economists that work generally out  
4 there in the world, and they do it by large sectors and so  
5 on.

6 So we don't have a model that's been tailored and  
7 where you've looked at this particular problem that we're  
8 highlighting as a possibility?

9 MR. HORTON: The escalation model is tailored towards  
10 Enbridge's needs, and towards industry, so the indices that  
11 we do get are for the pipeline construction industry.

12 MR. POCH: I understand that. And there's a history  
13 and these models presumably do some regression analysis of  
14 that history and so on.

15 Do the models go so far as to look at particular  
16 proposals for particular projects in a particular region  
17 and input those as inputs? Or is this all based on sort of  
18 general trends and history?

19 MR. HORTON: They're based on forecasted indices, so  
20 no, they don't take into account specific projects.

21 MR. POCH: I don't want to get into cross, but you  
22 would agree with me that our observation that -- we are  
23 going to be entering now a little period here where there's  
24 quite a lot compared to what we've ever seen recently of  
25 this kind of construction happening in this particular  
26 region?

27 MR. HORTON: That is true. It's also true to be said  
28 that that same increase in labour is expected to happen in

1 Alberta and all throughout North America. And the model is  
2 specifically tailored towards dealing with all the North  
3 American issues regarding escalation.

4 MR. POCH: Thank you. We had another question.  
5 Turning to a GEC interrogatory, 39, you were kind enough to  
6 provide us a table there which showed escalated and non-  
7 escalated break-out of costs. Can we just get the details  
8 about how you calculated escalation there, the assumed  
9 inflation rate and so on?

10 MR. HORTON: Sure. Escalation is calculated based on  
11 the proprietary model that Enbridge has, and it's based on  
12 best practices from the Association of the Advancement of  
13 Cost Engineering. And I can give you the recommended  
14 practice that the model actually is based on. It's number  
15 58R-10, and the title is: "Escalation Estimating  
16 Principals and Methods Using Indices."

17 We applied the multiple economic indices to specific  
18 -- provided by forecasters, that applies to every specific  
19 project. So the project is broken down into various  
20 categories, and those indices are applied to those  
21 categories.

22 So there is no specific flat inflation rate that's  
23 applied to the project. There are multiple inflation and  
24 deflation rates that are applied towards the different  
25 categories within the breakdown of the project.

26 MR. POCH: Could you just provide us with a break-out  
27 of what the inflation rates were, then, by category, that  
28 allowed you to work up the sum?

1 MR. HORTON: The inflation rates are provided by  
2 Global Insight, and they are purchased from Global Insight.  
3 They are forecasted.

4 And they are not available for me to present in a  
5 public forum.

6 MR. POCH: If you could just provide them as  
7 confidential, that's fine. My experts have signed the  
8 undertaking.

9 MR. HORTON: I would to take that as an undertaking,  
10 to find out whether our agreement with Global Insight would  
11 provide for that.

12 MR. POCH: Can we get an undertaking for that?

13 MR. MILLAR: JT2.10, and I understand it's, first, to  
14 make inquiries as to whether or not the information can be  
15 released confidentially, and if so, to provide it.

16 **UNDERTAKING NO. JT2.10: TO INQUIRE WHETHER GLOBAL**  
17 **INSIGHTS INFLATION DATA CAN BE RELEASED. IF YES**  
18 **PROVIDE UNDER CONFIDENCE.**

19 MR. POCH: Thank you.

20 Those are all my questions for this panel. Thank you.

21 MR. MILLAR: Thank you, Mr. Poch.

22 Who you like to go next? Dr. Higgin?

23 **QUESTIONS BY DR. HIGGIN:**

24 DR. HIGGIN: Good afternoon, panel. Roger Higgin for  
25 Energy Probe.

26 Before we start with your topics, I did have one  
27 question, which I can ask Mr. Cass how we could deal with  
28 it. Just a confirmation regarding the arrangements for

1 transportation from Parkway to Bram West, whether or not I  
2 can ask that question. I know that it's not this panel,  
3 but it was a follow-up that came from panel 1, really.

4 MR. CASS: Roger, you want to give us a question that  
5 you would have intended to ask panel 1; is that --

6 DR. HIGGIN: That's correct, and --

7 MR. CASS: Do you mind indicating what the question  
8 is, and --

9 DR. HIGGIN: Yes. It's simple, to ask if you,  
10 Enbridge, has contracted -- important word -- for the  
11 capacity from Parkway West to Bram West with TPCL, whether  
12 it's actually contracted, as opposed to potentially  
13 contracted. Actually contracted.

14 MR. CASS: Roger, I'm told the next panel will be able  
15 to answer that question.

16 DR. HIGGIN: Okay. That would be fine, then. Thank  
17 you.

18 So moving to the other topics, I would like you to  
19 turn up Enbridge -- sorry, EP number A2.EGD.EP.11.

20 Just as an introduction, what we're trying to explore  
21 here is the operating assumptions and so on underlying the  
22 PI analyses. And if you look at part (a) of the question  
23 and then the response to that, we're having a little bit of  
24 trouble with the response.

25 If we go through the response below, you'll see that  
26 you deal with gas distribution system. You give us a  
27 reference. You give us a table for gas costs, but what we  
28 can't deal -- find is the transportation service charge on

1 transportation savings. So that's the issue related to  
2 this response.

3 Now, we did a little bit of research before we came,  
4 and see if we can find it. So what I found is the  
5 following two references; first of all, Exhibit A, tab 3,  
6 schedule 5, page 30 of 30. That's paragraph 63. So if we  
7 could pull up that exhibit and look at it, Exhibit A, tab  
8 3, schedule 5, page 30, paragraph 63. Over the page,  
9 please.

10 So we see a reference there to savings of  
11 1,632 million and 1.6 billion, okay? See that number? And  
12 then if we would look at Staff No. 48, that's D5, Staff 48  
13 in the IR responses. You see there the number again,  
14 correct, at line "total transportation savings"? Do you  
15 see that?

16 MR. MURRAY: Yes.

17 DR. HIGGIN: You see that, okay. So the first  
18 question I have is: Where are the gas cost savings on  
19 Board Staff 48? Which line are they included? That's the  
20 first question.

21 MR. MURRAY: Well, they have been included in two  
22 places. The gas cost savings, gas transportation savings  
23 of 1.6, is included at page 5 of 5 in Board Staff 48 in the  
24 respective base case summaries that we've included there.

25 DR. HIGGIN: The question is: Is that transportation,  
26 or is that transportation and gas cost savings?

27 MR. MURRAY: I can confirm the 1.6 billion is  
28 transportation savings.

1 DR. HIGGIN: So where are the gas cost services in  
2 this schedule? This is Staff 48, page 5, if you want to  
3 look it up. And I'm trying to reconcile -- I don't want to  
4 put you on the spot. If you would rather take an  
5 undertaking to look it up and tell me, and then reconcile  
6 it to the schedule that you provided to us in EP.11 at the  
7 beginning, which is the gas cost savings schedule, if you  
8 would just like to take an undertaking?

9 So the undertaking is to look at Board Staff 48 to  
10 identify on these lines - total transportation, services  
11 charged, distribution revenue - where the gas cost savings  
12 are included, and then reconcile that to the attachment to  
13 EP.A2.EP.11, page -- plus the attachment to that, which is  
14 a number of pages in the attachment.

15 MR. MURRAY: I can clarify that the attachment of  
16 total gas costs that we show there is the associated gas  
17 costs supporting the attachment of the customers for the  
18 influence area.

19 DR. HIGGIN: Right. I would have expected to see that  
20 incorporated in one of your -- I don't want to go to the  
21 confidential one, but we can look -- go back to the  
22 original -- can we go back, then, sorry, to the original  
23 filing which has the redacted? That's Exhibit E, tab 1,  
24 schedule 1 attachment, and then there's five pages, which  
25 is the PI, right, analysis?

26 As our IR asks, we're trying to reconcile the numbers  
27 and the source of numbers in there in lines 16 to 22.  
28 That's what we're trying to do, is to understand those

1 numbers, and you've given us some responses. That's  
2 exactly the purpose of all this exercise. Sorry, that's  
3 where it comes from.

4 MR. MURRAY: No problem at all. The gas cost item of  
5 line 19 and the cash flow, that is the estimated 2013  
6 budgeted gas costs per unit for the respective customer  
7 adds that are being included in the analysis.

8 So this supports a cost for attaching those customers  
9 and carrying that cost over the four-year investment  
10 horizon.

11 DR. HIGGIN: Does that include, then, your gas cost  
12 forecast, which is for an escalation of gas costs, and you  
13 have a ten-year gas forecast?

14 MR. MURRAY: No, it does not. It's based on 2013  
15 feasibility parameters, and that value comes from the  
16 weighted average cost of gas as of the April QRAM for the  
17 company.

18 DR. HIGGIN: In doing the PI, though, you must be  
19 allowing for gas cost savings over the period based on the  
20 forecast you have; is that correct?

21 MR. MURRAY: Consistent with all of the O&M items we  
22 have included, we are keeping everything on a constant 2013  
23 year basis over the investment horizon, including the  
24 distribution rates. This is consistent with E.B.O. 188.

25 DR. HIGGIN: All right. So can we go then say -- if  
26 you can just confirm for me, then, on Staff 48 where the  
27 gas cost savings, if any, are included, in which of those  
28 lines that we talked about? That's transportation savings

1 charge and distribution revenues. Just confirm that for  
2 me, that will do. Do that by undertaking, just confirm  
3 that?

4 MR. MURRAY: In the interest of time, we'll do that.

5 MR. MILLAR: JT2.11.

6 **UNDERTAKING NO. JT2.11: TO CONFIRM WHERE GAS COST**  
7 **SAVINGS ARE INCLUDED IN BOARD STAFF 48 IN**  
8 **TRANSPORTATION SAVINGS AND DISTRIBUTION REVENUES.**

9 DR. HIGGIN: Thank you very much. So I think that's  
10 all my questions for this panel. I have some for the next  
11 panel. Thank you.

12 MR. MILLAR: Thank you, Mr. Higgin. Who would like to  
13 go next? Mr. Quinn.

14 **QUESTIONS BY MR. QUINN:**

15 MR. QUINN: I think it would make sense - Kent, thanks  
16 - because I'll follow right along with Roger. I had asked  
17 an interrogatory, which I don't believe you need to turn  
18 up. It was FRPO 24. But if we just stay on the page that  
19 we have here, maybe you can point it out to me.

20 The FRPO 24 response is:

21 "The company confirms the use of WACOG in the  
22 feasibility."

23 What I was trying to understand is, when you use the  
24 term WACOG, the previous sentence -- maybe I will ask that  
25 you turn it up. If you can keep a placeholder on this one  
26 here and pull up A2.EGD.FRPO.24?

27 While it's coming up on the screen, what I'm trying to  
28 get at is -- and maybe I can use a different vernacular.

1 There we are. Thank you.

2 If we just go down to the answer that's there, it says  
3 that the requirements to use gas costs based on weighted  
4 average cost of gas, excluding commodity costs, and then it  
5 says:

6 "The company confirms the use of WACOG in the  
7 facility."

8 So first off, as a point of confirmation, that's the  
9 use of WACOG excluding commodity costs or including  
10 commodity costs?

11 MR. MURRAY: That could be excluding.

12 MR. QUINN: That would be excluding. What I'm trying  
13 to get my head wrapped around, and, as I said, using a  
14 different vernacular, in the market there's a basis  
15 differential -- sorry, there's a price of gas at Empress or  
16 at AECO in Alberta. You are excluding commodity costs but  
17 you're just looking at the transportation reduction. Is  
18 that the upshot of that response?

19 MR. MURRAY: The commodity component is also excluded  
20 from the distribution rates, so we've included it in the  
21 feasibility for the forecasted customer additions, the  
22 forecasted distribution revenue, and corresponding gas  
23 costs for those additions.

24 MR. QUINN: Said differently, you're saying that  
25 commodity cost is taken into account in other areas of the  
26 economic analysis?

27 MR. MURRAY: As the commodity cost is a flow-through  
28 if it were included in the distribution costs, it would

1 just be an offset.

2 MR. QUINN: It's an offset in distribution costs, so  
3 What I'm trying to understand and capture is: Is the WACOG  
4 referred to in your response here and used in the analysis,  
5 is that the landed cost of gas in Ontario? In other words,  
6 that has both a commodity and transportation component?

7 MR. MURRAY: The WACOG does not have a commodity  
8 component. It has a transportation component and a  
9 component for load balancing and storage and unaccounted-  
10 for gas.

11 MR. QUINN: So the WACOG you are referring to there:  
12 "In this response, the company confirms the use  
13 of WACOG in the feasibility."

14 That is excluding commodity?

15 MR. MURRAY: Correct.

16 MR. QUINN: Would you agree with me, though, that,  
17 frankly, from an economic point of view, the landed cost of  
18 gas at GTA gate is much more representative of what the  
19 actually economic impact is of one scenario versus another?

20 MR. MURRAY: I'd have to ask you to clarify. A  
21 scenario of what gas? Transportation savings?

22 MR. QUINN: No. And maybe I'll try to create some  
23 numbers and I won't try to make them real.

24 If you have \$3 gas in Alberta and it takes \$2 worth of  
25 transportation to get it to Toronto, so you have \$5 at  
26 Toronto gate, if you say: Okay, but I can get transport  
27 from Dawn at 50 cents, but I'm buying my gas at Dawn at \$4  
28 instead, your real savings are only 50 cents, not a

1 transportation net savings, which would appear to be \$1.50,  
2 but the real economic benefit of that approach is only a  
3 50-cent reduction in gas cost to the end-use consumer?

4 Does that make the question more clear?

5 MR. MURRAY: I think it does. However, as the gas  
6 cost is a pass-through item whether or not it's coming in  
7 at \$2 or 50 cents, or -- I don't know if that was your  
8 example. Our rates would correspondingly be adjusted, and  
9 there would be, therefore, no impact on the overall  
10 feasibility.

11 MR. KACICNIK: If I can just add to that, under the  
12 present cost allocation and rate design principles approved  
13 by the Board, the molecule, the cost of the molecule would  
14 be the same if it's bought at Dawn or at Empress. We use  
15 Empress reference price to price our gas supply charge, the  
16 cost of the molecule.

17 So let's say that's \$2, and if we buy gas at Dawn at  
18 \$4, the molecules will still be priced at \$2 and the  
19 difference of \$2 would be treated as transportation-related  
20 cost.

21 MR. QUINN: But I think what you're telling us,  
22 though, is you are doing the model as per the Board's  
23 rules, but it doesn't represent real life?

24 MR. KACICNIK: It does represent it, because it  
25 reflects how our charges to customers are designed today.

26 MR. QUINN: But the actual -- if we set out a scenario  
27 to try to say what is the economic benefit to your  
28 customers, using the landed gas -- total landed gas cost in

1 scenario A or scenario B would be a more real-life  
2 representation of the economic value generated from the  
3 respective scenarios; would you agree with me on that?

4 MR. KACICNIK: I would say that given that commodity  
5 is priced in all scenarios at Empress reference price, you  
6 would still see the difference in the landed cost. I don't  
7 see that you wouldn't see it.

8 MR. QUINN: Respectfully said, a big part of your  
9 application here or a good part of your application in  
10 terms of gas cost reduction is on the basis that you would  
11 be sourcing gas in eastern North America, not at Empress,  
12 so tying it to gas that you are not purchasing and a price  
13 for gas that you are not purchasing, does that make  
14 economic sense?

15 MR. KACICNIK: Dwayne, can you repeat the question? I  
16 was distracted by people.

17 MR. QUINN: Sure, Anton. I'm going to try to be more  
18 concise.

19 That's why I asked my question. I did read -- you're  
20 directing me to Board Staff 14, and I honestly had trouble  
21 getting through the details of that. But what I'm trying  
22 to reconcile on behalf of the public interest here in this  
23 proceeding is: Does this economic test really define the  
24 economic benefit that will be realized by ratepayers? Or  
25 are you correctly and appropriately following the model the  
26 Board has laid out, but are we now essentially -- I don't  
27 want to sound disrespectful -- garbage in, garbage out?

28 If the inputs don't reflect the reality, you can say

1 this is what the model tells us the savings are, but those  
2 aren't actually real savings, because you're purchasing gas  
3 in the east at a higher price than the base case you are  
4 using of purchasing gas in Alberta.

5 So I'm asking the panel to give me some comfort or  
6 some help in how we reconcile your test to real-life  
7 economics.

8 MR. KACICNIK: I'll try to do it here on the spot, and  
9 I'm going to use your simple example.

10 MR. QUINN: Thank you.

11 MR. KACICNIK: So we buy commodity at Empress at \$2,  
12 and it costs us \$3 to land it in Ontario, for a total of  
13 five.

14 Then the other example was buying commodity at Dawn at  
15 \$4 and then paying 50 cents to bring it to the franchise  
16 area, so the total is four and a half.

17 So if our rate design prices the commodity at \$2, in  
18 both instances what's left over will be the landed cost of  
19 three, in the first example, right, shipping gas from  
20 Empress to the franchise area, and in the second example  
21 will be four and a half dollars minus two -- two-and-a-  
22 half, for a difference of 50 cents.

23 So I think you still reflect the same outcome applying  
24 the methodology that we are applying.

25 MR. QUINN: Without going through the line numbers --  
26 and I would ask the other one be brought up -- is it  
27 possible to use that or is there a better exhibit that  
28 would show us what you are talking about? I think I



1 evidentiary reference that would demonstrate what Mr.  
2 Kacicnik had pointed out, that the real savings of 50 cents  
3 in our hypothetical example are actually used for the  
4 ultimate test for the profitability on this applied-for  
5 project?

6 MR. KACICNIK: Dwayne, can I just confer with our  
7 People here? Because I'm pretty certain that an exhibit  
8 that shows that has been filed. I just want to take some  
9 time and find it.

10 MR. QUINN: Well, we could do it one way. We could do  
11 a two-part undertaking, Mr. Millar, potentially that they  
12 could search it out and provide the reference, and if  
13 that's all that's needed, great; if not, provide an  
14 undertaking that demonstrates that effect.

15 MR. CASS: As I understand what you are asking for,  
16 Dwayne, it's just an undertaking to give that reference, if  
17 there is such a reference. So perhaps that's simplest, in  
18 the interests of time, just to give the undertaking.

19 MR. QUINN: Yes, Mr. Cass, that is the first part.  
20 The second part: If there is not something on the record,  
21 that Enbridge does put something on the record to help  
22 everybody understand it.

23 MR. CASS: Sitting here, I've heard it explained  
24 repeatedly. I'm not sure whether there is a disconnect or  
25 what the difficulty is. I suppose there is no problem with  
26 the witnesses in an undertaking giving you the same  
27 explanation they have been giving here on the witness  
28 stand, if that's going to help you.

1 MR. QUINN: We presented a hypothetical example, Mr.  
2 Cass, just to try to make sure we're talking about the same  
3 methodologies. I was looking for you to tie that into the  
4 evidence to say, And here's how that representation is  
5 delivered on in the economic analysis undertaken by  
6 Enbridge.

7 And I don't want to bog us down saying, Let's go to  
8 line 19 again and work through the components. If that is  
9 as simple as it can be, just provide us some comfort and  
10 explanation of the components of gas costs that go into the  
11 analysis.

12 MR. CASS: That can be done.

13 MR. MILLAR: JT2.12.

14 **UNDERTAKING NO. JT2.12: TO PROVIDE REFERENCE TO WHERE**  
15 **EGD'S ECONOMIC MODEL IDENTIFIES GAS COST SAVINGS. IF**  
16 **THERE IS NO REFERENCE, PROVIDE ANALYSIS OF HOW GAS**  
17 **COSTS HAVE BEEN INCLUDED IN EGD'S ECONOMIC MODE**

18 MR. QUINN: Those are my questions. Thank you, Mr.  
19 Millar.

20 MR. MILLAR: Thank you, Mr. Quinn. Mr. Elson, did you  
21 want to go next?

22 **QUESTIONS BY MR. ELSON:**

23 MR. ELSON: Thank you. I guess I should put in an  
24 appearance. My name is Kent Elson, counsel for  
25 Environmental Defence.

26 I have two very brief questions. The first relates to  
27 Environmental Defence Interrogatory No. 37. And I don't  
28 know whether it's better that your counsel answer this, but

1 we had requested the estimated total present cost value of  
2 the three portions of the project as they are defined in  
3 Exhibit A, tab 3, schedule 1, page 3.

4 This is just a request for the most high-level cost  
5 information, and we would like that to be publically  
6 available so that we can use it in argument, and we don't  
7 see how it would be confidential. So I'm hoping we could  
8 get an undertaking to provide a public version of the  
9 response to our Interrogatory No. 37(b).

10 MR. HORTON: So that information is available, but  
11 under confidential guise. So we cannot provide that  
12 information in the public forum. It is available for those  
13 who have signed the declaration and undertaking.

14 MR. ELSON: I guess I'll ask on the record here why  
15 it's confidential.

16 MR. HORTON: We've yet to go through a formal  
17 procurement process, and it could undermine the procurement  
18 process.

