

SCHOOL ENERGY COALITION

ARGUMENT COMPENDIUM

EB-2011-0210

TABLE OF CONTENTS

1. Tr. 4:128	2
2. Tr. 4:150-1	3
3. Tr. 5:47	5
4. J5.6	6
5. J5.3	7
6. J5.2	14
7. Tr. 5:43	15
8. Tr. 5:39-40	16
9. Tr. 2:65-72	18
10. Tr. 1:35-38	26
11. J2.5	30
12. Graph of J2.5	31
13. J10.3	32
14. Tr. 12:113	37
15. Tr. 12-151-152	38
16. J12.5	40
17. Unit Costs in J12.5	43
18. Union North Unit Costs	44
19. Union South Unit Costs	45
20. JT2.27	46
21. K10.5, p. 18	50
22. J10.4	51
23. Tr. 12:40-44	52
24. Tr. 10:88-91	57
25. Unit Delivery Costs	61
26. Tr. 10:99-117	62
27. Tr. 12:98-100	81
28. TC Tr. 154-158	84

1 business risk have either remain unchanged or have declined
2 -- I think it should say "have not declined" -- since last
3 analyzed by Dr. Carpenter of the Brattle Group.

4 The response was Union has not analyzed its business
5 and financial risks. Is that correct?

6 MR. BROEDERS: Sorry, just give me a minute.

7 The answer to the undertaking is saying that we have
8 not analyzed our business and financial risk, but we accept
9 that its overall risk profile has not materially changed
10 since 2004.

11 MR. THOMPSON: All right. So whatever you have asked
12 the experts to do, you did not ask them to analyze whether
13 Union's -- there have been any significant changes in the
14 company's business and/or financial risks since 2007. They
15 were not asked to do that?

16 MR. BROEDERS: That's correct.

17 MR. THOMPSON: And Union accepts that its overall risk
18 profile is not materially changed since -- from 2004. You
19 don't take it to 2007 only. You go back to 2004.

20 You accept that your overall risk profile has not
21 materially changed; is that correct?

22 MR. BROEDERS: That's correct. We have submitted
23 evidence based on the comparables and we believe that the
24 risk, as we submitted in 2004, which has not materially
25 changed to this day, is not commensurate with the
26 equity percentage that we have.

27 MR. THOMPSON: All right. So I suggest to you it is
28 the end of the story. You cannot discharge the

1 MR. JANIGAN: Now, I wonder if you could turn over to
2 page 21?

3 MR. FETTER: I'm there.

4 MR. JANIGAN: And if you look at the answer to an
5 interrogatory of Board Staff, Union indicates here in part
6 b) of the answer that it is unlikely that going to
7 40 percent equity will be sufficient to result in a rating
8 upgrade or significantly impact the cost of debt.

9 So if the credit quality is not going to be increased
10 to the point where the cost of debt is going to be reduced,
11 where are the benefits going to be reaped by the ratepayer?

12 MR. FETTER: We don't live in a static world. Credit
13 quality can vary within a certain credit rating level,
14 regardless of whether it leads to an upgrade or a
15 downgrade.

16 I feel strongly that creating a credit profile which
17 can withstand unforeseen events, such as we saw in 2008 and
18 2009 during the worldwide financial crisis, which Dr.
19 Carpenter also did not predict -- I think it is important
20 for every utility to be able to withstand such stress, and
21 so even though this response to an IR states that there
22 might not be immediate change as measured by an upgrade, it
23 does not mean that Union Gas's credit quality has not
24 improved and puts itself in a better stead on behalf of
25 both its customers and its investors.

26 MR. JANIGAN: But as the time rolls on, that change
27 that you have recommended costs customers \$17 million a
28 year. When are they going to get it back?

1 MR. FETTER: They will get it back if there is a
2 financial crisis during which they're able to finance --
3 have access to the financial markets on a reasonable level,
4 and also to just have access to the capital markets.

5 As we saw in 2008/2009, the commercial paper markets
6 basically closed down for everyone for a short period of
7 time.

8 MR. JANIGAN: I wonder if you could turn over the page
9 to page 22, the interrogatory J.E-2-1-1.

10 The interrogatory asks:

11 "Please indicate all cases in the last 5 years
12 where Union Gas has had to defer or abandon
13 expenditures needed to provide service due to an
14 inability to raise the necessary capital under
15 reasonable terms and conditions."

16 The answer is:

17 "Union has not had a specific case where the
18 Company has not been able to issue debt to
19 finance capital investment within the last five
20 years. Previously, there have been situations
21 when the Company was limited by the interest
22 coverage test to the timing and the amount of the
23 debt issue."

24 And second part of that:

25 "What will be the impact on Union's ability to
26 raise capital if the Board do not approve Union's
27 proposed rate structure?"

28 The answer is:

1 MR. BROEDERS: No, it does not. Sorry, includes
2 working capital, but does not include construction work-in-
3 progress.

4 I may have misstated that. I apologize.

5 MR. SHEPHERD: Then let's go down to the last section,
6 and this is the equity section.

7 You're asking for a 40 percent equity ratio, but
8 you're asking for 40 percent plus the preferred equity,
9 right? You're treating the preferred equity as not equity
10 for this calculation?

11 MR. BROEDERS: We are asking for 40 percent common
12 equity component to the shareholder. The preferred equity
13 is external to Spectra, the shareholders.

14 MR. SHEPHERD: Why would that make a difference?

15 MR. BROEDERS: We're requesting 40 