19 MR. ELSON: I guess what I'm struggling with is what  
20 we're asking for is the most aggregated data possible,  
21 other than the number of \$604 million. We're looking for  
22 the next level down, which is: How much are the overall  
23 projects?

24 Is it something that you guys can undertake to go back  
25 and look at and see if that number can be provided, because  
26 we want to be able to use that number and make arguments on  
27 it, and I don't see how that fits the Board's guidelines  
28 for confidentiality?

1 MR. CASS: Kent, I understand from the answers that  
2 you've been given that the company has looked at it.  
3 You've been given the answers. I don't see any reason why  
4 you can't use it in argument if you and your client  
5 representatives sign the declaration and undertaking.

6 I don't think we can advance things by arguing it  
7 further here today.

8 MR. ELSON: I'll move on, then. This question may be  
9 for the next panel. It relates to our Interrogatory No.  
10 38. That interrogatory we had listed under issue A-3, and  
11 I have some questions in relation to the percentage of the  
12 GTA project influence area's annual supplies that are  
13 sourced from western gate stations, such as Parkway and  
14 Lisgar.

15 Is that better addressed to yourselves or to the  
16 subsequent panel?

17 MR. HORTON: I believe it would be best to the  
18 subsequent panel.

19 MR. ELSON: Okay. Then I have no further questions.

20 MR. MILLAR: Thank you, Mr. Elson. Who would like to  
21 go next? Mr. Rubenstein.

22 **QUESTIONS BY MR. RUBENSTEIN:**

23 MR. RUBENSTEIN: Good afternoon. I just have one  
24 question. I want to confirm with you something. This is  
25 with respect to the rate 332 proposal, the methodology for  
26 TransCanada.

27 TransCanada's election of option number 2, that  
28 doesn't change the proposal with respect to the

1 methodology?

2 MR. KACICNIK: Confirmed.

3 MR. RUBENSTEIN: Those are my questions.

4 MR. MILLAR: Thank you. Mr. Wightman?

5 **QUESTIONS BY MR. WIGHTMAN**

6 MR. WIGHTMAN: James Wightman on behalf of VECC. Good  
7 afternoon, panel. I have one question.

8 It refers to VECC 5 under issue D-5, and it's part  
9 (d), so that's on page -- the answer, and the question and  
10 the answer are on page 2 of 3.

11 So in part (d) we asked you to confirm that to avoid  
12 cross-subsidization - and this is a standard economic test,  
13 I believe - that you have to charge a rate to a class in  
14 between incremental costs and stand-alone costs.

15 And all I asked you to do was: Can you confirm this,  
16 and, if not, please discuss?

17 And your answer refers to fully allocated costs. So  
18 I'll put this question a different way. Do you agree that  
19 if you charge a class less than the incremental costs -  
20 that is, the increased costs in providing service - they  
21 are being subsidized?

22 MR. KACICNIK: Yes, I agree with that. In that  
23 instance, they would be subsidized.

24 MR. WIGHTMAN: And one other part. If you charged a  
25 rate to a class or to a customer that was greater than the  
26 stand-alone costs, then that customer would be subsidizing  
27 the other customers?

28 MR. KACICNIK: Like, this second part I think perhaps

1 requires me to elaborate a little bit, because we don't --  
2 we follow the Board-approved principles and conventions to  
3 design rates to our customers.

4 So we look at our cost on a pooled basis. Rate base,  
5 it's pooled operating and maintenance expenses, so it's  
6 total company cost.

7 Then to determine how much you have to recover from  
8 each class, you go through the steps in the cost allocation  
9 study that tell you, at the end of the exercise, I need to  
10 recover this much from my residential customers, this much  
11 from commercials, industrials and so forth.

12 So that certainly is not the same as looking it on an  
13 incremental or stand-alone basis.

14 MR. WIGHTMAN: Just to follow up on that, do you agree  
15 that if you were charging a rate to a customer to a class  
16 that was greater than stand-alone costs, that that customer  
17 might be eligible for bypass rates?

18 MR. KACICNIK: I don't agree with that either.

19 MR. WIGHTMAN: Thank you. That's good enough.

20 MR. MILLAR: Who is next? Mr. Garner.

21 **QUESTIONS BY MR. GARNER**

22 MR. GARDNER: Mark Garner with CCC. I would like you  
23 to pull up CCC interrogatory A2-CCC-12. This is where we  
24 asked you to run some sensitivity analysis on your model.

25 Now, in the response, you ran the sensitivity analysis  
26 on a number of the scenarios that we suggested there. And  
27 while I thank you for that, and it turns out to be quite  
28 useful, what we were looking for was for you to run a

1 scenario with each one of those aspects in one run, so I  
2 through 6.

3 And I think in attachment 6, which is one of the runs  
4 you did, you did partially that, but you left some of those  
5 out. So what I'm wondering is: Could you run a scenario -  
6 a sensitivity analysis with each one of those items under  
7 (a) of that response, (i) through (vi), and run that  
8 scenario both removing and including the transportation  
9 service charge? Would that be possible, certainly as an  
10 undertaking?

11 MR. MURRAY: We certainly can run that for you. The  
12 item that was left out was item 2, and the thought there  
13 was that -- the preliminary analysis we did that on that  
14 scenario was that there was basically an immaterial impact,  
15 and, thus, didn't include it. But for completeness, we can  
16 undertake to add it, and then revise (b) accordingly.

17 MR. GARDNER: Thank you. And maybe I'm reading it  
18 wrong, but I also thought it left out item number 6, which  
19 was the direct purchase and the original assumptions.

20 But that's what I'm taking from the attachment 6  
21 description that was done in the summary. So perhaps I'm  
22 incorrect and perhaps -- or maybe it's just mislabelled  
23 there. So you could just confirm that when you do that  
24 final run, and then --

25 MR. MURRAY: Yeah, we'll confirm that. And perhaps  
26 the label's incorrect, but we can undertake to provide that  
27 update.

28 MR. MILLAR: JT2.13.



1 potential assumption changes in the model.

2 I'm wondering if you could help me with that. Could  
3 you do a sensitivity analysis on the 42-inch shared and 36-  
4 inch shared that would help me see it on the same basis,  
5 without any other changes in assumption, other than the  
6 cost of the pipe, all the costs associated with a larger  
7 pipe?

8 And we could do that in two ways. We could do that  
9 with the transportation service charge or without the  
10 transportation service charge, but I'm wondering if you  
11 could do that for us also.

12 MR. MURRAY: Yes, we could do that.

13 MR. MILLAR: JT2.14.

14 **UNDERTAKING NO. JT2.14: TO PROVIDE SENSITIVITY**  
15 **ANALYSIS FOR BOTH A COMBINED 42 AND 36 INCH PIPE WITH**  
16 **SAME ASSUMPTIONS INCLUDED IN EACH FOR COMPARISON**  
17 **PURPOSES**

18 MR. GARNER: Now, one other question. And, I'm sorry,  
19 I should have brought this up earlier with our  
20 Interrogatory 12, if we could bring that one back. I'm  
21 sorry, yes, CCC 12. It just slipped my mind.

22 One of the things I'm -- I'm certain that the outputs  
23 are what they are in this, but one of the things that I  
24 didn't understand -- and perhaps you could help me  
25 understand -- is it seemed to me that in the scenario where  
26 you removed the transportation revenues it didn't really  
27 make a big change in the outcome of the PI, give a very  
28 different PI.

1 And I'm wondering why that would be the case.

2 MR. MURRAY: You're referring to removing the  
3 transportation services charge?

4 MR. GARNER: Right.

5 MR. MURRAY: This would be after year 15? Is that  
6 what your specific request was?

7 MR. GARNER: Right.

8 MR. MURRAY: I believe in 5? I think it simply  
9 reflects the magnitude of that cash inflow, relative to the  
10 other cash inflows of the project.

11 MR. GARNER: And because it's in year 15 and not in  
12 the earlier years? Would that be one of the reasons?

13 MR. MURRAY: That would be -- factor in it, as well.

14 As we also noted in the response, we have an  
15 arrangement with TransCanada that would allow us to  
16 recover, under an event such as that, their share of the  
17 net book value of the asset, and that hasn't been included  
18 here. And it would provide an offsetting effect.

19 MR. GARNER: Right, but of course it seems to me one  
20 of the questions now is what, if any, compensation  
21 TransCanada may put into the project, so what I want to  
22 explore is what the impact of that is.

23 So I'm wondering -- again, with your help on how best  
24 to present this -- to be able to do the run without the  
25 service charge in it completely, taking that charge out  
26 completely from year 1 onward, so that we can understand --  
27 what I'm trying to do is understand the impact of not  
28 having that revenue stream from the beginning, or any of

1 the benefits of TransCanada in this project.

2 Is there a way for you to help me understand that in a  
3 sensitivity analysis?

4 MR. MURRAY: Yes, we can provide that.

5 MR. GARNER: Thank you.

6 MR. MILLAR: JT2.15.

7 **UNDERTAKING NO. JT2.15: TO RUN SENSITIVITY ANALYSIS**  
8 **OF NOT HAVING REVENUE STREAM FROM TCPL FOR COMPARISON**  
9 **PURPOSES**

10 MR. GARNER: Those are all my questions, Mr. Millar.  
11 Thank you. Thanks, panel.

12 MR. MURRAY: Just for clarity, would you want all the  
13 a companying DCF schedules for each of the requests you've  
14 made?

15 MR. GARNER: I'm quite happy with the summary tables  
16 that you put together. They're very helpful, and I think  
17 they really get to the bottom line, because I'm really  
18 looking at the PI and the NPVs that you put for those  
19 together.

20 MR. MURRAY: Okay.

21 MR. MILLAR: Mr. Brett?

22 MR. BRETT: In light of the questions that have been  
23 asked, I don't have any questions for this panel. Thank  
24 you.

25 MR. MILLAR: Is there anyone else for this panel? I'm  
26 sorry, Mr. Schuch?

27 **QUESTIONS BY MR. SCHUCH:**

28 MR. SCHUCH: Colin Schuch for Board Staff. Just very

1 briefly, because I think some of my questions have already  
2 been dealt with.

3 Can you turn up Board Staff No. 14? And that is issue  
4 A3.EGD.Staff.14. That is the interrogatory that requested  
5 transportation savings sensitivity.

6 And there's a table; thank you for pointing that out.

7 Now, my first question is: I'm wondering in light of  
8 the events of the last few days -- and I'm thinking about  
9 the NEB's decision to basically reject TPCL's Notice of  
10 Motion to have the decision changed -- is this table still  
11 up to date?

12 MR. MURRAY: I'm not quite sure I would be the right  
13 person to comment on that. The table was done June 7th.

14 MR. CASS: I'm not sure what you mean by whether the  
15 table is up to date, Colin, but it sounds like a question  
16 for the panel we've already had, the first panel, if I  
17 understand the question correctly.

18 Mr. SCHUCH: I'm looking at the footnote 1, and it  
19 refers to the assumptions used in TransCanada's May 1st,  
20 2013 compliance filing.

21 So I'm wondering if the base cases using those  
22 assumptions, is -- this base case, perhaps, does it need  
23 updating, is my question.

24 MR. KACICNIK: I can offer a comment, and I will  
25 verify that with the witness who prepared this table.

26 The TPCL toll reflected in these calculations, I think  
27 was set at \$1.67 per gJ. Now, following the NEB decision,  
28 I think the toll goes down to Enbridge's CDA to 1.56 per

1 gJ. And I can verify that during the break.

2 MR. SCHUCH: Thank you. Maybe by way of undertaking  
3 we could get you to verify that. If there is a significant  
4 impact on this sensitivity, I would like to add that it  
5 should be rerun, or I would like to request that it be  
6 rerun.

7 MR. MILLAR: Personally, I think that would be  
8 helpful, as well. Obviously -- I'll put it to you, Mr.  
9 Cass.

10 Are you willing to either confirm that that table is  
11 still based on the most current information available? Or  
12 if it's not, could we have that updated? I know this may  
13 not technically have been the correct panel for that, but  
14 is that something the company can do?

15 MR. CASS: Yes, I believe the company can do that,  
16 Mike.

17 MR. MILLAR: That will be JT2.16, and it's to update,  
18 if necessary, the chart in Board Staff 14. Thank you.

19 **UNDERTAKING NO. JT2.16: TO VERIFY THAT TABLE IN REPLY**  
20 **TO STAFF 14 IS ACCURAGE AND IF NECESSARY UPDATE.**

21 MR. MILLAR: Is that all, Mr. Schuch?

22 MR. SCHUCH: Yes. Thank you very much.

23 MR. MILLAR: Anyone else for this panel?

24 Okay. Thank you. The panel is excused.

25 Mr. Cass, do you have Enbridge's panel 2 ready to go?

26 MR. CASS: I believe they are more or less ready. I  
27 haven't looked around to see if they are all right here in  
28 the room.

1 MR. MILLAR: Do you want to take a five-minute break  
2 to --

3 MR. CASS: Maybe just five minutes.

4 MR. MILLAR: Let's just take five minutes and then  
5 come back. Thank you.

6 --- Recess taken at 1:36 p.m.

7 --- On resuming at 1:43 p.m.

8 MR. MILLAR: I think we'll get started again. I  
9 understand that the presentation system is down for a  
10 little bit and we're trying to get it back up. I'm going  
11 to suggest we try and continue, in any event, and if we get  
12 slowed down, we'll have to deal with that. Mr. Stoll,  
13 would you like to introduce your panel?

14 **ENBRIDGE GAS DISTRIBUTION - PANEL 2**

15 **Trevor MacLean**

16 **Fiona Oliver-Glasford**

17 **Craig Fernandes**

18 **Eric Naczynski**

19 MR. STOLL: I'm going to toll the same tact as Mr.  
20 Cass and just have the panel introduce themselves. And in  
21 the interest of trying to keep things moving, I think my  
22 one witness is going to try and provide a couple minutes of  
23 his understanding of some questions that were asked by a  
24 couple of the intervenors through some written  
25 correspondence over the last couple of days between us.

26 So hopefully we can shorten down the number of  
27 questions they will have here.

28 MR. MILLAR: Okay, let's do that.

1 MR. STOLL: So if I could start on the far side with  
2 Mr. Naczynski, please.

3 MR. NACZYNSKI: Eric Naczynski, manager of system  
4 analysis.

5 MR. FERNANDES: Craig Fernandes, senior manager of GTA  
6 project, regulatory.

7 MS. OLIVER-GLASFORD: Fiona Oliver-Glasford, senior  
8 manager of market policy and DSM.

9 MR. MacLEAN: Trevor MacLean. I'm the director of  
10 market development and sales.

11 MR. MILLAR: Mr. Stoll, one of your witnesses wanted  
12 to --

13 MR. STOLL: Perhaps I can ask Mr. Fernandes.

14 MR. FERNANDES: We did have several written  
15 correspondence that kind of alluded to certain things that  
16 I thought we could provide an overall backdrop on and it  
17 would help with some of the questions specifically related  
18 to peak demand reductions required to offset facilities,  
19 including any kind of geographical targeting.

20 So I thought it would be quite useful if we could  
21 actually go through a little bit of that in advance and put  
22 a little bit more backdrop to -- it might actually sharpen  
23 some of the questions.

24 So I would like to start and bring up the influence  
25 area map from A-3-3, figure 3. So this is part of the pre-  
26 filed evidence. And the reason why I want to bring this up  
27 is to point everyone to the -- I'm colour blind. That is  
28 some form of orange or peach area coming down from Victoria

1 Square.

2 The point being here, from what you've already heard,  
3 station B is included in that area. That is currently our  
4 point of minimum system pressure or where the current  
5 constraint in our system is in terms of peak demand.

6 And as you can see from the figure on the pre-filed  
7 evidence, that is primarily sourced from Victoria Square  
8 when we get into cold winter conditions.

9 So in terms of looking at geographical targetting,  
10 this actually helps to give an understanding of where it  
11 would be required for us to alleviate load relative to our  
12 current constraint on the system.

13 So that was the first point. That's probably the most  
14 important area in terms of targetting any peak load  
15 reduction.

16 Next, I would like to move on and reference talking  
17 about some of the potential for peak load reduction,  
18 Environmental Defence 14, if you could bring that up and  
19 come down to the table?

20 Now, the Environmental Defence 14, for all intents and  
21 purposes, was asking about forecasted DSM and what the  
22 impact would be on peak demand. And there were some  
23 estimates provided, and I don't want to get into too much  
24 detail, but I do want to point -- if you can zoom in on the  
25 bottom table where the GTA influence area is, the estimate  
26 provided for that was, in terms of each year, what the  
27 forecasted DSM would be about, 12 103M3 per hour. If you  
28 convert that for comparison purposes to a daily number,

1 that's about 9 tJs a day, approximately.

2 So that was the company's forecast in the evidence  
3 that was provided of what the DSM activities that are  
4 currently under -- being undertaken would do in terms of  
5 reducing demand.

6 Now, in the growth forecast section, which A-3-4, and  
7 I don't think we need to pull that up, if you were to look  
8 at the year-over-year growth in peak demand we have in our  
9 forecast, it's approximately 18 tJs per day growth per  
10 year. So rough order of magnitude, it's about double what  
11 we expect or what we estimate our current DSM programs are  
12 achieving in terms of load reduction.

13 We also have an estimate in the same portion that  
14 talks about what our load reduction factor did. So you can  
15 do a comparison there. But the point I'm trying to make is  
16 that we've got a relative magnitude of something on the  
17 order of 9 tJs per day happening every year, a load growth  
18 of 18 tJs per day happening every year.

19 When we talked about the other aspects of the project  
20 over and above pure load growth, one of the key items that  
21 we have on the table for the project is the pressure  
22 reduction on some of our older high stress lines.

23 The evidence spoke to a 160 tJ per day reduction in  
24 terms of capacity in order to reduce the pressure in the  
25 Don Valley line. Now, all of those items are still in that  
26 area of influence that we showed initially. So the order  
27 of magnitude we're looking at in terms of our load growth,  
28 or what we think energy efficiency measures are doing

1 compared to the pressure reduction, is very large. The  
2 pressure reduction is equivalent to about nine years of our  
3 forecast load growth.

4 That's not the only objective the project is trying to  
5 achieve. Probably most fundamentally, when we look back at  
6 where a lot of the economics are driven from and a lot of  
7 our concerns, it has to do with the upstream supply. And  
8 in the evidentiary record, we have fundamentally a shift of  
9 600 tJs a day coming from upstream supply that's  
10 discretionary services shifting over to short haul.

11 And when we look at our system, if we can flip back to  
12 that map for a second, fundamentally that 600 tJs per day  
13 shift is coming from Victoria Square, and it's coming over  
14 into our system from Bram West and into Albion.

15 So when we start to look at all of those other items  
16 that are embedded in the project, and we start to look at  
17 the orders of magnitude relative to what would be required  
18 to offset facilities, we need to be looking at all the  
19 benefits the project is providing.

20 So when we look at offsetting load growth, the load  
21 growth facilities are fundamentally the same facilities  
22 that are being used to lower the pressure in the older  
23 lines, and they are the same facilities that are being used  
24 to accomplish that shift.

25 So that was actually the primary reason why we wanted  
26 to look at all of the issues holistically, because it helps  
27 to avoid duplication of facilities.

28 So some of the answers that we're giving, it's very

1 difficult for us to answer a load-growth-only scenario in  
2 terms of offsetting, because fundamentally you still have  
3 all of the other issues that we would like to deal with in  
4 the project, and all the facilities actually fundamentally  
5 handle that.

6 So we when we're looking at geographical targetting  
7 and the volume of demand that would have to be reduced, we  
8 need to look at this peach/orange area and talk about the  
9 fact we're trying to move 600 tJs per day, and compare that  
10 to our forecast of load growth of only 18 tJs per day. So  
11 it's a very large volume.

12 So in terms of load reduction, it would be a very  
13 large amount that would have to be reduced in that area for  
14 us to have a substantial impact on the facilities.

15 So hopefully that will help with the context of some  
16 of the questions, because there were all sorts of  
17 variations on the theme of how to offset those facilities.

18 MR. STOLL: Other than that, we're ready to turn it  
19 over.

20 MR. MILLAR: Very good. Mr. Poch, I think you've got  
21 a train to catch, so you've asked to go first.

22 **QUESTIONS BY MR. POCH**

23 MR. POCH: Thanks. Just looking at that map, if we  
24 could pull it back up, where you had the influence areas  
25 broken out and the shaded, that was I think A-3-3,  
26 figure 3.

27 If we were trying -- if all we were trying to do was  
28 to relieve the low pressure situation at station B, I take

1 it lowering load in the entire pink zone would help  
2 directionally with that, because it's relieving that line  
3 either higher up or farther down?

4 MR. FERNANDES: Directionally, correct.

5 MR. POCH: Right. In fact, relieving it higher up  
6 might be even more helpful, or not? Tell me. I'm not  
7 sure --

8 MR. FERNANDES: There is probably a slight difference  
9 where lower down might be slightly better, but we would  
10 have to actually model that out. But directionally, it's  
11 the -- are we calling it orange or peach?

12 MR. POCH: Call it peach. How's that?

13 MR. FERNANDES: Okay. In the peach area.

14 MR. POCH: Now, the borders on here that you've drawn  
15 between the peach area and the purple area, for example,  
16 are the borders -- is a rough -- obviously this is just a  
17 schematic, but you've modelled this and you've said this is  
18 the border that you feel is relevant from -- on the peak  
19 day of the year where the gas molecules are flowing.

20 MR. FERNANDES: This is cold winter conditions, where  
21 the system's substantially near peak.

22 MR. POCH: Obviously it's an integrated system. A  
23 pipeline's either at low pressure, or in one case, high  
24 pressure -- a couple of cases, high pressure across that  
25 border.

26 If we do conservation, for example, west of that  
27 border, wouldn't that tend to shift the border a little,  
28 because a little -- there would be less demand on the west

1 side of that?

2 MR. FERNANDES: Conceptually, yes.

3 MR. POCH: That would shrink that peach area,  
4 conceptually?

5 MR. FERNANDES: Conceptually, yes. You would have a  
6 little but more pressure --

7 MR. POCH: A little more would -- could be served from  
8 these other lines?

9 MR. FERNANDES: Correct.

10 MR. POCH: Thank you.

11 So when we talk about targeted DSM, we should be  
12 talking about certainly the peach area, but presumably some  
13 effort in the other parts of the GTA, which would also have  
14 a spill-over effect?

15 MR. FERNANDES: Correct.

16 MR. POCH: Great. I think for the next little bit, it  
17 might be helpful to turn up BOMA Interrogatory -- in the A-  
18 1 series, Interrogatory 25. There's a table in your  
19 response to part (d), where you indicate what you expect  
20 the capacity deficit is, the peak hour pressure -- I'm  
21 sorry, the 10-3 M-cubed per-hour capacity deficit at  
22 station B in the different scenarios, existing system and  
23 pressures, and then in the new world.

24 First of all, would it be possible to -- just for us  
25 to get a sense how that is tracking, could you produce a  
26 similar number for -- let's look at just for the 41-day  
27 degree day extreme situation -- for what you are expecting  
28 in 2013 and what you would expect in 2014?

1 MR. NACZYNSKI: We can provide that for the years that  
2 you mention there, yes.

3 MR. POCH: Thanks. Let's get a number for that, first  
4 of all.

5 MR. WASYLYK: That'll be JT2.17.

6 **UNDERTAKING NO. JT2.17: RELATED TO BOMA A1-IR25 TABLE**  
7 **PART D (CAPACITY DEFICIT), TO PROVIDE A SIMILAR**  
8 **CAPACITY NUMBER FOR THE 41 DEGREE DAY EXTREME**  
9 **SITUATION**

10 MR. POCH: And then I want to look at a different  
11 scenario than you've looked at here. If we bring in --  
12 you've given us a column, the next column, which gives us  
13 the situation where you build your additions and you bring  
14 down the pressure on the pipelines in the -- I guess it's  
15 the 30, NPS 30 line, and the 26 line.

16 I wanted to look at the situation where you just built  
17 -- you build everything except the north/south part of  
18 segment B, so you don't double up on that Don Valley line  
19 and you don't reduce you're operating pressures.

20 My assumption is that that alleviates the problem at  
21 station B; it doesn't -- obviously you have the side  
22 benefit of lowering the pressure in the pipeline.

23 First of all, directionally, does that make sense?

24 MR. NACZYNSKI: You are correct. Directionally, that  
25 is correct.

26 MR. POCH: Is it possible for us to get -- is that  
27 something that you could provide for us, that number?  
28 Again, the DD 41 at station B in that scenario?

1 MR. NACZYNSKI: Yes. That's a number I can provide  
2 for you right now.

3 So in 2015, with Victoria Square at 450 pounds and the  
4 26-inch at 375, their existing operating points, with  
5 segment A and segment B, the east/west portion only, so no  
6 north/south piece -- just to clarify -- and the associated  
7 facility at Buttonville to feed into the Don Valley line --

8 MR. POCH: Pressure regulation, yeah.

9 MR. NACZYNSKI: You would have a surplus capacity at  
10 station B of approximately 85 10<sup>-3</sup> M3 per hour, or 64  
11 terajoules per day.

12 And again, that is limited to that specific set of  
13 circumstances, ignoring the pressure reductions.

14 MR. POCH: Just to put that in perspective, what's the  
15 growth rate on that station B that you're experiencing  
16 annually compared to the 85 or the -- do you have any sense  
17 of that? Or the annual or the daily, however you want to  
18 phrase it?

19 MR. NACZYNSKI: That's the annual -- one sec.

20 The annual is approximately three 10<sup>-3</sup> M3 per year  
21 growth, specifically at station B.

22 MR. POCH: It wouldn't address your SMYS issue, but  
23 would solve --

24 MR. NACZYNSKI: Would not address the pressure issues,  
25 however would address the growth.

26 MR. POCH: All right. Am I correct the number you've  
27 given us for that scenario would be a savings of -- capital  
28 savings of about \$40 or \$50 million a year? Or total, I'm

1 sorry, capital savings?

2 MR. FERNANDES: Actually, that's not correct. So I  
3 think you're referring to the interrogatory response where  
4 we estimated a range for growth only.

5 Now, for growth only that was based on going from  
6 Sheppard Avenue up to McNicoll, not to Buttonville.

7 MR. POCH: Okay. Got you. A much shorter length,  
8 right? To McNicoll?

9 MR. FERNANDES: Correct.

10 MR. POCH: Just above Finch, I think, right? If  
11 memory serves from my high school days.

12 MR. FERNANDES: Yeah, I'd have to...

13 MR. POCH: Can we get what the capital savings would  
14 be on the --

15 MR. FERNANDES: Actually, no, because you'd have to  
16 sign the declaration.

17 MR. POCH: Okay. I have signed the declaration. Can  
18 we get that confidentially?

19 MR. FERNANDES: Oh, absolutely. I'd have to double-  
20 check, but I think it's already there, but we can point to  
21 where --

22 MR. POCH: Maybe you can either point it out to us or  
23 provide it, if you haven't already. And we understand that  
24 you are claiming confidentiality, and I'll let my -- Mr.  
25 Elson argue about whether that goes on the record or not.

26 MR. WASYLYK: We'll just number that as JT2.18.

27 **UNDERTAKING NO. JTX2.18: TO CALCULATE PERCENTAGE**  
28 **REDUCTION IN DEMAND REQUIRED TO LOWER PIPELINE**



1 from DSM, the impact they would have on the NPS 26 and 30  
2 lines, the pressure issue.

3 And your response was simply it's not feasible, and  
4 you referred us to Environmental Defence No. 20 in the A-4  
5 series. And we looked at that. It -- excuse me one sec.

6 I'm wondering can we just -- I recall from one of the  
7 other interrogatory responses you -- and from your  
8 introductions just earlier that you were contrasting these  
9 figures, but I just want to get a few more basics on that.

10 If you lower the capacity demand on these pipes, does  
11 the pressure -- is the relationship with the pipeline  
12 pressure linear?

13 MR. FERNANDES: No, it's not linear. There's a --  
14 Eric would probably -- sorry, Mr. Naczynski would probably  
15 be able to speak to that, but it's not absolutely linear.  
16 The impact on absolute capacity depends on both flow and  
17 pressure, and it's non-linear depending on the number of  
18 flows that are taken off along the length of the pipeline.

19 MR. POCH: I know in the electrical world, the analogy  
20 is to losses and it's either a square -- I think it's a  
21 square law there. If you lower your current, your losses  
22 go down by the square.

23 If you lower your cubic metre flow, how much does the  
24 pressure go down? Can you give me a general rule of thumb?  
25 Is it a square rule, or which direction?

26 MR. NACZYNSKI: You are directionally correct. I  
27 can't quote specific squared loss at this time. However,  
28 it is certainly not linear.

1 MR. POCH: In fact, if you cut the throughput in by,  
2 say, a factor of two, you might reduce the pressure by a  
3 factor of four, if it was a square law? The pressure comes  
4 down faster than the -- in percentage terms, comes down  
5 faster than the capacity reduces in percentage terms. Have  
6 I got that right, directionally?

7 MR. NACZYNSKI: You have that right directionally.

8 MR. POCH: Thank you.

9 MR. NACZYNSKI: I'm hesitant to quote a specific  
10 number there to you, however, but, yes.

11 MR. BRETT: Is there somewhere where that can be -- or  
12 can it just be provided, what the formula is, just we don't  
13 have to dispute that? I don't want to have to have an  
14 engineering dispute in front of the Board.

15 MR. NACZYNSKI: If there's a specific scenario you are  
16 looking for, we can certainly try to provide that to you.

17 MR. POCH: Why don't we take those lines, then, that  
18 are operating at 37? If -- let's ask what the reduction --  
19 assuming we don't -- let's just ask: What is the reduction  
20 in throughput required to reduce it to 36 and to reduce it  
21 to 30 -- can you give us a couple of examples so we'll just  
22 get a sense of the pattern? I guess that's really what I'm  
23 asking.

24 MR. NACZYNSKI: So if you are looking for an example,  
25 we can undertake to do that for you. However, we of course  
26 have provided at 30 percent SMYS at our target.  
27 Specifically at station B, it's the 106 terajoules of  
28 capacity that would need to be replaced.



1 MR. FERNANDES: Would something like reducing all off-  
2 takes by 10 percent, and then showing what the pressure  
3 could be, would that do?

4 MR. POCH: Sure. You could just -- well, I wouldn't  
5 even think -- yes, let's just do it at -- sure. We could  
6 maybe do it at 5 percent and 10 percent. That would give  
7 us a pattern.

8 MR. NACZYNSKI: Absolutely.

9 MR. POCH: Let's get an understanding.

10 MR. WASYLYK: That one will be JT2.18. Just to  
11 confirm that, the confidential undertaking is going to be  
12 JX2.1.

13 **UNDERTAKING NO. JTX2.1: TO VERIFY CAPITAL SAVINGS**  
14 **AMOUNTS**

15 MR. POCH: Just further on that, why you think it's  
16 not feasible, you're basically saying it's not feasible  
17 just because it would just be way too much DSM to get it  
18 right down the 30 percent in any reasonable time frame?

19 MR. FERNANDES: The rough order of magnitude, based on  
20 our estimate of what we're doing today, is about nine  
21 years' worth, plus the first year's worth of load growth,  
22 puts a rough order of magnitude of 20 times what we're  
23 doing today in terms of delivered results, not necessarily  
24 spend, depending on what your assumptions are.

25 MR. POCH: Sure. Okay. There was another question  
26 that was bumped to you folks about the -- it was GEC  
27 interrogatory 15, again in the A-1 series, and this was  
28 about the actual details of how they came up with the

1 project influence area.

2 I think maybe from the answer I had a few moments ago  
3 about the shaded areas, can I say the same logic applies,  
4 that those borders are borders at a given state, which is  
5 your cold day state? To the extent we can lower pressures  
6 through DSM on one side or other of that border, that  
7 border could shift a little?

8 MR. FERNANDES: Correct.

9 MR. POCH: I'm going leave it at that. There was a  
10 question -- and, finally, the last bumped question was  
11 number 29 in the A-1 series. And it was just -- I don't  
12 think I got an answer to this. I apologize, I didn't get a  
13 chance to go back in the transcript.

14 There was a discussion of the studies that were done  
15 in August 2002. I assume -- and then studies that were  
16 done in 2006 in the anticipation of PEC hooking on. First  
17 of all, in 2006, was this capacity shortfall at station B  
18 foreseen?

19 MR. NACZYNSKI: In 2006, the capacity shortfall was  
20 foreseen. It was foreseen in 2002, as well, prior to the  
21 Portlands Energy Centre, and then on an ongoing basis  
22 Enbridge is tracking and managing its system. And it's  
23 then at this time we've identified that something needs to  
24 be done.

25 MR. POCH: Was it identified before 2002?

26 MR. NACZYNSKI: I'm only aware up to 2002.

27 MR. POCH: It's possible and you're just not -- is  
28 there something you can look into easily, or is it lost in

1 the corporate vaults?

2 MR. NACZYNSKI: Well...

3 MR. POCH: At least as far as 2002?

4 MR. NACZYNSKI: At least as far as 2 -- yes. Yes.

5 MR. POCH: Fair enough. I won't make you search files  
6 further that. I think the point is made. One sec.

7 What our question was was: How did the firm peak day  
8 requirements forecast used -- or found in those studies in  
9 2002 and 2006, how do they compare to what you are  
10 currently projecting? This is specifically, I guess, for  
11 the station B.

12 MR. NACZYNSKI: I think that to answer that question,  
13 let's take a look at ED.3. In ED.3, we provide a summary  
14 of all the loads on the system, and that data that we have  
15 -- let's bring this up. And there's a table here. Did I  
16 build a reference? There it is.

17 So the tables here, this is providing the derived  
18 historic peak loads, going back in this case to 2006, and  
19 what we could specifically take a look at here is the total  
20 load that we have on the GTA influence area, and you can  
21 see that there are most certainly fluctuations, as you  
22 would anticipate, from year to year on the amount of load,  
23 the base load on the system plus the added load.

24 So to answer your question, the loads have fluctuated  
25 throughout the -- over the years, and as indicated in this  
26 document.

27 MR. POCH: Can we just get the forecast that -- I  
28 think maybe the easy answer is if you can give us the

1 forecast that you had that you made in 2006 -- yeah, if you  
2 could just give us the corresponding values that you found  
3 in the 2006 study for peak day, that would be helpful.

4 MR. FERNANDES: Are you referring to the corresponding  
5 values being --

6 MR. POCH: Total load. Total load is all we need.

7 MR. NACZYNSKI: So the total load is indicated in that  
8 table, at the bottom left-hand corner of that table.

9 MR. POCH: This is the forecast underlying your  
10 current proposal?

11 MR. NACZYNSKI: Let me just offer some clarification.  
12 The derived historic that is indicated in here are the --  
13 on an annual basis -- and this is described in one of the  
14 other Environmental Defence interrogatories, but the --  
15 Enbridge goes through an annual process to do their load  
16 gathering, to project a peak day demand on the system right  
17 down to the customer level, and this is an aggregate of all  
18 the loads on the system -- sorry, of all the bundled  
19 customers on the system at those peak days.

20 And I have this -- as I say, this is the 2006, 2007  
21 winter, going up to --

22 MR. POCH: These are actual bundled customers, in  
23 effect?

24 MR. NACZYNSKI: These are the actual derived numbers.  
25 Let me just be clear that they are not the actual spinning  
26 meters; it's the derived, projected out to 41 degree --  
27 these are the numbers that were used in Enbridge's system  
28 planning for those winters.

1 MR. POCH: You don't use spinning meters for planning  
2 your use, station gate measurements and so on?

3 MR. NACZYNSKI: We would use station gate measurements  
4 at the higher levels at gas supply, but again, as I'm  
5 trying to do that system modelling for the entire  
6 franchise, I'm using the billed meter information from  
7 those individual customers, and we have meter reads on a  
8 monthly basis. And then we do some regression work to --

9 MR. POCH: I think you are not hearing my question,  
10 which was: Can we get what the 2006 study as a forecast at  
11 that time was projecting?

12 MR. FERNANDES: That's what this is.

13 MR. POCH: Is that what this is? I haven't looked --  
14 sorry, I didn't -- is that what this is?

15 MR. NACZYNSKI: This is what the actual -- what we  
16 were using for system planning at that time in 2006.

17 MR. POCH: I guess I don't -- how can you have derived  
18 historic in 2006 going out to 2012?

19 MR. NACZYNSKI: So I'm not -- I think, just to  
20 clarify, what you are asking for is: The 2006 study, what  
21 was your growth rates at that time?

22 MR. POCH: Yes. What was the base number and the  
23 growth rate anticipated at that time? At that time, as  
24 opposed to what came to be.

25 MR. FERNANDES: So what this table shows is the 2006  
26 number would be what we were forecasting for 2006.

27 MR. POCH: For 2006, and then I guess what we're  
28 asking is what the stream for the next 20 years was it

1 forecast at that time to be?

2 Can we do that? I assume it's just sitting in a file  
3 somewhere.

4 MR. NACZYNSKI: I can undertake to get that for you.

5 MR. POCH: Thank you very much.

6 MR. WASYLYK: That'll be JT2.19.

7 **UNDERTAKING NO. JT2.19: 2006 GROWTH STUDY AND GROWTH**  
8 **RATE AT THAT TIME AND FORECAST FOR THE NEXT 20 YEARS**  
9 **IN 2006**

10 MR. POCH: I'm also assuming your files are better  
11 organized than mine, so...

12 Let's move onto GEC 31. We asked you if you had  
13 evaluated the cost effectiveness replacing any parts of  
14 this project with additional DSM. You referred us to  
15 Environmental Defence 14.

16 Correct me if I'm wrong, but my read of Environmental  
17 Defence 14 was that this is something you did for  
18 Environmental Defence to answer their interrogatory. This  
19 is not an analysis you did at the planning -- in the early  
20 planning stages of this project, right? This is -- you  
21 went back and --

22 MR. FERNANDES: That's correct.

23 MR. POCH: Okay. So let me ask, then, if you could  
24 answer our interrogatories.

25 Can you provide us with what evaluation you did, in  
26 the planning of this project, of DSM as an alternative?

27 MR. FERNANDES: As in the preamble that I had at the  
28 beginning, when we look at DSM we looked at the rough order

1 of magnitude what we thought would be potentially  
2 achievable in terms of peak demand reduction. And we  
3 looked at it in terms of the order of magnitude of what we  
4 were trying to achieve, particularly with respect to the  
5 upstream supply considerations.

6 So when we talk about 600 terajoules per day, we felt  
7 that that was so far away from anything that we could  
8 possibly hope to achieve that we screened that out as an  
9 alternative.

10 So I do want to make sure you understand that. Our  
11 level of detail is not any more than that.

12 MR. POCH: That's fine. And that's it. That's -- I  
13 could ask for it in paper, but I'd basically get the same  
14 thing as what you just said; is that what you're saying?

15 MR. FERNANDES: Pretty much. When we look at  
16 something that's -- whether it's 20 X or 100 X, what we  
17 think is achievable, it's largely irrelevant at that point.

18 MR. POCH: Okay. Can you just turn up 14B,  
19 Environmental Defence 14? And in that table -- I think we  
20 were looking at it earlier. I just want to make sure I  
21 understand everything on it.

22 The dollar values there in the bottom box of the GTA  
23 efforts, in effect you've taken your DSM -- do I correctly  
24 understand you've taken your DSM budget and said --  
25 allocated it as between GTA and influence area and the rest  
26 of the franchise, and said approximately that much of the  
27 money was being spent in the GTA?

28 MS. OLIVER-GLASFORD: That is correct.

1 MR. POCH: And if -- all right.

2 Going to the next table in that answer, under part  
3 (b), there's a figure of 77,800 10-3 M3 annual. That what  
4 you say the additional DSM -- so that's incremental DSM you  
5 would need on top of what you are already doing in the GTA  
6 area to -- that would be to offset growth; correct?

7 MS. OLIVER-GLASFORD: Yes. Sorry, I just missed the  
8 number. So you're talking about the 77,811 number?

9 MR. POCH: Correct.

10 MR. THOMPSON: Yes, that would be what would be needed  
11 to offset the growth portion of the project only.

12 MR. POCH: So earlier when you spoke of nine  
13 terajoules per day in the GTA area and 18 terajoules --  
14 first of all, let me clarify. That was GTA area number as  
15 opposed to system-wide?

16 MR. FERNANDES: Correct. And I was use some  
17 approximations, so you would have to have some decimal --

18 MR. POCH: Was the -- the experience of 18 terajoules  
19 per day growth before or after the nine terajoules? Does  
20 the net growth after DSM take into account 18, or is it 18  
21 less nine?

22 MR. FERNANDES: The net was 18.

23 MR. POCH: Thank you. Can we get the TRC that's  
24 associated with the -- that would be associated, assuming  
25 the same cost-effectiveness as you currently experience in  
26 your program? Could you give us what the TRC is,  
27 associated either with the nine terajoules per day effort  
28 in the GTA, or with the 77,811? Doesn't matter, assuming

1 it's all linear.

2 MS. OLIVER-GLASFORD: Yes. Happy to do.

3 MR. POCH: Let's get a number for that. I assume  
4 don't have it on-hand?

5 MS. OLIVER-GLASFORD: Mr. Poch, I'm assuming you want  
6 the actual numbers and not just the percentage?

7 MR. POCH: Right. The TRC net benefits, as opposed to  
8 the TRC ratio.

9 MS. OLIVER-GLASFORD: We can provide that for you.

10 MR. POCH: Just be clear whether it's for the existing  
11 GTA effort or for this trebling or -- as long as we can do  
12 the math and apply it either way, that's...

13 MS. OLIVER-GLASFORD: Sorry, just so I'm making sure I  
14 understand you clearly, you want that three times amount  
15 that we've talked about that allocated into TRC, as well as  
16 the roughly 20 times --

17 MR. POCH: I don't need the 20 times. I assume it's -  
18 well, it's linear. If we're holding cost effectiveness  
19 constant, then it's linear?

20 MS. OLIVER-GLASFORD: That is what our assumption is.

21 MR. POCH: Thank you.

22 MR. WASYLYK: That is going to be JT2.20.

23 **UNDERTAKING NO. JT2.20: TO ADVISE TRC NET BENEFITS**  
24 **WITH 9TJ/DAY GTA GROWTH.**

25 MR. POCH: Going over to GEC 32, we asked if we could  
26 get the TRC cost-effectiveness screening for your current  
27 program in the spreadsheet, and the response, which I think  
28 I have here, says that it's going to be given

1 confidentially to the audit committee in due course for the  
2 2013, 2014.

3 I assumed that the company had provided TRC screening  
4 of its programs prior or when it filed them most recently  
5 with the Board.

6 MS. OLIVER-GLASFORD: Yes, it did.

7 MR. POCH: I guess you were talking about what will be  
8 available later at the audit committee, which is the  
9 actuals as opposed to the projected. All we wanted was the  
10 projected and just get them on the record here.

11 Can we -- and I assume that's been -- for 2012, it  
12 would have been given to the 2012 audit committee already,  
13 would it not?

14 MS. OLIVER-GLASFORD: Correct, under confidentiality  
15 agreement.

16 MR. POCH: Let's just get the 2013/2014 projected,  
17 which I take it is not subject to this confidentiality  
18 concern.

19 MS. OLIVER-GLASFORD: That would be correct. Can I  
20 just ask a clarification? Are you looking for those for  
21 screening purposes? Is that the purpose?

22 MR. POCH: I think those would be what you already  
23 have available, so that's what we could ask for, yes.

24 MS. OLIVER-GLASFORD: Because we do have a TRC  
25 screening tool that I would be happy to provide for that  
26 purpose, as well, that -- it's essentially what that  
27 document does.

28 MR. POCH: That's fine, whatever form is easy for you.

1 That's helpful. We just want to know -- have the TRC for  
2 the various programs --

3 MS. OLIVER-GLASFORD: Okay.

4 MR. POCH: -- that you were projecting. I appreciate  
5 the actuals may vary. So that's another undertaking.

6 MR. WASYLYK: That is going to be JT2.21.

7 **UNDERTAKING NO. JT2.21: 2013/2014 PROJECTED TRC**  
8 **SCREENING RATIOS**

9 MR. POCH: Okay. Could you turn to GEC 34? Let's  
10 start with page 4. You've given us cubic metre sales by  
11 year for the four customer groups. Oh, you haven't given  
12 us cubic metres. Let me get this straight.

13 I guess all we really need there, could we get the  
14 sales, the corresponding sales? You've given us the  
15 savings in cubic metres for the GTA area. Can we get the  
16 sales, the corresponding cubic metre sales levels, just to  
17 put it in perspective, by customer, by the four customer  
18 types?

19 I assume if that's not -- if you can't give us  
20 precise, the best estimate will do.

21 MS. OLIVER-GLASFORD: We can provide that as an  
22 understanding.

23 MR. POCH: JT2.22?

24 MR. WASYLYK: Yes, that will be JT2.22.

25 **UNDERTAKING NO. JT2.22: EX1 A4 GEC34 - EXPECTED CUBIC**  
26 **METRE SALES BY CUSTOMER TYPE.**

27 MR. POCH: We also asked in 34 for the measure lives  
28 of all the programs by year, and you've given us -- you've

1 used an approximation of 12 years, which I gather was an  
2 approximation you've used in the past and you've been able  
3 to refine things better since then. Is that correct, first  
4 of all?

5 MS. OLIVER-GLASFORD: Sorry, would you repeat your  
6 question?

7 MR. POCH: I think in your answer on -- with respect  
8 to average measure life of savings, you indicated that it  
9 was -- the numbers you've given us assume a measure life of  
10 12 years, and then you expressed numbers going forward for  
11 consistency that way, even though the measure life is best  
12 estimated now in that period at 17.7 years.

13 I guess what I'm saying is if you could just give it  
14 to us by year your best estimate of measure life for each  
15 year, that would be most helpful.

16 MS. OLIVER-GLASFORD: I've got that with me now, if  
17 you'd like it, or I could provide that to you after.

18 MR. POCH: If you have it in paper and you want to  
19 just file it as an undertaking rather than reading numbers  
20 into the record, that might be better.

21 MS. OLIVER-GLASFORD: That sounds good.

22 MR. POCH: Okay, let's do that.

23 MR. WASYLYK: That is going to be JT2.23.

24 **UNDERTAKING NO. JT2.23: AVERAGE MEASURE LIFE FOR ALL**  
25 **DSM PROGRAMS.**

26 MR. MILLAR: Mr. Poch, could I ask you to hold for  
27 just a second? I'm going to close the shades, because it  
28 is getting quite warm in here. Thank you.

1 MR. POCH: Turning to interrogatory 35, I think you  
2 may have answered this this morning already -- this  
3 afternoon already. Give me one sec here.

4 In parts 2 and 3, we were looking at if you had not  
5 been investing in DSM for the last decade, how would that  
6 affect the timing of any of the proposal.

7 And I think your answer is you just haven't done that  
8 analysis. Is there any more information you can provide us  
9 with on that?

10 MR. FERNANDES: I think fundamentally I would like to  
11 refer you to the beginning section of Board Staff 15. What  
12 Board Staff 15 describes is the differences that the  
13 company has in terms of measurement at different time  
14 intervals, and also its forecasting methodologies and what  
15 they are used for.

16 So in terms of looking at things from an annualized  
17 perspective, which is what the DSM programs do -- and we  
18 use it for rate-making purposes and other purposes. It's  
19 clearly outlined in there how the company goes about using  
20 those forecasting methodologies for the purposes intended.

21 There's also purposes for daily forecasting for  
22 contract demand upstream, and, in addition, there's also  
23 forecasting for system modelling.

24 Now, all of these are done on different time periods  
25 for different purposes, and they all have different  
26 forecasting methodologies, and they are also done for  
27 different geographical areas.

28 So a lot of the questions that have been asked, we

1 have very difficult time, because some of them are asking  
2 for information for geographical areas and times frames  
3 which we don't typically forecast, and we never have. So  
4 particularly providing any kind of historical forecast is  
5 difficult, or has to be in some way, shape or form derived.

6 So in many times, the information just simply does not  
7 exist. So I would encourage you to read Board Staff 15 and  
8 the first couple of pages --

9 MR. POCH: I'm going to leave that.

10 MR. FERNANDES: -- because it will help understand why  
11 we may be having some challenges in answering some of the  
12 questions.

13 MR. QUINN: If I may, if I could just ask, when you  
14 were providing Board Staff 15, can you tell us what issue  
15 it is? I'm trying to find it and I'm not sure I'm on the  
16 right issue.

17 MR. FERNANDES: Sorry, I apologize.

18 MR. QUINN: A-3, okay.

19 MR. POCH: A...

20 MR. FERNANDES: A-3.

21 MR. POCH: A-3, Board Staff 15 to EGD. Let's just  
22 look at part (b). I think I might have my number wrong  
23 here. You've indicated some DSM measures affect both peak  
24 and energy, if you will, and others just energy.

25 I think I'm getting my interrogatory numbers mixed up  
26 here. You will have to excuse me for a minute.

27 Yes. In our question, we were asking about measures  
28 which save both energy and peak and measures which don't.

1 Can we get insight into your -- take your 2012 measures, by  
2 way of example, and could you just provide something  
3 classifying which measures affect both peak and annual, and  
4 which don't?

5 MR. MacLEAN: I think perhaps it's worth starting, by  
6 way of background, of reminding ourselves that we do  
7 everything within the DSM program on the basis of annual  
8 savings. And we do not actually have studies which are  
9 done, say, through load research, that would develop  
10 different curves addressing individual technologies or  
11 measures on a peak basis.

12 However, in an effort to respond to some of the  
13 questions that were posed to us, we pulled a number of our  
14 technical staff together and we made a number of  
15 assumptions on how we might get from different technologies  
16 with different profiles, from annual today and then to  
17 peak. And this was done on a best-efforts basis, but it's  
18 not backed up by what you would refer to as research or  
19 study. It is backed up by a set of reasonable assumptions,  
20 and we would be prepared to share those assumptions with  
21 you.

22 MR. POCH: So let's get an undertaking for that,  
23 assumptions and conclusions with respect to that -- how  
24 measures affect the peak, first of all.

25 MR. WASYLYK: That first one will be JT2.24.

26 **UNDERTAKING NO. JT2.24: TO ADVISE WHICH 2012 DSM**  
27 **MEASURES AFFECT BOTH PEAK AND ANNUAL SAVINGS**

28 MR. POCH: In part (c), you refer to the fact that you

1 did actually do what you called "a desktop analysis."

2 Is that the same -- are you talking about the same  
3 thing or is that a different effort?

4 MS. OLIVER-GLASFORD: Yes, that would be the same  
5 effort.

6 MR. POCH: So it's this desktop analysis you are going  
7 to give us, in whatever form it's available?

8 MS. OLIVER-GLASFORD: That would be correct.

9 MR. POCH: Thank you. Looking -- a few questions  
10 arising out of the Environmental Defence interrogatories,  
11 which my diligent friends got off ahead of us and we were  
12 able to rely on, and I'm thankful for that.

13 ED13 refers to this DSM -- this reduction factor, the  
14 0.65 reduction factor, and I'm not sure I fully understand  
15 it, but -- or it refers to other interrogatories that refer  
16 to it, perhaps.

17 There was indication that it uses gate station daily  
18 demand trends in the GTA. Could you tell us over what  
19 period of time those trends were analyzed to compute the  
20 reduction factor?

21 MR. FERNANDES: I can clarify that. So the reduction  
22 factor, in keeping with some of what I'm reading into the  
23 querying, there was some initial assumption that it was  
24 done from a bottom-up sort of aggregated forecast with  
25 detail.

26 It was not. It was done from the top down.

27 In terms of the time frame it looked at, was in  
28 keeping with -- if we go to A-35, I believe it's figure 3,

1 looking at the GTA project influence area temperature trend  
2 going from memory, I'm thinking 1999.

3 We looked at that trend, and as per the prefiled  
4 evidence -- if we can have that up?

5 If you can show the paragraph below a little bit, as  
6 well, that would be good.

7 So looking at the normalized peak day demand in the  
8 GTA project influence area, the graph was prefiled and the  
9 paragraph 15 below talks about the average peak day demand  
10 growth. And for the GTA project area historically, it was  
11 1.5 percent per year. When we look at our growth forecast  
12 going forward, prior to the reduction factor it was  
13 approximately 1.1 percent. We applied a 0.65 multiplier to  
14 the increase, bringing our project forecast growth down to  
15 about 0.75 percent.

16 It does taper off a little bit year over year as you  
17 go forward, but fundamentally our growth forecast going  
18 forward is about half what we had seen in the past.

19 MR. POCH: Okay. You derived this 0.65 reduction  
20 factor from some trend?

21 MR. FERNANDES: This is the trend.

22 MR. POCH: Okay. It's the shift from -- it's the  
23 trend from -- that was 1.5 down to 1.2, and you are  
24 projecting that trend forward; is that correct? Have I  
25 read that right?

26 MR. FERNANDES: Yes.

27 MR. POCH: And that shift -- and I see that the time  
28 period of that shift was over this period of data, '99

1 through 2012?

2 MR. FERNANDES: Correct. We compared our growth  
3 forecast, the increase in load growth coming out of the  
4 network analysis simulation, to previous trend, and when we  
5 looked at the load growth we applied a multiplier  
6 specifically intended to reduce the annual load growth. It  
7 was a very broad-brush approach.

8 And the net impact was historically we've seen 1.5  
9 percent growth; our bottoms-up forecast led to 1.1 percent,  
10 approximately, growth per year. After the multiplier of  
11 0.65, what you see in the evidence is approximately 0.75  
12 percent load growth in the first year, tapering down  
13 somewhat going forward to 2025.

14 MR. POCH: I guess I still really don't understand  
15 where the 0.65 came from.

16 I'm sorry to take you through it again, but can you  
17 just tell me how you derive the 0.65?

18 MR. FERNANDES: It was a very broad-brush approach in  
19 order to attempt to account for some things we believe we  
20 may not be able to account for within our forecasting  
21 model.

22 MR. POCH: Okay. And that was just -- you basically  
23 just exercised judgment; in other words, it wasn't a  
24 regression analysis or anything like that?

25 MR. FERNANDES: We looked at multiple trends and we  
26 chose to take down our forecast.

27 MR. POCH: And the multiple trends, could you give me  
28 a list of what they -- obviously one of them is -- the key

1 one is DSM, accelerating DSM, I take it, from long-term  
2 history?

3 MR. FERNANDES: The key one was looking at what our  
4 system analysis forecast would look like going forward.  
5 What we would forecast from our process as described in --  
6 was it ED.12?

7 MR. NACZYNSKI: Yeah, 12.

8 MR. FERNANDES: The forecast, system modelling  
9 forecast, as described in detail in Environmental Defence  
10 No. 12.

11 MR. POCH: I'm going to hand the that off to Mr. Elson  
12 and see if he -- I wish him luck if he can understand it  
13 better than I can.

14 Maybe just one more question. Without going back and  
15 looking at all that material first, what drove you to  
16 realize you needed a reduction factor? What were the two  
17 disparate value sets that you had that you said: This  
18 doesn't reconcile? We need a factor here to account for  
19 some things that our model is not picking up.

20 What were those two forecasts? Could you just label  
21 them? One was your...

22 MR. FERNANDES: Our system analysis forecast.

23 MR. POCH: And that's the one that's done at a very  
24 high level, looking at gas sales overall and gate station  
25 flows, kind of thing?

26 MR. FERNANDES: No. That's the historical trend from  
27 gate station flows.

28 The detailed build-up based on regression analysis of

1 individual customer bills, once it was aggregated up, would  
2 form our system analysis forecast.

3 MR. POCH: Was that the one that gave you a higher  
4 forecast or a lower forecast?

5 MR. FERNANDES: That was our original starting point.

6 MR. POCH: And you felt it was too high?

7 MR. FERNANDES: And what we did is we looked at our  
8 aggregated trend, and we wanted to ensure that we were  
9 conservative.

10 MR. POCH: So your aggregated trend was, in fact,  
11 coming in lower than the built-up analysis; is that right?  
12 Have I got it right, or in the wrong direction? Which  
13 one -- you had an aggregated trend --

14 MR. FERNANDES: The issue we really had was for a  
15 project of this nature compared to virtually all of our  
16 other reinforcements, there's a large discrepancy in the  
17 installed base relative to the incremental load growth, and  
18 we wanted to ensure that we had potential included for  
19 efficiency-type measures.

20 So it was simply to make sure that our load forecast,  
21 in terms of incremental load growth, was conservative to  
22 account for factors such as that.

23 MR. POCH: Okay. Just had you not used that factor,  
24 it would have been -- your forecast would have been 100  
25 over 65 higher?

26 MR. FERNANDES: Yes. So instead of approximately 18  
27 tJs per day growth per year, they would have been in the 26  
28 or -7 range.

1 MR. POCH: I was going to ask you, as I think I  
2 indicated in my heads-up to you, whether that factor --  
3 whether you're confident that factor fully accounts for  
4 efficiency improvements expected in the future, both your  
5 own and external efforts.

6 I think you've told me it was really an educated  
7 assumption, and you've been pretty careful to caveat it's a  
8 pretty rough assumption. Can you do any better than that?  
9 Was it based on any specific look at programs and other  
10 government initiatives and so on?

11 [Witness panel confers]

12 MR. FERNANDES: So in terms of the two forecasts that  
13 we looked at prior to landing on something for submission  
14 for the project, first off, the system analysis forecast  
15 that's built up in a much more detailed level is done for  
16 very specific purposes, as described in Board Staff 15, but  
17 it's aggregated up and it's reliant on a regression  
18 analysis of actual billing system data.

19 So actual billing system data takes into account all  
20 forces acting on demand, whether there are efficiency  
21 measures driving demand down or whether there are any kind  
22 of measures or increases, say, in production that would  
23 drive demand up.

24 The same thing can be said of the historical trend  
25 from our gate stations. By definition, that's what was  
26 actually consumed.

27 So it takes into account all efficiency measures to  
28 that point in time. What we did when we looked at those,

1 we could have had slightly different forecasts that we  
2 could submit. Our intention was to be intentionally  
3 conservative to ensure we would not in any way, shape or  
4 form be overstating our load growth.

5 When we look at the overall project, the load growth  
6 is actually a very small component in terms of the  
7 facilities that are being proposed, and it's only one of  
8 the purposes of the project.

9 I think if we can go to ED.33, one of the questions we  
10 were actually asked was: What would happen if there were  
11 no customer load growth at all? And we did run a  
12 feasibility scenario taking out all of the customer-related  
13 adds, revenue and whatnot, from that, and the project is  
14 feasible based on the other parameters.

15 As the beginning of the discussion when I talked about  
16 those other factors, the load growth facilities are  
17 coincident with the other facilities required to achieve  
18 the other objectives.

19 So from our perspective, the proposed facilities are  
20 required regardless of what the load growth forecast is, so  
21 changing it by some factor is not really going to take away  
22 from the need for the proposed facilities.

23 MR. POCH: You have made that point repeatedly. I  
24 understand the point. I unfortunately have to run, but I  
25 have a few questions left. They tend to overlap with Mr.  
26 Elson's, so he has kindly agreed to pick up the ball.  
27 Thank you very much, panel.

28 MR. MILLAR: Thank you, Mr. Poch. Mr. Elson?

1 MR. STOLL: Excuse me, Mike. Just before David gets  
2 away, is David -- are you happy, then, with just the  
3 undertakings that are on the record as far as our follow-up  
4 work with the --

5 MR. POCH: I'm not sure. Those undertakings,  
6 presumably they are going to respond to the questions I  
7 have already posed. There may be one or two that arise out  
8 of the other questions that I passed along to my friend.

9 I understand also, just on the record, there was a  
10 number of Excel spreadsheets that were provided in answer  
11 to earlier interrogatories, and there was some question as  
12 to whether we could get them with live formulas or with the  
13 formulas transparent, even if not cross-referenced to other  
14 sheets.

15 And I understand that Enbridge is finding a way to  
16 respond to that. So I don't think we will need to dispute  
17 it in front of the Board. We'll just leave that out there  
18 hanging. I'm just putting it on the record as a place  
19 holder in case a problem arises.

20 MR. STOLL: Understood. I was trying to make sure we  
21 were all clear where we were going.

22 MR. POCH: Great. Thank you very much.

23 MR. MILLAR: Let's continue. Mr. Elson.

24 MR. ELSON: Michael, what is your plan for taking a  
25 break? Is now --

26 MR. MILLAR: I don't know. How long will you be?

27 MR. ELSON: I mean, I have maybe another half hour on  
28 GEC's, and then another hour for Environmental Defence.

1 MR. MILLAR: Well, then we're going to be very, very,  
2 very, very tight today, so let's keep going and we'll see  
3 where we are.

4 MR. QUINN: Respectfully said, can others that just  
5 have short questions be able to get them in to make sure we  
6 have a time frame?

7 MR. MILLAR: If short means short, then, yes. Dwayne,  
8 yours were mostly by undertaking; right?

9 MR. QUINN: That's right, and I wanted to make sure  
10 that that was --

11 MR. MILLAR: Do you want to do that quickly now, and  
12 then --

13 MR. QUINN: If we can, Scott, do it now.

14 MR. STOLL: I'm fine with that. If the questions you  
15 had are provided in writing, if you want those put on the  
16 record for undertakings, we'll answer them.

17 MR. QUINN: Yes, and I have two minutes of  
18 supplemental questions, that's it, Kent, if you would allow  
19 me to proceed. Thank you.

20 MR. STOLL: We'll hold you to the two.

21 **QUESTIONS BY MR. QUINN:**

22 MR. QUINN: Yes, FRPO had asked some follow-up  
23 questions; started with the panel yesterday. It was punted  
24 to this panel. Most of these are data analysis questions,  
25 and, therefore, I didn't want to take the time here going  
26 through them.

27 So I provided copies to Mr. Stoll, counsel, and Ms.  
28 Chin from Enbridge. They have gratefully accepted to do

1 the undertakings. I want to put on the record I'm not in a  
2 hurry for these. These undertaking responses can follow  
3 the responses to ED and to GEC, so we don't need them to be  
4 delivered next Tuesday, if that's helpful to the company.

5 MR. MILLAR: Why don't we just give that a number?

6 MR. WASYLYK: Yes, that will be JT2.25.

7 **UNDERTAKING NO. JT2.25: TO RESPOND TO FRPO HARD COPY**  
8 **QUESTIONS SENT TO EGD.**

9 MR. QUINN: Board Staff has copies of the submission I  
10 made to Enbridge, and they have given a copy to the court  
11 reporter. Josh?

12 MR. STOLL: Do you want an undertaking for each of the  
13 four questions?

14 MR. MILLAR: Let's just do it all as a single one.

15 MR. STOLL: One to respond to four questions?

16 MR. MILLAR: Mr. Quinn has given you a set of  
17 questions and the undertaking is to respond to those.

18 MR. WASYLYK: That's fine.

19 MR. QUINN: My simply follow-up questions, and they  
20 are spurred by Mr. Poch, I wanted to get a slide rule out  
21 and figure out how you did your pressures that related to  
22 loads.

23 Simply put, in the pressure simulations that you are  
24 performing - and I'll stick first with steady state - are  
25 you presuming laminar flow or turbulent flow, or maybe more  
26 specifically can you tell me: Are you using IGT or  
27 panhandle-type equation? I just want to understand the  
28 fundamentals behind it.

1 MR. NACZYNSKI: It's a general flow equation.

2 MR. QUINN: General flow equation, okay, but squared  
3 on both pressures and load?

4 MR. NACZYNSKI: I'll have to get back you to that.

5 MR. QUINN: Maybe you can put that into the  
6 undertaking. It's just hopefully a simple question, but  
7 allows a high level impact of changes in load growth.

8 Those are my questions.

9 MR. MILLAR: Mr. Elson, why don't you get started and  
10 while you're going, I'll chat with the parties?

11 **QUESTIONS BY MR. ELSON:**

12 MR. ELSON: I can try to shorten this up if some of  
13 these can be answered by way of undertakings. I would like  
14 to start with a question that was bumped from a panel  
15 earlier which relates to ED number 38.

16 Further to the response to that and to actually BOMA  
17 interrogatory 5, could you provide an undertaking to tell  
18 me currently what percent of the GTA project influence  
19 area's annual supplies are sourced from western gate  
20 stations, such as Parkway and Lisgar?

21 MR. FERNANDES: I believe that's already in the  
22 evidence. Could you repeat the question?

23 MR. ELSON: Currently, what percentage of the GTA  
24 project influence area's annual supplies are sourced from  
25 western gate stations, like from Parkway and Lisgar and the  
26 like?

27 MR. FERNANDES: Can we pull up A-3-1? I believe  
28 there's already a figure in the pre-filed evidence.

1 MR. ELSON: Is it faster to do that by way of  
2 undertaking or to pull it up now?

3 MR. FERNANDES: They would have to pull it, because  
4 I'm not -- off the top of my head, I don't know the figure  
5 number, but it's clearly in the prefiled evidence.

6 MR. ELSON: While they are looking that up, I'll ask  
7 my next question, which is: Currently, what is the maximum  
8 percentage of the GTA project influence area's supplies  
9 that could potentially be supplied by the western gate  
10 stations?

11 MR. FERNANDES: Those gate stations are pretty much at  
12 their maximum capacity, given the downstream  
13 infrastructure.

14 MR. ELSON: Let's go back to my first question, now  
15 that we have this on the screen here.

16 So the percentage that are sourced from the western  
17 gate stations would be Parkway, Lisgar, and that's it; is  
18 that right? So 60 percent?

19 MR. FERNANDES: 70.

20 MR. ELSON: So 70 percent currently, and your answer  
21 is that no more could be provided from the west? Or is  
22 there some amount -- if there is -- if it's possibly  
23 different, if you could provide an undertaking to provide  
24 what the maximum is that could come in from the western  
25 gate stations, I would appreciate that.

26 MR. FERNANDES: There's no material additional.  
27 They're maxed out, given the current infrastructure.

28 MR. ELSON: After Parkway West and Bram interconnect

1 are built, what is the maximum percentage of the GTA  
2 project influence area's supplies that could potentially be  
3 supplied by western gate stations, even if segment A and B  
4 are not built?

5 MR. FERNANDES: I'm sorry, can you repeat the  
6 question?

7 MR. ELSON: What percentage could be supplied by the  
8 western gate stations after Parkway West and the Bram  
9 interconnect are built, but if segment A and B are not  
10 built, the pipelines?

11 MR. FERNANDES: I'm -- I'm having trouble being able  
12 to answer the question.

13 So Parkway West on its own, in isolation, would  
14 connect into the same downstream infrastructure as Parkway  
15 does today, so the answer would not change at all. You  
16 would be able to split the volumes between the two sites,  
17 but not get any incremental volume further down the system.

18 The Bram West interconnect is the initiation point for  
19 segment A, so if segment A did not exist, then neither  
20 would Bram West.

21 MR. ELSON: So what about if A was built but not B?

22 MR. NACZYNSKI: If segment A was constructed but not  
23 B, you would be able to offset some of the Parkway flows  
24 through the Albion station, but you would not be able to  
25 push any additional volumes of gas to the east without  
26 segment B.

27 MR. ELSON: So our maximum was 70 percent; is that  
28 still the maximum? Or would a higher percentage be able to

1 be flowed through?

2 MR. FERNANDES: There might be some, but it would be  
3 very low and not very material.

4 MR. ELSON: Like one or two percent, or five percent?

5 MR. NACZYNSKI: As Craig has mentioned, there would be  
6 immaterial -- on the order of one or two percent that  
7 you've stated there.

8 MR. ELSON: This flows from the response to BOMA  
9 Interrogatory No. 5, which asked for the supply percentage  
10 from western Canada before and after the GTA project, and  
11 it appears to stay the same. Why is that?

12 MR. FERNANDES: I'm afraid we would have to ask the  
13 panel that has gas supply.

14 MR. BRETT: I think that panel undertook to give an  
15 undertaking on that question as part of a somewhat larger  
16 undertaking, but they would address the issue of why the 37  
17 percent remained at 37 percent.

18 MR. STOLL: I believe Mr. Brett is correct on that.

19 MR. ELSON: Thank you. So I have a further question  
20 relating to ED No. 9.

21 In this -- in the response, Enbridge indicated the  
22 forecast peak loads for existing customers are assumed to  
23 be constant for network planning.

24 My follow-up question is: Does your load forecast on  
25 the evidence assume that the peak demands of all your  
26 existing customers will remain constant between now and  
27 2025?

28 MR. NACZYNSKI: So from a system planning perspective,

1 the base customers are remaining constant, and then of  
2 course we had the discussion on the 65 percent in reducing  
3 those overall net new loads. However, the base loads have  
4 remained constant throughout the planning study.

5 MR. ELSON: So for your forecast, your forecast  
6 assumes that the demands of existing customers are  
7 constant; is that correct? The forecast on the evidence?

8 MR. NACZYNSKI: That's correct.

9 MR. ELSON: Moving to -- that was actually in relation  
10 to ED.9. Moving to ED.12, in response -- I'm going to read  
11 a paragraph. You say that:

12 "An extract of 24 months of actual customer  
13 consumption volumes and corresponding temperature  
14 readings are used in a mathematical regression to  
15 determine the base load and heat load for each  
16 customer. The base load and heat load are  
17 aggregated to the sector within each  
18 municipality. These two values collectively  
19 result in peak hourly consumption estimates that  
20 are applied accordingly within the study area for  
21 the forecast period."

22 So our question is whether you can use this  
23 methodology to estimate peak loads for the past years and  
24 divide these peak loads by sector and by the number of  
25 customers in each sector, to calculate an average peak load  
26 per customer by sector.

27 MR. NACZYNSKI: That can be done, yes.

28 MR. ELSON: Thank you. If I could get an undertaking?

1 MR. WASYLYK: JT2.26.

2 **UNDERTAKING NO. JT2.26: TO PROVIDE AVERAGE PEAK LOAD**  
3 **PER SECTOR**

4 MR. STOLL: Can we clarify what that's for?

5 MR. ELSON: Pardon me?

6 MR. FERNANDES: Can we clarify exactly what's in that  
7 undertaking, so that we can appropriately respond?

8 MR. ELSON: That would be to use the methodology that  
9 was discussed in the answer to ED.12 -- I believe I read it  
10 out -- to estimate the peak loads for the past years, and  
11 then to divide those peak loads by sector and by the number  
12 of customers in each sector, to calculate the average peak  
13 loads per customer by sector.

14 MR. NACZYNSKI: Let me try again on that one there for  
15 you.

16 Let's take a look at ED.13. If we look at the tables  
17 that are provided there, that is a summary by the different  
18 regions, showing the derived historic numbers from 2006  
19 onward. So in that, you have broken down by municipality,  
20 by rate class, all the --

21 MR. FERNANDES: Sorry, by sector?

22 MR. NACZYNSKI: Thank you. By sector.

23 And it has a summary of the historical numbers that  
24 were there.

25 Does that provide you with the sufficient information?

26 MR. FERNANDES: I believe that was what you were  
27 referring to or asking for, was it not?

28 MR. ELSON: No. We're asking you to calculate the

1 average peak loads per customer by sector. It doesn't need  
2 to be broken out by municipality, but, again, it's the  
3 average peak loads per customer by sector, so I guess what  
4 an average residential customer would be using in past  
5 years, and we would be specifically looking at that since  
6 2000.

7 And I was going through the methodology in ED.12 to  
8 suggest a way that you could go about doing that  
9 calculation.

10 MR. NACZYNSKI: I don't have the data back to 2002, as  
11 you've requested. I think I made mention of that in ED.3.

12 MR. ELSON: Goes back to 2006; is that where the  
13 date --

14 MR. NACZYNSKI: I have the data to 2006 on here.

15 MR. ELSON: So ultimately what we would be looking for  
16 is a historical time series, showing the average peak loads  
17 by customer type since 2006.

18 MR. NACZYNSKI: And if you would like that  
19 specifically by the sector, we can provide that. You have  
20 far more information here already in front of you,  
21 obviously. If you would like me to aggregate that to --  
22 instead of by different municipalities, just to a single  
23 sector, we can do that.

24 MR. ELSON: I don't think it's in here. What we're  
25 looking for is the average peak loads by customer type, so  
26 like per customer.

27 MR. NACZYNSKI: That's exactly what you have here.  
28 This is average load -- so scroll down here a little bit,

1 Bonnie, to the second page on this.

2 So for example, here we have for residential, Brampton  
3 Concord, Don Mills, all those different regions, this is  
4 the peak hour loads on a 41 degree day for all these  
5 individual types of customers in Brampton, for example.

6 MR. ELSON: Could you provide me an aggregate of that,  
7 I guess?

8 MR. NACZYNSKI: The aggregate of that would be  
9 provided in ED.3, where I have it broken down by sector.

10 MR. ELSON: Maybe the confusion is between hourly and  
11 yearly. What we're looking for is the hourly peak.

12 MR. NACZYNSKI: These are the hourly peaks, hourly  
13 peaks at a 41 degree-day derived based on the load  
14 regression work we do as described in ED.12.

15 MR. ELSON: Where is the line that's total for  
16 residential?

17 MR. NACZYNSKI: Let's go back to ED.3. If we look at  
18 ED.3 and we scroll down to the summary table, in that  
19 summary table you have, for the different sectors, the  
20 aggregated -- what the base load was on the system and what  
21 load we were adding to it in that year, and then forecasted  
22 out.

23 MR. ELSON: Now, are these per customer numbers?

24 MR. NACZYNSKI: These are aggregated. So the number  
25 of customers multiplied by the figure in --

26 MR. ELSON: What we're looking for is the per customer  
27 average.

28 MR. NACZYNSKI: That's in ED.13. Those are the per

1 customer averages at a peak day, what we would be  
2 forecasting for system planning.

3 MR. ELSON: I don't see that in the answer to ED.13.  
4 Sorry. I don't know where we're not connecting here, but  
5 what we're looking for is the average per customer peak  
6 loads by company type since 2006.

7 I think in ED -- maybe it can be derived from ED.13 by  
8 aggregating each of the municipalities. Perhaps that's a  
9 way to do it, and if you could give me an undertaking to do  
10 that, that might be the answer.

11 MR. FERNANDES: We can provide that.

12 MR. ELSON: Thank you. Further on ED.12 -- could I  
13 get an undertaking number for that?

14 MR. WASYLYK: That will be a revision to undertaking  
15 JT2.26.

16 MR. ELSON: I'm going to go back to this -- the  
17 discussion of the declining average use trends, and that's  
18 part of the answer to ED.12. And you said the network  
19 analysis model also factors in the declining average use  
20 consumption trend.

21 Would you be able to provide us with that declining  
22 average use trend per customer and by sector?

23 MR. NACZYNSKI: We can provide that. It will be a  
24 summary of ED.13 with the specific trends applied to it,  
25 then, if you like. The information certainly is there, but  
26 we can undertake to provide you with that.

27 MR. ELSON: If you are providing me with those trends  
28 that you used, then, yes, thank you.

1 MR. WASYLYK: That will be JT2.27.

2 **UNDERTAKING NO. JT2.27: TO PROVIDE DECLINING AVERAGE**  
3 **USE TRENDS PER CUSTOMER AND PER SECTOR. INCLUDE**  
4 **EQUATION USED FOR REGRESSION**

5 MR. ELSON: Could you also describe, and I don't know  
6 if this would be in the same or a separate undertaking,  
7 exactly how they were calculated? I don't know there was  
8 some discussion earlier today, but I think I might not be  
9 the only person who didn't quite grasp how those trends  
10 were calculated.

11 Could you describe that for me now or as part of that  
12 undertaking response?

13 MR. NACZYNSKI: Not to be confused with the 65 percent  
14 discussion that we had, these trends -- on the trends, if  
15 you would like, we can provide the equation that was used  
16 for that regression on the table or on the chart for you.  
17 We would provide that.

18 MR. ELSON: If that could be added to JT2.27, that  
19 would be great.

20 When those trends were calculated, were you basically  
21 looking at your load growth over a certain period, your  
22 total load growth?

23 MR. NACZYNSKI: That trend was derived, again, going  
24 back to ED.13, we looked at the derived historic values  
25 that we were looking at by sector by region, because people  
26 use gas differently throughout the region, and we looked at  
27 how -- from 2006 onwards, how those customers were using  
28 the gas and what their derived peak hour was.

1 MR. ELSON: Is the trend based on all customers or  
2 just existing customers?

3 MR. NACZYNSKI: The trend is just based on those  
4 existing customers in that geographical area.

5 MR. ELSON: The trend isn't impacted by new customer  
6 additions?

7 MR. NACZYNSKI: The trend is only based on the  
8 customers that are currently on our system and burning gas  
9 that I have load information for.

10 MR. ELSON: Because it's a series over time, the fact  
11 the trend could go up or down doesn't have anything to do  
12 with people -- new customers coming in; is that correct?

13 MR. NACZYNSKI: That trend -- so whatever that load  
14 was, we use that load and applied that to the forecasted  
15 customers that were coming into that geographical area.

16 When Craig was describing that bottom-up approach that  
17 system analysis does, that's what we applied. So based on  
18 the historic use of how customers were burning gas, we  
19 applied that to future customers. Then that's when we got  
20 into the discussion that once we aggregated all that up  
21 across the entire system, it appeared to be a little high  
22 compared to what we were seeing through all the gate  
23 stations.

24 MR. ELSON: Okay. Could you provide us with your  
25 forecast of the peak hour demands by customer type that you  
26 applied the forecast customer additions to?

27 MR. NACZYNSKI: Again, I believe that's in ED.13.  
28 We've described going out in the forecast for the customers

1 in those geographical areas. Those are the loads in ED.13  
2 that were applied to the customers that were forecast to  
3 come on in that area by sector.

4 MR. ELSON: Those are the existing?

5 MR. NACZYNSKI: The existing would be the derived  
6 historic, and then from 20 -- would we be able to pull up  
7 that chart again in ED.13, just take a look at that?

8 If we go down to -- let's go down to the residential,  
9 because I think that's the easiest for us to look at here.  
10 So, for example, in Brampton for example, you can see from  
11 2006 to 2012, you see a series of numbers. Now, those are  
12 what our forecast actually was showing us from our load  
13 gathering.

14 Then you can see going out in the future what we  
15 applied per -- so for Brampton, for example, in whatever  
16 year that was, we multiplied that by the number of  
17 residential customers that were forecast to come on in  
18 Brampton.

19 MR. ELSON: Okay. Moving on, in response to ED.12,  
20 you refer to an additional reduction factor that was also  
21 applied. What's the difference between this additional  
22 reduction factor and the 0.65 reduction factor we were  
23 talking about before?

24 MR. NACZYNSKI: They are one and the same.

25 MR. ELSON: So there is just one?

26 MR. NACZYNSKI: There's one. Hold on. Before I --  
27 when I added the -- so you have the loads, and you can see  
28 those loads change slightly in the future years when I

1 multiply that by the future customers coming on.

2 So remember that I mentioned that we kept the base  
3 year constant, and then added the future customers to that.

4 Based on that declining trend we were seeing that  
5 could be derived from ED.13 and the numbers there, we then  
6 applied those loads to the customers that were being added  
7 in that geographical area. So that is a first slight  
8 reduction factor that was added, very small.

9 Then the 65 percent was added to the total load that  
10 was being added.

11 MR. ELSON: So what is the first reduction factor?

12 MR. NACZYNSKI: The first reduction factor is that  
13 trend that I have undertaken to provide to you based on the  
14 historic -- derived historic peak loads, seeing that there  
15 is a slight decrease from year to year, which you can see  
16 on that table, and then forecasted out what those loads  
17 would be per customer added to the system.

18 MR. ELSON: So the second reduction factor is the  
19 reduction factor to account for both DSM and customer  
20 losses, is that right, the 0.65?

21 MR. FERNANDES: It's intended to account for all the  
22 other forces impacting our peak hour on the system.

23 MR. ELSON: And I guess the 0.65, what units is that  
24 number in?

25 MR. FERNANDES: There are no units. Simply you can  
26 think of it as a 35 percent reduction or a 0.65 multiplier.

27 MR. MILLAR: Mr. Elson, when would an appropriate time  
28 for a break be? You might just finish this set of

1 questions, perhaps.

2 MR. ELSON: That would be perfect. So I think you may  
3 have answered this question already, but how exactly do you  
4 apply this reduction factor? You just take what your  
5 anticipated load growth is, and then multiply it by 0.65;  
6 is that correct?

7 MR. FERNANDES: Correct. The system analysis  
8 forecast, once all of the detail that you see in that table  
9 is aggregated up to a network node level, it was applied at  
10 the network node level as a multiplier.

11 MR. ELSON: So the resulting further reduction in peak  
12 hourly loads by customer type, would you be able to provide  
13 me with those figures?

14 MR. FERNANDES: It wasn't done by customer type. It  
15 was based on the aggregated load that was at the system  
16 level.

17 MR. ELSON: Would you be able to provide a break-out  
18 by customer type based on the data that you have? Of what  
19 the reduction was, that 65 percent, what that equated to?

20 MR. FERNANDES: Well, that was not the way it was  
21 applied. We could derive something mathematically, but  
22 quite simply if you take any of the individual breakdowns  
23 you have right now, it incorporates a 35 percent reduction,  
24 so you can back-calculate that yourself quite easily.

25 MR. ELSON: If you could provide that breakdown for us  
26 so that we wouldn't have any disputes about the numbers,  
27 that would be appreciated.

28 MR. FERNANDES: Sure.

1 MR. WASYLYK: JT2.28.

2 **UNDERTAKING NO. JT2.28: TO PROVIDE REDUCTION IN PEAK**  
3 **HOURLY LOADS BY CUSTOMER TYPE THAT INCORPORATES**  
4 **35 PERCENT REDUCTION**

5 MR. ELSON: Perhaps now would be a good time for a  
6 break.

7 MR. MILLAR: We're a bit tight for time, still, so  
8 let's make it 15 minutes, and we will resume at 3:30.

9 --- Recess taken at 3:15 p.m.

10 --- On resuming at 3:30 p.m.

11 MR. MILLAR: Good afternoon. We're back. Mr. Stoll,  
12 I understand one of your witnesses has to be gone by 4:30  
13 today; is that correct?

14 MR. STOLL: That's correct. Mr. MacLean has a hard  
15 stop at 4:30.

16 MR. MILLAR: I guess we will have to manage as best we  
17 can. We may have to proceed by way of some undertakings if  
18 he's --

19 MR. STOLL: If need be. If he gets up to leave, it's  
20 not a function of the question.

21 MR. MILLAR: Of course. Mr. Elson, would you like to  
22 continue?

23 MR. ELSON: Yes, thank you. On the 0.65 reduction  
24 factor, I understand that it was a bit of a ballpark  
25 figure. But could you provide an undertaking to describe,  
26 in as much detail as you can, how it was calculated and all  
27 of the factors that it covers?

28 MR. FERNANDES: So first and foremost, I think we do

1 need to go back to Board Staff 15. As explained, there's  
2 only certain data points that we actually have with respect  
3 to consumption and consumption on annual basis versus and  
4 daily or an hourly basis.

5 So, fundamentally, when we are looking backwards at  
6 historical actual data, which would account for all forces  
7 acting on demand, at a customer level we typically read the  
8 meter once a month -- actually, once a month, and then the  
9 next month for most customers, being residential, are  
10 estimates.

11 So when we look backwards for historical data, we  
12 simply do not have data that is at an hourly or daily level  
13 at a customer level. So it's fairly fundamental. All of  
14 our work we have to do is derived broken down from -- at a  
15 sector or customer level differentiation when talking about  
16 peak load.

17 When we look at the gate station or system level data,  
18 that certainly is measured on an hourly and daily basis.

19 MR. ELSON: In the interest of time, I don't know if  
20 this is connected to the 0.65. I think my question was  
21 simple and it's probably better answered in an undertaking,  
22 if that might speed things up a little bit.

23 I do recognize what you are saying with respect to  
24 your data limitations, but I don't know if that's connected  
25 to this specific issue, and perhaps it could be answered by  
26 way of undertaking.

27 MR. FERNANDES: So the specific question would be?

28 MR. ELSON: Was exactly how the 0.65 was calculated,

1 providing an explanation, and also listing all of the  
2 factors that it covers, such as DSM, et cetera.

3 MR. FERNANDES: We can do that.

4 MR. WASYLYK: That will be JT2.29.

5 **UNDERTAKING NO. JT2.29: TO ADVISE HOW EGD'S 0.65**  
6 **REDUCTION FUNCTION WAS CALCULATED WITH AN EXPLANATION**  
7 **DISCUSSING ALL THE FACTORS IT CONSIDERS INCLUDING DSM.**

8 MR. ELSON: So continuing on the load forecast issue,  
9 I have to admit that to me it's a bit of a black box, and  
10 we have a couple of pages in your evidence on it, but it's  
11 not -- I haven't been able to put all the pieces together  
12 and I don't know if we have the information to put all the  
13 pieces together.

14 And I'm wondering if you could provide an undertaking  
15 - and we actually ask this by way of interrogatories - to  
16 provide the underlying analyses and to provide the  
17 underlying spreadsheets so that we can go back and look  
18 over those to fully understand all the inputs and the  
19 assumptions.

20 It might speed up a lot of these discussions here,  
21 which are difficult to do in the air without the underlying  
22 analyses and spreadsheets. Would you be able to provide  
23 that undertaking to provide the underlying spreadsheets and  
24 analyses?

25 MR. NACZYNSKI: The underlying spreadsheets and  
26 analysis with respect to what exactly?

27 MR. ELSON: To your load forecast.

28 MR. NACZYNSKI: To the load forecast, as in with

1 respect to customer projections?

2 MR. ELSON: All aspects of it, in the sense how you  
3 came up with what your load forecast is, the different  
4 factors involved.

5 MR. NACZYNSKI: So you have a summary of all the  
6 results of the load forecast.

7 MR. ELSON: We do, and we just don't understand how  
8 you got there exactly, how existing customers and new  
9 customers factored in, how your -- where your different  
10 data came from. If you could provide the underlying  
11 documentation, that would satisfy us and it would go a long  
12 way to assist us in being able to assess your load  
13 forecast.

14 Right now, it's a black box, like I said. You  
15 provided a summary of the results, but we have no idea how  
16 you got there. So if you could provide an undertaking to  
17 provide the underlying spreadsheets, et cetera, that would  
18 explain how you got to those final conclusions, that would  
19 be appreciated.

20 Can you give that undertaking?

21 [Witness panel confers]

22 MR. NACZYNSKI: So, again --

23 MR. FERNANDES: Can we pull up -- was it ED.13, the  
24 table?

25 MR. ELSON: If your ultimate answer is no, we can  
26 perhaps move on, but --

27 MR. FERNANDES: I believe we've already provided --

28 MR. NACZYNSKI: My ultimate answer would be no. I

1 believe I provided all this information. You have all the  
2 information on our customer forecast, as well as what those  
3 load -- per customer load projections will be.

4 I've undertaken to provide you with the curve of the  
5 historical data points with what that's going to be, and  
6 that will allow you to get to that same conclusion of  
7 what's in ED.3 of total loads -- between ED.13 and ED.3.

8 MR. ELSON: If the answer is no, then I'll move on and  
9 I will take a look at what you are providing me.

10 MR. FERNANDES: Just to be clear, the table here,  
11 which does provide future forecasts, peak hour by sector,  
12 by area, if you multiply by the number of customer  
13 additions by sector, that's how you get to the incremental  
14 load growth.

15 MR. ELSON: Okay. Thanks for that clarification.

16 This load growth forecast for new customers, you  
17 estimate the number of new customers by sector and by year;  
18 is that correct? That's part of your forecasting process?

19 MR. FERNANDES: That's correct.

20 MR. ELSON: Then you multiply the number of new  
21 customers per sector by a per customer average; is that  
22 right?

23 MR. NACZYNSKI: That's correct.

24 MR. FERNANDES: Which is the table we're showing here.

25 MR. ELSON: The numbers in this table, are those the  
26 per customer averages that you multiply the numbers by?

27 MR. NACZYNSKI: That's exactly it.

28 MR. ELSON: Thank you. And so the per customer

1 averages going forward are constant, or do they go up and  
2 down?

3 MR. NACZYNSKI: They are -- in most cases you'll find  
4 a slight decline in the peak hour consumption. And, again,  
5 this goes back to the earlier undertaking to provide how  
6 that was derived. But it would be based on the previous  
7 six years of derived historic loads.

8 MR. ELSON: And your estimated average peak for  
9 existing customers, would that be constant or would it be  
10 up and down over time?

11 MR. NACZYNSKI: Again, in ED.13, if you look at the  
12 derived historic number that's there, that is what we found  
13 in those particular areas as the load would have gone up  
14 and down, average loads on a peak day that we've calculated  
15 based on the actual billing data. And it's an average of  
16 all the customers in Brampton, for example; residential,  
17 for example.

18 MR. ELSON: Thank you. I'm going to move onto some of  
19 the questions in my letter to you of -- my letter to  
20 Enbridge of June 11th, 2013. I'm going to start by  
21 touching on those questions that are more for clarification  
22 as opposed to questions where I'm asking for a more  
23 complete interrogatory response.

24 So I'll be skipping around a little bit here.  
25 Starting with Interrogatory No. 3, our second question is:  
26 Can you explain why some of the incremental historic loads  
27 are negative in the table that you provided for  
28 interrogatory 3?

1 MR. NACZYNSKI: If we pull up ED.3, and then we take a  
2 look at the table, again, these are the derived hourly  
3 numbers based on the -- all the customers that were in --  
4 in this case, it's all aggregated up.

5 If you look at -- you're right. Some of the numbers  
6 do go negative. So, for example, there's a couple of  
7 things that will filter into this: (a) Did we lose  
8 customers, or was there declining use per customer?

9 And, again, remember these numbers are based on 24  
10 months of billing information, of which only 12 are actual  
11 meter reads, and then derived or normalized up to a 41-  
12 degree day.

13 So the loads -- these are the loads at that year that  
14 were in our system or for your forecast planning for that  
15 particular winter.

16 So other factors that would be included in it would be  
17 weather. So if we had unusually warm weather, that could  
18 adjust the regression that was completed, given -- you  
19 know, if the weather was warm, for example, you've got less  
20 data points of cold weather, and then your trend may skew a  
21 little bit.

22 We're looking at relatively small volumes if we go  
23 along the grand scheme of the overall system. If we lost  
24 industrials, our industrial customers use less gas. For  
25 example, you will see a lot of the negative -- some of the  
26 negative numbers in the industrial sector.

27 Then with respect to some of the residential, that may  
28 be having to do with some of the warmer winters we've

1 experienced over the last couple of years.

2 MR. ELSON: Your base numbers are your existing  
3 customers, and your adds new customers, but the number for  
4 your new customers is negative, is that --

5 MR. NACZYNSKI: Correct. So what we're looking at  
6 here, this is the actual summary of the loads for that  
7 particular heating season. So, you're right, if the base -  
8 we've got the - what we're really looking at, the base plus  
9 the add, it's really the load that we had forecasted in  
10 2009 subtracted from the year before. And in some cases,  
11 for example in the apartments in 2008, we see that it  
12 actually decreased collectively all the apartments in all  
13 of our system. When we looked at what the peak hour number  
14 was, that number had reduced slightly, again, remembering  
15 this is a regression analysis completed on the data points  
16 to analyze this.

17 You're right, it's going to bounce around a little bit  
18 from sector to sector from year to year.

19 MR. ELSON: So the negative number doesn't represent -  
20 can't represent a negative demand from new customers. What  
21 it represents is an adjustment factor that you're applying?

22 MR. NACZYNSKI: No. What it represents is that the  
23 load -- for example, if the load dropped, what it shows is  
24 that for that sector, the peak hour -- the forecasted peak  
25 hour consumption for that sector has decreased. There  
26 hasn't been any customer losses, et cetera.

27 MR. ELSON: For ED.13, you provided table 1. What are  
28 the units for this data, and are these per customer

1 averages?

2 MR. NACZYNSKI: Table 1 on ED.3 here?

3 MR. ELSON: ED.13.

4 MR. NACZYNSKI: Sorry, ED.13. Let's pull up ED.13  
5 there. So the loads that are in this table are the average  
6 -- is the average peak hourly load in cubic metres per  
7 hour.

8 MR. ELSON: So these are per customer averages?

9 MR. NACZYNSKI: These are per customer averages.

10 MR. ELSON: For ED.14, we requested the forecast  
11 impact of DSMS calculated using the reduction factor for  
12 each year from 2014 to 2025. What we got was a response  
13 that was one number, which was 13,000 cubic metres per  
14 hour.

15 Can you explain why the result would be constant over  
16 time?

17 MR. FERNANDES: It's actually not constant. I guess  
18 in the resolution of the table that was provided, the  
19 number of decimal places -- it does not change very much  
20 from year to year.

21 MR. ELSON: I think it's --

22 MR. FERNANDES: Would you like us to provide that with  
23 more digits attached to it?

24 MR. ELSON: It's not necessary. If you can just  
25 explain why it's constant or effectively constant?

26 MR. FERNANDES: The way the interrogatory response was  
27 done was taken from our original evidence to ensure there  
28 was no matching. Our original evidence didn't have decimal

1 places in terms of how you would see the load growth. So  
2 we back calculated the reduction factor and, as a  
3 consequence, it appears to be flat. There's actually a  
4 slight variation.

5 MR. ELSON: I just would have thought the forecast  
6 impact of DSM from 2014 to 2025 would actually increase  
7 over time as the DSM budget increases. Is the assumption  
8 that the DSM budget is basically flat and, therefore, the  
9 impact of DSM is the same?

10 I just don't -- I would have thought the number would  
11 have been changing between -- in that time period.

12 MR. FERNANDES: As we have previously stated, the way  
13 the reduction factor was created was a top-down aggregate.  
14 It was simply a multiplier. The resolution, when you take  
15 the load growth directly out of the evidence, the load  
16 growth appears to be constant, because we didn't include  
17 additional digits. It's not actually constant, but it's  
18 very close to it.

19 MR. ELSON: What's the DSM, I guess, component of the  
20 reduction factor?

21 MR. FERNANDES: Again, we didn't do it as a bottom-up  
22 forecast. It was done as a top-down. So we are unable to  
23 break it apart or disaggregate it.

24 MR. ELSON: Could you, if you haven't done it already,  
25 provide us with an estimate of what proportion it would be?  
26 So netting out all the other factors, what proportion of  
27 the reduction factor is just DSM?

28 MR. FERNANDES: It was a broad-based assumption. We

1 have no basis on which to do that.

2 MR. ELSON: So can you work backwards? You must have  
3 used some sort numbers to come up with that. I'm just  
4 wondering if you can, in retrospect at least, look at 0.65  
5 and say how much of that is with respect to DSM.

6 MR. FERNANDES: I have no basis on which to do that.

7 MR. ELSON: So, no, okay. Moving on to ED.17,  
8 according to the response to ED.17, the GTA system has a  
9 peak hourly capacity of about 3 million cubic metres.  
10 According to the response to ED IR number 3, the peak hour  
11 demand in 2015 and 2016 will be about 2.9 million cubic  
12 metres.

13 According to those figures, there would be actually a  
14 capacity surplus of about 58,000 cubic metres in 2015 and  
15 2016. And if you look at our letter of June 11 that is on  
16 page 6, those specific numbers, this is equivalent to a  
17 surplus of 2.2 tJs since there are 37.69 mJs per cubic  
18 metre.

19 But according to the response in ED IR 25, in 201 and  
20 2016 there is a capacity deficit of 15,000 cubic metres per  
21 hour. So can you explain the discrepancy there?

22 MR. NACZYNSKI: Certainly. So what I could have or  
23 should have communicated a little more clearly in those  
24 tables, that includes bundled customers only. We also have  
25 unbundled customers, of which there are two in the GTA  
26 influence area.

27 When you net those customers in, you will see that  
28 there's a capacity shortfall, as I have indicated there. I

1 also would want to just make clear for the record and  
2 everybody in the room here that the 10 terajoule shortfall  
3 is point specific at station B at that control point;  
4 whereas the volumes that I/we have quoted are total system.

5 MR. ELSON: So moving on to ED.19, this actually  
6 relates to a question that David asked earlier, which was  
7 when Enbridge started analyzing DSM as a possible  
8 alternative and what was done, and if you could provide  
9 written materials.

10 And I heard you say this morning that you looked at a  
11 rough order of magnitude of what DSM was achievable. I  
12 believe those were your words. And could you provide the  
13 memo or whatever analysis was done at that time so that we  
14 could take a look at it?

15 And by "that analysis", the question probably was not  
16 clear enough for an undertaking. Could you provide your  
17 analysis from when you first screened out DSM, your  
18 internal memo or report or whatever was created at the  
19 time?

20 MR. FERNANDES: We could write up the response that  
21 was given, but just to be clear, looking at DSM as a  
22 potential alternative to meet the objectives of the  
23 project, we have an order of magnitude estimate of existing  
24 DSM programs being -- on annual basis, providing  
25 approximately 8 or 9 tJs per day, but we have other factors  
26 -- sorry, 8 or 9 tJs per day specific to the entire GTA  
27 project influence area, but we have other needs on the  
28 project to be able to swing 600 tJs.

1 MR. ELSON: I'm just asking about the original  
2 analysis that you did and whether you can provide a copy of  
3 that. I do understand what you are saying on the evidence  
4 here.

5 Are you able to provide an undertaking to provide the  
6 original analysis when you screened out DSM as an  
7 alternative, some sort of document that would have a data  
8 on it and be either one page or ten pages? I don't know  
9 what it is, but if you could provide it, that would be  
10 appreciated.

11 [Witness panel confers]

12 MR. FERNANDES: So in response to this, we don't have  
13 anything to provide. When we're undertaking to take a look  
14 at a project, it is common for you to explore many possible  
15 alternatives but using rules of thumb to rule out certain  
16 alternatives in order to preserve resources and time.

17 So the order of magnitude was simply so large that we  
18 did not consider it in detail.

19 MR. ELSON: So there's no document?

20 MR. FERNANDES: No, there is not.

21 MR. ELSON: When was that decision made?

22 MR. FERNANDES: In 2011.

23 MR. ELSON: I presume in a meeting?

24 MR. FERNANDES: Correct.

25 MR. ELSON: Moving on to ED.42, Enbridge's response to  
26 this interrogatory included a category entitled "Other"  
27 that accounts for about two-thirds of the customers and  
28 half of the volume. Would you be able to provide a further

1 breakdown of the "other" category and explain what it  
2 contains perhaps by way of undertaking?

3 MR. FERNANDES: This particular response, there's not  
4 a member on the panel, so we can provide an undertaking to  
5 see if we can provide further breakdown.

6 MR. ELSON: Best efforts would be --

7 MR. FERNANDES: If we can, then we will.

8 MR. ELSON: Thank you.

9 MR. WASYLYK: That's JT2.30.

10 **UNDERTAKING NO. JT2.30: FOR ED IRR #42, PROVIDE**  
11 **FURTHER BREAKDOWN OF WHAT 'OTHER' ROW IN 2012 EGD**  
12 **COMMERCIAL CUSTOMER TABLE REPRESENTS.**

13 MR. ELSON: I'm going to jump actually back to the  
14 remainder of GEC's questions. The remainder of the  
15 questions in our letter of June 11th are, in a sense, for  
16 better interrogatory responses, and I'll deal with those at  
17 the end if we have time, but I would like to make sure we  
18 get through the GEC's questions, as well.

19 Moving back to ED.13, I believe David may have asked  
20 this just before he left, but the reduction factor, 0.65  
21 reduction factor, my understanding is that that is meant to  
22 fully account for all efficiency improvements expected in  
23 the future, both those in Enbridge's programs and  
24 introduced by other factors?

25 MR. FERNANDES: As explained earlier, yes, we believe  
26 that our load forecast is accurate after application of  
27 that factor.

28 MR. ELSON: If DSM savings were to double in the

1 future, what reduction factor would then be appropriate?

2 How would that affect the reduction factor?

3 MR. FERNANDES: It would be larger. The 35 percent  
4 would have to go up to approximately 65 percent, but there  
5 would still be load growth. Based on our response to --  
6 based on response that's already been provided to ED.14,  
7 we've provided our best estimate of what impact on peak  
8 hour the annualized DSM savings have of our existing  
9 programs.

10 So if you were to double that amount in the GTA  
11 influence area, you can directly correlate what the impact  
12 would be on our load growth.

13 MR. ELSON: I'm wondering would the impact would be on  
14 your reduction factor. Your reduction factor currently is  
15 0.65. If your DSM programs were to result in double the  
16 savings, what would your new reduction factor be?

17 [Witness panel confers]

18 MR. FERNANDES: We're having some challenges with the  
19 line of the thought process. So the reduction factor was  
20 intended to recognize the fact that, from an average use,  
21 both annual and we do believe on peak, has some form of  
22 declining trend, and that declining trend is not just  
23 because of efficiency gains or DSM programs. It's as a  
24 result of a number of forces that are driving consumption  
25 and peak daily and peak hourly demands.

26 Some of those factors drive that down and some of the  
27 factors drive it up, such as economic factors for  
28 industrial customers with increased production.



1 develop a more accurate estimate based on the types of  
2 measures installed of what peak day and peak hour savings  
3 are? Is it possible to do that?

4 [Witness panel confers]

5 MS. OLIVER-GLASFORD: Union, that was our best effort  
6 to try and understand what the load profiles would be. We  
7 don't have definitive studies that show what the load  
8 profiles are for each technology. We've talked about this  
9 desktop analysis. So my hope is that would be helpful in  
10 kind of gaining some of that perspective.

11 MR. ELSON: Thank you.

12 MS. OLIVER-GLASFORD: But I think beyond that, we  
13 can't. Yes, we don't have anything further.

14 MR. ELSON: Thank you. Moving onto ED.18, at one  
15 point in the evidence or in the interrogatory responses  
16 there's reference to a 20-fold increase in DSM necessary,  
17 but then in ED.14 there is that table which suggests that  
18 DSM could increase, I believe, two-fold, in order to deal  
19 with load growth issues.

20 I'm wondering if you could explain the difference  
21 between that 20-fold increase -- I believe that's related  
22 to addressing the SMYS pressure issues -- as opposed to the  
23 increase as indicated on table 14 -- sorry, the table as  
24 part of IR 14, ED's IR 14.

25 MR. FERNANDES: You are correct. In the one case, the  
26 200 percent increase in DSM -- slightly more than that --  
27 it was to offset the remaining load growth, whereas in  
28 ED.18 it's to offset that year's load growth, in addition

1 to accounting for the pressure reduction on the Don Valley  
2 line.

3 MR. ELSON: That's to bring it down from 36 to 30 so  
4 it's within SMYS? That's the 20-fold?

5 MR. FERNANDES: So that would increase the required  
6 offset to be a factor of 20-fold.

7 And I should note as we had in our preamble, noting  
8 that that would also have to be heavily concentrated in the  
9 influence area from Victoria Square. So it's not  
10 necessarily a generalized reduction in load that would have  
11 to occur; it would have to be the fairly heavily  
12 concentrated in the -- I guess we've now decided that it's  
13 peach-coloured area in the figure that we were looking at  
14 earlier.

15 MR. ELSON: That's actually a very important issue  
16 that I will need to get back to before the end of this, but  
17 I would like to continue on with the GEC questions, of  
18 which there is only one or two more.

19 For ED.20, in referring to the growth-only component  
20 of the GTA project, does Enbridge mean that if growth was  
21 the only project driver, this component would not be added  
22 if growth was eliminated by DSM?

23 MR. FERNANDES: No, that is incorrect. We were  
24 referring to a hypothetical situation, where the only need  
25 for the company was to address system load growth.

26 If that were the case -- and I have to be clear it is  
27 not -- if we were looking at a load growth-only scenario  
28 and nothing else, the amount of reinforcement required for

1 the system is actually relatively small. And it does  
2 entail, as per the interrogatory response, going from  
3 Sheppard to McNicoll at an approximate cost of 40 to  
4 \$50 million, is what we have done a desktop estimate on.

5 But again, that is a totally hypothetical situation,  
6 because that's not the only issue the company is trying to  
7 address.

8 MR. ELSON: So in that hypothetical situation, to  
9 defer the growth-only component of the project, is that  
10 what you would need, the amount of DSM that you indicated  
11 in ED.14? Or more or less than that?

12 MR. FERNANDES: That is correct. ED.14 lists the  
13 amounts of DSM using all of the assumptions, as noted, that  
14 would reduce our load growth forecast to essentially zero.

15 MR. ELSON: Thank you. ED.39, Enbridge says that 48  
16 percent of its customers are in the GTA, but not 48 percent  
17 of its industrial customers. Could you provide the portion  
18 of Enbridge's total residential, apartment, commercial and  
19 industrial sales that are in the GTA, and could you provide  
20 those separately for each customer type?

21 And actually, you know, it might be best, just so it  
22 can be clear, to provide both the proportion by sales and  
23 also the proportion just by customer numbers.

24 MS. OLIVER-GLASFORD: We can provide you that as an  
25 undertaking.

26 MR. ELSON: Yes, of course. Thank you.

27 MR. WASYLYK: JT2.32.

28 **UNDERTAKING NO. JT2.32: THE PORTION OF EGD'S TOTAL**



1 exact number, which changes slightly from year to year,  
2 because there are a few people that aren't full-time on it.  
3 So we allocate portions of the time, based upon other  
4 things that they are doing.

5 But rough order of magnitude would be approximately 70  
6 -- the equivalent of approximately 70 people employed by  
7 the company on DSM activity. The majority of those would  
8 be on the sales or marketing side.

9 MR. ELSON: Is that approximately 70 FTE customer  
10 reps?

11 MR. MacLEAN: What I'm suggesting is that the majority  
12 of those forces would be on marketing or sales activity. I  
13 would have to get back you to on the exact number, but it  
14 would be in the neighbourhood of 50 out of the 70 would  
15 actually be field sales or marketing forces.

16 MR. ELSON: That's sufficient. And if you go back and  
17 look at it and find that you want to provide a more  
18 accurate figure, I'll leave that up to you.

19 I would like to -- so that's it for the GEC questions.  
20 I would like to go back to the discussion of the peach  
21 area, and in particular, further to Environmental Defence  
22 Interrogatory 25, I believe -- no, 24.

23 In Interrogatory ED.24, we had asked that if load  
24 growth were to be addressed by DSM, where would that DSM  
25 need to be located and could it be located anywhere in the  
26 GTA project influence area.

27 Where would that DSM need to be located in order to  
28 address load growth issues only? And I'm not talking about

1 the SMYS, I'm not talking about shifting from one gate  
2 station to the other; just load growth. Where would that  
3 DSM need to be located?

4 MR. FERNANDES: It's a difficult question to answer,  
5 but generalized, we have growth throughout the area, so I  
6 would assume that we would need load reduction throughout  
7 the area.

8 MR. ELSON: That answer is sufficient. The reason I  
9 ask it is that we're going to be providing some DSM  
10 evidence, and I don't want to go through that process for,  
11 then, Enbridge to come back and say: Well, actually, it  
12 would all have to be around station B.

13 My understanding from your answer is that it wouldn't  
14 all need to be around station B, and that it would be okay  
15 if it was distributed over the general GTA project  
16 influence area. Is that what you seem to be saying?

17 MR. FERNANDES: Well, the system right now has a point  
18 of system constraint at station B. So the effective area  
19 which is most likely going to deal with that point of  
20 minimum system pressure would be within the peach area, not  
21 necessarily localized to station B, but it's anywhere from  
22 station B back to its supply point.

23 MR. ELSON: So would DSM that's located in the peach  
24 area in a sense have a...

25 MR. FERNANDES: A larger impact.

26 MR. ELSON: A larger impact?

27 MR. FERNANDES: That's correct.

28 MR. ELSON: Would you be able to provide the numbers

1 in table 14 that you gave us, you know, how much DSM we  
2 would need if it was just in the peach area?

3 I mean, I don't know if we need to go down to this  
4 level of specificity. I want to head off this issue before  
5 we produce our evidence and before --

6 MR. NACZYNSKI: So maybe I can help a little bit. So  
7 the challenge or the issue with maintaining minimum system  
8 pressures at station B, obviously any DSM activities that  
9 were targeted specifically in the downtown core that would  
10 specifically reduce flows through station B would obviously  
11 have the greatest impact.

12 The further upstream the system you go, the more you  
13 may need. So if we were looking at the aggregated peach  
14 area and there were additional -- if it was distributed  
15 evenly throughout the system.

16 So if you were able to provide enough DSM that was in  
17 the downtown core to negate all load growth, you would need  
18 less DSM in the downtown than you would need as you worked  
19 your way up the system.

20 So, for example, that 10,000 terajoule deficit I was  
21 referring to, if that all was at station B, that would  
22 support your deficit there. As you move up the system, you  
23 will need more.

24 MR. FERNANDES: So it's geographical dependent, but  
25 it's not easy to state exactly a number.

26 MR. NACZYNSKI: It will be within the peach area, but  
27 the further down the pipeline you go, the more  
28 concentrative an impact it will have.

1 MR. ELSON: There's a table. Actually, we were  
2 referring to 18 tJs as being the need; is that correct?

3 MR. NACZYNSKI: That's correct.

4 MR. ELSON: The incremental need.

5 MR. NACZYNSKI: That's correct.

6 MR. ELSON: If there were 18 tJs of DSM spread out  
7 over the city, would that be sufficient to meet -- adjust  
8 the load growth?

9 MR. NACZYNSKI: Over the entire city?

10 MR. ELSON: Over the influence area.

11 MR. NACZYNSKI: So the answer would be no, because  
12 that would be distributed throughout the entire influence  
13 area, not specifically concentrated at the area of where  
14 we're having the system constraint.

15 MR. ELSON: How many tJs would you need over the  
16 entire influence area?

17 MR. NACZYNSKI: So you are suggesting that I would  
18 ratchet down the loads on the overall system and reduce the  
19 -- on a system of 2.4 petajoules, what would be the  
20 percentage reduction of 2.4 petajoules to produce that, to  
21 alleviate the constraint at station B?

22 MR. ELSON: I'm not suggesting that. I'm trying to  
23 figure out how many tJs of DSM you would need and where  
24 that would need to be the located so we can produce  
25 evidence.

26 Would all of the 18 tJ need to located within the  
27 peach area?

28 [Witness panel confers]

1 MR. NACZYNSKI: DSM activities could be distributed  
2 throughout. Depending on where it is concentrated in the  
3 system, it will have varying degrees of effect.

4 MR. ELSON: That's my understanding, because - and  
5 correct me if I'm wrong - the load growth forecast is based  
6 on load growth throughout the system?

7 MR. NACZYNSKI: That's correct.

8 MR. ELSON: So that would mean the DSM could  
9 conceivably be located throughout the system?

10 MR. NACZYNSKI: That's correct. Although realizing I  
11 already have a capacity deficit at a particular point, as  
12 well, already today.

13 MR. ELSON: I'm sorry, could you repeat that?

14 MR. NACZYNSKI: I've already -- as I've mentioned and  
15 is in evidence already right now, we're referring to a 10  
16 terajoule supply deficit at station B. So we would need to  
17 obviously overcome that, and then apply the DSM. That  
18 would reduce the overall system growth.

19 MR. ELSON: I understand that, but in terms of -- I  
20 believe what we've come to is that because the growth is  
21 calculated based on the entire influence area, you could  
22 have DSM throughout the influence area. I believe that was  
23 where we concluded.

24 MR. NACZYNSKI: That's an absolute fair statement.

25 MR. ELSON: Thank you. So those are more my questions  
26 of clarification. The remainder are interrogatory  
27 responses that we didn't feel were complete. Those are  
28 listed in our letter of June 11th, 2013.

1 I can go through those with you now, if you would  
2 like, or you could provide an undertaking to provide  
3 responses where that's appropriate. I mean, frankly, you  
4 could read through them right now and tell me what you are  
5 and are not going to answer.

6 How would you and your counsel like to proceed with  
7 these, cognizant of our timing constraints?

8 MR. STOLL: I think, like, some of these we went  
9 through in the clarification stage, so I'm not sure what's  
10 outstanding. So I would prefer that you --

11 MR. ELSON: You would like me to go through them?

12 MR. STOLL: -- go through them so that we are clear  
13 about what we have to address.

14 MR. ELSON: Okay. So starting with page 2 of our  
15 letter of June 11, 2013, and this is also on the record,  
16 ED.3(i), is your position that that information has been  
17 provided already?

18 MR. NACZYNSKI: That's my position, yes.

19 MR. ELSON: For ED.3, and then Roman numeral 3, is it  
20 possible to provide a revised response that includes the  
21 unbundled customers?

22 MR. NACZYNSKI: It's not. As I mentioned, there are  
23 two unbundled customers, and I would not want to provide  
24 that, because that would allow you to calculate the other  
25 customer's load.

26 MR. FERNANDES: We don't give out specific customer  
27 information.

28 MR. ELSON: But if it's two customers, how would I be

1 able to calculate --

2 MR. NACZYNSKI: Because I believe you can infer what  
3 one of the customers are, or who.

4 MR. ELSON: Is that something that could be provided  
5 through a confidential undertaking response?

6 MR. STOLL: No. We are not prepared to provide that.

7 MR. ELSON: I guess it poses a bit of a difficulty, as  
8 we discussed earlier, in that our numbers aren't going to  
9 match up with the other aggregate figures that you have  
10 provided. But I'll have to leave this issue for now.

11 Moving onto ED.4(i), no data was provided for 2022 to  
12 2025, and there wasn't an explanation for why this data was  
13 missing. Can you provide that?

14 MR. FERNANDES: We don't forecast beyond a ten-year  
15 horizon, so anything that we have would be a flatlining  
16 from 2022, but if you would like us to provide that, we  
17 could.

18 MR. ELSON: I think your answer may be sufficient,  
19 which is that your forecast from 2022 to 2025 would be  
20 constant with the 2022 numbers?

21 MR. FERNANDES: We would be making a broad-based  
22 assumption such as that, because the forecast doesn't  
23 actually exist.

24 MR. ELSON: In response to ED.4, and I believe some  
25 other interrogatories, you said that you presented  
26 historical information derived based on one or more data  
27 systems.

28 Could you provide an undertaking to fully describe the

1 assumptions and methodology used by Enbridge to derive this  
2 historical data in this and the other interrogatories?

3 MR. FERNANDES: Yes, we can.

4 MR. ELSON: Thank you.

5 MR. WASYLYK: JT2.34.

6 **UNDERTAKING NO. JT2.34: TO FULLY DESCRIBE THE**  
7 **ASSUMPTIONS AND METHODOLOGY USED BY EGD TO DERIVE**  
8 **HISTORICAL DATA IN ED IR#4 AND OTHER INTERROGATORIES.**

9 MR. ELSON: ED.5(i), again, is it your position you  
10 have already provided this data?

11 MR. NACZYNSKI: That's my position, yes.

12 MR. ELSON: Roman numeral 2 is the same unbundled  
13 issue, so I'll move on.

14 ED.6, Enbridge didn't answer this question. Can you  
15 provide an answer to it? I have no idea why you didn't,  
16 but....

17 MR. FERNANDES: There's two parts to it.

18 MR. ELSON: Yes.

19 MR. FERNANDES: Historical and forecast.

20 MR. ELSON: Yes.

21 MR. FERNANDES: So in other responses, we did provide  
22 the GTA project influence area total demand as measured by  
23 all of the gate stations on an hourly basis going back  
24 three years. It was a very large amount of data. So  
25 historically that's contained within that data set.

26 MR. ELSON: What we're looking for is -- I think you  
27 gave it yearly. We're looking for the ten days -- you  
28 know, the top ten days of each year. I didn't see that

1 data in there.

2 MR. FERNANDES: We can provide a reference, but we  
3 gave three years of every hour within each of those years,  
4 and we have no way to forecast which ten days of the year  
5 in the future will be the coldest days.

6 MR. ELSON: I guess what you are saying is you can't  
7 give us forecast data, but you can give us the historical  
8 data, and what you've already given us is three years.

9 Can you give us a table indicating from 20 -- from  
10 2000 to the present the top ten days?

11 MR. FERNANDES: That is quite a bit of work with a  
12 number of systems to go back historically to look for the  
13 ten highest days in each year. It's a large amount of  
14 effort.

15 MR. ELSON: So you've given us three years, but not --

16 MR. FERNANDES: Correct.

17 MR. ELSON: -- not ten years, and you've given us  
18 three years but not --

19 MR. FERNANDES: Correct.

20 MR. ELSON: -- not 10 years? And you've given us  
21 three years because you've given us the hourly figures for  
22 the last three years?

23 MR. FERNANDES: Correct.

24 MR. ELSON: Could you give me a table indicating for  
25 the last, let's say, five years?

26 MR. FERNANDES: Again, to get hourly data, our system,  
27 it's a fair bit of effort to store that amount of data, so  
28 it gets archived. So we provided what could be accessible.

1 Is there -- the amount of effort is fairly -- is quite a  
2 bit of effort.

3 MR. ELSON: So when is it archived? How far back can  
4 you go?

5 MR. FERNANDES: I would have to check with the folks  
6 who actually work on the system, but we went back as far as  
7 could be easily retrieved.

8 MR. ELSON: So three years is as far back as you can  
9 go?

10 MR. FERNANDES: Correct.

11 MR. ELSON: Could you provide a table with those three  
12 years? We could derive the data, but that just is going to  
13 add another layer of where we're going to have to confirm  
14 these are the correct numbers.

15 Perhaps for now, you could provide an undertaking just  
16 to provide a table going back three years for the data that  
17 we've requested in this question -- sorry, in this  
18 interrogatory, which is both for a total and broken out for  
19 customer class; is that something you could do?

20 MR. FERNANDES: We're not able to break out customer  
21 classes, because we can only measure peak hour and peak day  
22 at a total system level.

23 MR. ELSON: So I will ask, then, for a response to  
24 ED.6, only for the past three years and only for totals; is  
25 that something that you can provide, that table?

26 MR. FERNANDES: We can do that.

27 MR. WASYLYK: That will undertaking JT2.35, and just  
28 to clarify, Mr. Elson, that's to Environmental Defence

1 Interrogatory No. 6?

2 MR. ELSON: Yes.

3 MR. WASYLYK: Yes. Thank you.

4 **UNDERTAKING NO. JT2.35: TABLE WITH PAST 3 YEARS OF**  
5 **DATA EXPANDING ON ED IR#6 WITH TOTAL DEMAND DATA**

6 MR. ELSON: So ED.7, we requested from each year from  
7 2000 to 2025 inclusive the actual forecast total peak day  
8 demands, tJ per day, and the average peak day demands, GJ  
9 per day, of certain customer classes. And I don't believe  
10 you provided a response.

11 Could you do so? In particular, we didn't get the  
12 average peak day demands per customer type.

13 MR. NACZYNSKI: Again, I think my answer would be  
14 similar to our dialogue on Question 3 and the other one  
15 there, that I have provided the average use per customer.  
16 We've already talked about that, and then point two, that  
17 was the unbundled question again.

18 MR. ELSON: So for one, you're saying you have already  
19 given it to us, and for two, you can't give it to us?

20 MR. NACZYNSKI: That's correct.

21 MR. ELSON: ED.8, we had requested from each year from  
22 2000 to 2025 the actual and forecast total annual demands  
23 and the average annual demands for certain customer  
24 classes, divided up between new and existing customers.

25 I didn't see that data in there. Is that possible?  
26 Could you provide an answer to this interrogatory, ED.8?

27 MR. FERNANDES: Can you scroll down?

28 MR. ELSON: I misspoke, but you can actually see the

1 question for ED.8.

2 Perhaps you could just advise me whether you can  
3 provide that data.

4 MR. FERNANDES: I would have to check this, but I  
5 believe the response was about the historical, specific to  
6 the GTA project influence area.

7 MR. ELSON: Yep. I think that's --

8 MR. MILLAR: Mr. Elson, are there nine pages of these  
9 questions?

10 MR. ELSON: That's correct.

11 MR. MILLAR: It's already 4:30. We still have another  
12 panel after this one.

13 Can I make a suggestion? I don't know if this will  
14 work. Can we take a single undertaking? I know this is  
15 more or less what you asked for at the beginning, but maybe  
16 I'll turn to Mr. Stoll again. Can we have an undertaking -  
17 Mr. Stoll, would it be suitable to have an undertaking  
18 where you either provide the answers to these questions or  
19 give the reason why they can't be done? And perhaps it  
20 would involve some off-line discussions with Mr. Elson; I'm  
21 sure he'd be happy to do that with you.

22 It seems you are kind of working together, but this is  
23 going to take all afternoon to get through all of these,  
24 and it's mostly just saying: Yes or no, we'll answer them.

25 I'm wondering if there's a way we could speed this up.

26 MR. STOLL: I'm not sure that we can. Some of these  
27 we've answered. Some of them we've provided the  
28 information. Sometimes the information just doesn't exist.

1 MR. MILLAR: So why can't that be said in writing  
2 instead of going through it orally right now?

3 MR. STOLL: I think we've said that already. We're  
4 not --

5 MR. FERNANDES: To my understanding, we have. I would  
6 have to check this response, but I do believe we've stated  
7 that as per -- again, I point you to the Board Staff 15  
8 preamble, that we don't track certain information on  
9 certain time frames for certain geographical areas, so we  
10 don't necessarily have all of the information and it  
11 explains which pieces of information are typically used and  
12 tracked for forecasting, and what we measure and what we  
13 don't measure. In some cases, we simply do not have the  
14 data.

15 MR. MILLAR: I guess my question is: Why do we have  
16 to go say this orally? Why can't you make that response in  
17 writing?

18 MR. ELSON: I agree. I don't think this is necessary.  
19 I don't see any reason why you can't take each of the  
20 questions; if you think you've provided the information,  
21 all you have to do is say so. If you think the information  
22 can't be provided, you explain why it can't be provided.

23 I think that should have been part of the original  
24 interrogatory responses, and I can't see why they can't be  
25 answered one by one. If you think they have been dealt  
26 with elsewhere orally, you can say they have been dealt  
27 with at this paragraph. I don't see it as being necessary  
28 for us to go through them one by one here.

1 MR. STOLL: That's correct. Let's take it off-line.

2 MR. MILLAR: So let's put a global undertaking for  
3 that, and I'll rely on the goodwill of the parties to -- if  
4 there's some clarification --

5 MR. STOLL: In an effort -- I think we've gone through  
6 the first eight, and my understanding was we went through  
7 nine earlier, so why don't we start at ED.12 and continue  
8 from there with the undertaking?

9 MR. MILLAR: Very good. Mr. Elson, did you have more  
10 questions other than those?

11 MR. ELSON: No. Could we clarify what that  
12 undertaking is? I believe --

13 MR. MILLAR: Why don't you state it as you'd like it?

14 MR. ELSON: I believe the undertaking was to either  
15 provide the information requested in our letter from ED.12  
16 onwards, or explain why that information cannot be  
17 provided, or explain where elsewhere it has already been  
18 provided.

19 MR. STOLL: Understood.

20 MR. MILLAR: Thank you.

21 MR. WASYLYK: That's JT2.36.

22 **UNDERTAKING NO. JT2.36: TO RESPOND TO ED LETTER FROM**  
23 **#12 ONWARDS OR EXPLAIN WHY IT CANNOT BE PROVIDED OR**  
24 **EXPLAIN WHERE IT HAS ALREADY BEEN PROVIDED**

25 MR. MILLAR: That's it for you, Mr. Elson?

26 MR. ELSON: Yes, that's it for me.

27 I do note that for some of the questions before ED.12,  
28 some of the them we don't have answers to, but those have

1 all been dealt with on the record, so yes, we have no  
2 further questions.

3 MR. MILLAR: Thank you very much. Who still has  
4 questions for this panel? Ms. Grice?

5 **QUESTIONS BY MS. GRICE:**

6 MS. GRICE: Hi. It's Shelley Grice, representing  
7 Energy Probe. I just have one follow-up question. The  
8 reference is Issue A-3, Staff 15 (c).

9 The response to 15(c) provides information on the Bram  
10 West-to-Albion pipeline. We just had a couple of questions  
11 on the Parkway West-to-Bram West link.

12 The first question is: What is Enbridge's capacity on  
13 that link?

14 MR. FERNANDES: The link from Parkway West to Bram  
15 West is not owned nor operated by Enbridge. That's part of  
16 TransCanada's main line system.

17 MS. GRICE: But what is your capacity on that line?

18 MR. FERNANDES: As per the MOU, we would be  
19 contracting capacity to match our 800,000 reserved on Bram  
20 West-to-Albion.

21 MS. GRICE: Okay. I guess I was looking for a  
22 response along the lines of 400 gigajoules per day, or an  
23 alternative? Can you give it to me that way?

24 MR. FERNANDES: I'm sorry. So in part (c), it says  
25 Enbridge plans to retain 800,000 gigajoules per day for the  
26 benefit of distribution customers.

27 So that is the amount of capacity that will be moving  
28 from Bram West to Albion. To get it to Bram West from

1 Parkway West, we would be taking transportation service  
2 from TransCanada, and it's the same amount.

3 MS. GRICE: Included in that amount, is there an  
4 opportunity for growth?

5 MR. FERNANDES: Can you clarify?

6 MS. GRICE: Does that amount include growth?

7 MR. FERNANDES: I would have to go back and refer to  
8 the gas supply plan, and I'm not the right person who could  
9 respond to that.

10 MR. STOLL: I think this was probably better for the  
11 first panel to talk to gas supply. So if we can provide an  
12 undertaking?

13 MS. GRICE: That would be great. Thank you.

14 MR. FERNANDES: Can we clarify exactly, just to make  
15 sure, because we don't them here, to make sure we have an  
16 understanding?

17 MS. GRICE: So we were looking for Enbridge's capacity  
18 on that line and whether or not that capacity included  
19 growth.

20 MR. STOLL: And that is --

21 MR. FERNANDES: The capacity is 800,000 gigajoules per  
22 day, and is it fixed. So you are asking whether that  
23 accounts for the expected growth for our franchise?

24 MS. GRICE: Yes.

25 MR. FERNANDES: We can take that as an undertaking.

26 MR. MILLAR: JT2.37.

27 **UNDERTAKING NO. JT2.37: TO PROVIDE ENBRIDGE'S**  
28 **CAPACITY ON THAT LINE AND WHETHER OR NOT THAT CAPACITY**



1 MR. MILLAR: Thank you, Ms. Grice. Anyone else with  
2 questions for this panel. Mr. Garner?

3 **QUESTIONS BY MR. GARNER:**

4 MR. GARNER: A very, hopefully, quick one. If you  
5 would pull up interrogatory A4-CCC-20, in that  
6 interrogatory what we asked you to do was draw your trend  
7 lines for a number of peak day demands using a shorter  
8 period than the one you had used in your evidence. You had  
9 used 1997 to 2012, and we asked you to use 2004 through  
10 2012.

11 And the result of that, to summarize, shows quite a  
12 different trend line than the one that is shown in your  
13 evidence. So my question to you, because I'm a bit lost  
14 from this afternoon, is: What difference, if any, would it  
15 make to be using a trend line from 2004 to 2012 versus the  
16 one you are showing in your evidence from 1997 to 2012?

17 What impact would that have?

18 MR. FERNANDES: I think we would have to undertake to  
19 provide a complete response. The real thing that I would  
20 like to point out, though, is that using a shorter period  
21 of time producing trends isn't necessarily as accurate,  
22 because that would clue a global economic recession.

23 MR. GARNER: I understand your response to that, but  
24 perhaps by undertaking you would do that for us. That  
25 would be --

26 MR. FERNANDES: We will do that.

27 MR. MILLAR: JT2.38.

28 **UNDERTAKING NO. JT2.38: TO PROVIDE A COMPLETE**



1 stand and stretch their legs if they need a minute, but  
2 let's not take more than two or three minutes.

3 MR. STOLL: That's fine, Mr. Millar.--- Discussion off  
4 the record.

5 **ENBRIDGE GAS DISTRIBUTION - PANEL 4**

6 **Lisa Marie Dumond**

7 **Byron Madrid**

8 MR. STOLL: This is the final panel, and I would ask  
9 each of the witnesses to introduce themselves, but this  
10 panel is basically D-1, D-2 -- issues D-1, D-2, D-3, D-4,  
11 D-6, which are basically environmental landowner matters  
12 and design. So if I could start with Mr. Madrid, name and  
13 position?

14 MR. MADRID: I'm Byron Madrid, manager, engineering  
15 and construction for the GTA project.

16 MS. DUMOND: Lisa Marie Dumond, environmental lead for  
17 the GTA project.

18 MR. MILLAR: And there's no further comments required?  
19 We can go straight to questions?

20 MR. STOLL: Straight to questions.

21 MR. MILLAR: Perfect. Mr. Beaman, you were in the  
22 middle of some questions that appeared to be for this  
23 panel. Would you like to continue?

24 **QUESTIONS BY MR. BEAMAN**

25 MR. BEAMAN: Yes, thank you. If we go back to page 1  
26 of the attachment, there's criteria listed at the top and  
27 my question is: How were those criteria synthesized and  
28 weighted?

1 MR. MADRID: This list of constraints was originally  
2 put together as a takeaway from a meeting we had with both  
3 the City of Markham and also the gate -- Langstaff gateway  
4 or Markham gateway developers.

5 We had been asked to identify some of the reasons why  
6 we excluded these alternative routes, if you want to  
7 consider it that.

8 So what we did is we did provide some of the rationale  
9 as to why they had been initially excluded from the  
10 proposed routes.

11 So to your question, if you were to read through  
12 those, there's some very specific things. One of the main  
13 questions we were asked is: Why aren't you going cross on  
14 the north side of the 407, following the utility corridor?

15 So when the original project was reviewed and we  
16 looked at that scenario in following the designated utility  
17 corridor, we discovered that a lot of the sections of the  
18 utility corridor had already been taken up by a number of  
19 constraints, and those constraints have been identified  
20 there, such as a gas station. You've got the PowerStream  
21 substation that's in the way there. Parts of the Highway 7  
22 itself follow through the utility corridor.

23 That doesn't even take into account some of the  
24 constraints as far as constructability and accessibility.

25 So to my point at the top there, safety is a priority  
26 for Enbridge, so we always want to make sure we pick a --  
27 we do our route selection, and we allow that it provides us  
28 with a safe and reliable operation and maintenance of the

1 pipe.

2           So in trying examine that possibility, it just wasn't  
3 feasible, so that we didn't proceed with anything else on  
4 that matter.

5           Couple of the other options that were thrown at us or  
6 questioned from the Langstaff developer was opportunities  
7 to go in the transit way. So again, we provided the  
8 rationale as to why we can't go in the transit way, or why  
9 we didn't proceed with a study or feasibility along those  
10 lines.

11           The other option they asked about was the -- call it  
12 piece of land. When you are looking on the Google map,  
13 there's what looks like a nice, green piece of land between  
14 Highway 407 and Highway 7. In reality, when you actually  
15 do investigate it, it is the designated transit way  
16 corridor right now.

17           So to the point of the original answer on the other  
18 one on the transit way, we would not be able to install our  
19 pipe there, and as far as accessibility and  
20 constructability in itself, that stretch of land has some  
21 pretty severe challenges. Even if we were able to get  
22 permission to install it within the transit way there, we  
23 would not be able to construct it, or it would be very  
24 difficult to try to construct in that manner.

25           Does that answer your question?

26           MR. BEAMAN: As far as it goes.

27           Was there any written evaluation or spreadsheet  
28 analysis of the alternatives?

1 MR. MADRID: No. There was no need to proceed in that  
2 manner, because it was very clear that you would not be  
3 able to construct in those locations.

4 So we started looking at the -- what made more sense;  
5 either the existing road allowance for Langstaff or the  
6 proposed development of the Langstaff gateway, which  
7 proposes an east/west arterial road.

8 And it made more sense to work with the developers in  
9 the City of Markham to come up with a proposed location  
10 within that new development, instead of trying to find or  
11 acquire permission to install it in the existing road  
12 allowance for Langstaff, knowing full well that part of the  
13 development is going to force the realignment of Langstaff,  
14 which in turn would result in us having to relocate the  
15 proposed main.

16 MR. BEAMAN: Do I take it that it was a casting off of  
17 the other alternatives, leading you to the current  
18 proposal?

19 MR. MADRID: Correct. It was basically trying to  
20 identify what was in the best interest of the developer,  
21 the company, the stakeholder, and as I was alluding to, it  
22 didn't make sense to try to propose a line location within  
23 the Langstaff Road allowance, knowing that we would to have  
24 relocate, and that would be a shared cost by the City of  
25 Markham and ourselves.

26 And if you were going to relocate, you would be  
27 looking at relocating it in a new development anyway.

28 MR. BEAMAN: At the bottom of that same page on the

1 attachment 1, there's a reference to "changes of  
2 conservation authority requirements."

3 What are those changes?

4 MR. MADRID: Some of those changes have to do with  
5 setbacks on banks, and the comparison there was changes to  
6 previous constructions where the setbacks -- in the old  
7 specs, the setbacks used to be about five metres. The new  
8 setbacks push you to 15, so when dealing with TRCA and  
9 trying to manage those setbacks on those banks, it would  
10 make it difficult to install.

11 MR. BEAMAN: That's good enough. I understand.

12 You mention bridge abutments. There's a significant  
13 bridge and related abutments on South Boulevard on the  
14 preferred route, with the CNR rail.

15 Was that considered in your evaluation as a  
16 constraint?

17 MR. MADRID: The CNR rail was considered in our  
18 design. We viewed that as no different than some of the  
19 other railway crossings that we will encounter through our  
20 proposed route, and our plan there is to track bore.

21 I do understand that from the gateway, Langstaff  
22 gateway development, they're planning to have that road go  
23 over the railway.

24 Considering the fact that we are planning to go  
25 underneath the railway, it should not pose a problem, but  
26 we're perfectly willing to work with the developers to  
27 ensure that the proper depth and location within that road  
28 makes sense for everybody.

1 MR. BEAMAN: Is the answer the same for a significant  
2 structure where Pomona Creek is concerned?

3 MR. MADRID: That is correct.

4 MR. BEAMAN: And how far along the process does a  
5 planned infrastructural facility have to be in order for it  
6 to be included in your constraint analysis?

7 MR. MADRID: I'm not quite clear on what you are  
8 asking there.

9 MR. BEAMAN: I'll try to be clearer.

10 You said you took into account existing infrastructure  
11 as constraints. How far along does a planned  
12 infrastructure have to be in order for it to enter into the  
13 constraint?

14 MR. MADRID: If we can be provided with information or  
15 plans from the developers, we would incorporate that into  
16 our design and ensure that we mitigate where we need to, or  
17 design accordingly.

18 MR. BEAMAN: Does your analysis differ if land is  
19 privately owned versus publicly owned, in terms of  
20 constraint analysis?

21 MR. MADRID: No, we viewed whether it's privately  
22 owned or publicly owned the same way. We are pursuing an  
23 easement whether it's privately owned or publicly owned.

24 MR. BEAMAN: In answering -- in determining your  
25 alignment, what assumption was made about the final  
26 elevation of South Boulevard -- that is, the new road --  
27 compared to existing grade?

28 MR. MADRID: Unfortunately, in absence of that

1 information from the developers, that has not been  
2 incorporated into the design yet. All we've done is  
3 designed it based on what we've got presently known as far  
4 as the information.

5 As that information is -- becomes available from the  
6 developers, then we would be able to incorporate that into  
7 our detailed design.

8 MR. BEAMAN: If South Boulevard is planned to be  
9 raised by approximately 10 metres above the existing grade,  
10 could the proposed pipeline be situated more than 10 metres  
11 below final grade?

12 MR. MADRID: Yes, it can.

13 MR. BEAMAN: Is there a maximum depth on which the  
14 pipeline could be located?

15 MR. MADRID: No.

16 MR. BEAMAN: Are other utilities -- can they be in  
17 installed above the pipeline? And what separation distance  
18 would be involved, if so?

19 MR. MADRID: We have requested a six-metre easement,  
20 as we are -- in the undertaking that this development is  
21 going to be phased. So we want to ensure that the pipeline  
22 will be protected while the construction of the development  
23 takes place.

24 Once the road is assumed by the municipality, that  
25 easement will be released, and location of other  
26 infrastructure will be allowed accordingly, based on  
27 permits from the municipality.

28 MR. BEAMAN: If there is no room remaining in the

1 right of way because it is filled up with other utilities  
2 that are approved by the town and the developer, what  
3 alternatives would be available from Enbridge for  
4 construction of the pipeline through this area?

5 MR. MADRID: There are no current alternatives. We do  
6 have a need to get from the west side to the east side, and  
7 based on the potential routes that we have reviewed, this  
8 is the area that we do have to cross.

9 And as mentioned before, we have reviewed the site  
10 plan approval from the developer and, in my opinion, it  
11 makes perfect sense that is where you would want do have  
12 this facility installed, and what we are proposing is the  
13 south side of the proposed arterial road, so adjacent to  
14 the cemetery land where we know that there will not be any  
15 development.

16 MR. BEAMAN: Were you aware that there is a retaining  
17 wall approximately requiring three metres of land at that  
18 location?

19 MR. MADRID: We were made aware at a meeting we had  
20 with the developers. I can't recall the date right now.  
21 But at that meeting, they did mention that part of their  
22 proposal was to potentially install a retaining wall.

23 We are still awaiting that information, and also their  
24 proposed cross-section of that south boulevard road.

25 MR. BEAMAN: Would the pipeline be capable of being  
26 underneath the retainer wall, that depth?

27 MR. MADRID: It is possible, but without having the  
28 information as to the specifics of the retaining wall, I

1 cannot confirm.

2 MR. BEAMAN: If located under the grade currently,  
3 would standard earth-moving equipment be allowed to compact  
4 fill over top of the pipeline?

5 MR. MADRID: We would have to evaluate the load of the  
6 equipment and ensure that between the depth that we install  
7 and the load of the equipment, that there will not be any  
8 issues or concerns with the pipeline.

9 MR. BEAMAN: Is there a standard you could provide me  
10 for evaluating that in terms of weight?

11 MR. MADRID: I would prefer to work with what the  
12 developer is proposing and have a view of that first.

13 MR. BEAMAN: Does office and residential high density  
14 development have any required setback distance from the  
15 proposed pipeline?

16 MR. MADRID: We have designed to a class 4 location,  
17 and there are no additional setback requirements.

18 MR. BEAMAN: Outside the easement?

19 MR. MADRID: Outside the easement. As I stated  
20 before, once the easement is released and it becomes a road  
21 allowance assumed by the city, then the infrastructure that  
22 is approved by the city would be allowed to go in there.

23 MR. BEAMAN: Thank you. Those are my questions.

24 MR. MILLAR: Mr. Sidlofsky, would you like to go?

25 **QUESTIONS BY MR. SIDLOFSKY:**

26 MR. SIDLOFSKY: Thank you, Mr. Millar. Panel, my name  
27 is James Sidlofsky. I'm actually wearing one hat today,  
28 although it's a different one from what's on the record.



1 MR. SIDLOFSKY: Now, Dillon notes -- and I don't need  
2 to take you there, so that's okay. Dillon notes in the  
3 pre-consultation comment summary that York Region permits  
4 aren't required within the Highway 407 corridor; is that  
5 right?

6 MR. MADRID: Correct.

7 MR. SIDLOFSKY: My purpose in mentioning that isn't to  
8 debate that with you here. I'm actually more concerned  
9 about the way Enbridge intends to address the planned  
10 subway expansion.

11 My understanding is that in May of last year, York  
12 Region rapid transit staff provided your consultant with  
13 copies of track work alignment drawings for the Yonge  
14 subway extension.

15 I'm not sure if you are in a position to confirm that  
16 or not at this point, but if I could ask you to confirm  
17 that your consultant did receive those documents, that  
18 would be excellent.

19 MR. STOLL: Just to be clear, those are the documents  
20 that you provided just before we started?

21 MR. SIDLOFSKY: I provided copies. My understanding  
22 that they correspond to what was sent by e-mail in May of  
23 last year.

24 MS. DUMOND: It's most likely we do have that on file  
25 and we can double check.

26 MR. SIDLOFSKY: Thank you. And I don't have specific  
27 questions about the alignment at this point. It's more a  
28 matter of just orienting you to what I'm asking about.

1 I've given the panel copies, Mr. Millar, and I hope  
2 you don't mind, panel, if those two sheets are marked as  
3 exhibits. Those would be track work alignment drawings,  
4 sheets 9 and 10 dated August 22nd, 2011.

5 MR. MILLAR: K2.1.

6 **EXHIBIT NO. K2.1: TRACK WORK ALIGNMENT DRAWINGS,**  
7 **SHEETS 9 AND 10 DATED AUGUST 22, 2011.**

8 MR. SIDLOFSKY: Thanks, Mr. Millar.

9 Now, I would like to take you briefly to Exhibit I,  
10 tab D2, and your response to Metrolinx' Interrogatory  
11 No. 5.

12 MR. MADRID: Yes.

13 MR. SIDLOFSKY: Now, in that interrogatory you were  
14 asked to advise as to how GO Transit or Metrolinx's planned  
15 track and station expansions will be addressed by Enbridge;  
16 correct?

17 MR. MADRID: Correct.

18 MR. SIDLOFSKY: I note in your response you advise  
19 that Enbridge will design and construct the proposed  
20 pipeline for all known and currently available GO Transit  
21 and Metrolinx planned track and station expansions in  
22 accordance with the standards you mentioned in the  
23 response.

24 MR. MADRID: That's correct.

25 MR. SIDLOFSKY: One of my questions for you is: Do  
26 you plan to take a similar approach to the planned Yonge  
27 subway expansion, including tracks, tunnels and stations, a  
28 similar approach to that that you'll be taking to

1 Metrolinx?

2 MR. MADRID: Yes, we do.

3 MR. SIDLOFSKY: Because you are aware that the subway  
4 -- the planned subway extension does cross your route? At  
5 least that is my understanding.

6 MR. MADRID: That is correct. As far as we understand  
7 from the plans that we have received, it stretches just  
8 south of where we will be crossing. Actually, the tunnel  
9 goes underneath where we will be crossing.

10 MR. SIDLOFSKY: And I understand from -- I won't take  
11 you to it, but I understand that your consultant also  
12 suggested - I believe it may have been in a pre-  
13 consultation meeting with the TTC - that Enbridge is  
14 experienced in dealing with subway tracks and with routing  
15 in such a way as to not affect those tracks or stations; is  
16 that correct?

17 MR. MADRID: That is correct.

18 MR. SIDLOFSKY: The approach you plan to take with --  
19 to the York Region -- excuse me, to the Yonge subway  
20 extension, will that be your approach irrespective of  
21 whether York Region is responsible for permitting in the  
22 vicinity of the pipeline where it would cross Yonge Street?

23 MR. MADRID: Yes.

24 MR. SIDLOFSKY: I assume that at this time -- I know  
25 in your response to Metrolinx' Interrogatory No. 6 you  
26 indicated that there are no detailed engineering or  
27 construction plans at this point.

28 I assume that there's still no detailed engineering or

1 construction plans; is that right?

2 MR. MADRID: That is correct.

3 MR. SIDLOFSKY: And when those engineering and  
4 construction drawings are created, will those plans be  
5 provided to GO -- excuse me, be provided to York Region for  
6 their review and comment?

7 MR. MADRID: Yes, they will be.

8 MR. SIDLOFSKY: As in your answer to Metrolinx, will  
9 the plans include proposed construction and staging  
10 requirements of the pipeline?

11 MR. MADRID: Yes.

12 MR. SIDLOFSKY: Thanks, Mr. Millar. Those are my  
13 questions. Thank you, panel.

14 MR. MILLAR: Thank you, Mr. Sidlofsky.

15 Ms. Grice, you had a couple of questions?

16 **QUESTIONS BY MS. GRICE:**

17 MS. GRICE: Yes. Thank you. I plan to be very brief.

18 Okay. The reference is your environmental report at  
19 Exhibit B, tab 2, schedule 1, attachment 4, but I don't  
20 think we really need to bring it up. I just wanted to talk  
21 about some of the proposed mitigation measures that are  
22 stated in the environmental report prepared by Dillon are  
23 phrased as measures that Enbridge "should" do.

24 An example of that is on page 167, where it states,  
25 for example, that:

26 "Refuelling activity should be undertaken away  
27 from water courses and sensitive environmental  
28 features."



1 would follow if the consent is not given, and what the  
2 potential impact could be on the existing schedule and the  
3 planned in-service date if consent is not granted.

4 MR. MADRID: Enbridge's preferred method is to  
5 continue to negotiate with the landowners. These four  
6 landowners coincidentally are the landowners within the  
7 Langstaff gateway area.

8 So as part of the ongoing discussions that we are  
9 having with them and as we obtain information on the  
10 development and work towards finding the proper location  
11 for our pipeline, I don't foresee that as being an issue.

12 So at the time when we did meet with the developers,  
13 they were not in a position to commit in any respect and  
14 that's the way it was captured, but we feel that if we can  
15 continue to work with the developers in the City of Markham  
16 that we should be able to couple up with a proper location  
17 for the pipeline, and thereby getting the appropriate land  
18 required.

19 MS. GRICE: So you don't foresee another external  
20 process to try and acquire that?

21 MR. MADRID: I guess in the end, there's always the  
22 expropriation method. We prefer not to go that route,  
23 especially when you are looking at what we are presented  
24 with in that location. There aren't a lot of choices, and  
25 when you view the development itself, that is the best  
26 location for the pipeline that we're suggesting.

27 MS. GRICE: If you did have to go the expropriation  
28 route, it could impact your project schedule, if that

1 happened to be the outcome?

2 MR. MADRID: I believe there's always that potential.

3 MS. GRICE: Okay. Thank you. And just one last piece  
4 of that.

5 In the update that was filed -- I believe it was June  
6 3rd, another landowner was added. I just wanted to just  
7 inquire the status of that particular property, if they  
8 have consented or if it's in the same bucket as the other  
9 four that have not provided initial consent.

10 MR. MADRID: When we realized that that landowner --  
11 it was originally determined we were going to avoid that  
12 property as part of our pull-forward engineering that we've  
13 been doing.

14 And in providing other updates, we realized that we  
15 were catching the corner of that property, so we did  
16 immediately approach the landowner, have discussions with  
17 the landowner on the project, the easement requirements,  
18 and we've added them to the list of interested parties.  
19 They seem in agreement.

20 MS. GRICE: Okay. That's great. Those are my  
21 questions. Thank you.

22 MR. MILLAR: Thank you, Ms. Grice.

23 Anything else for this panel?

24 Okay. Thank you very much everyone. Thank you to the  
25 witnesses, to the parties, and of course the court  
26 reporter, who has had a very long day. And we are  
27 adjourned.

28 --- Whereupon the conference concluded at 5:04 p.m.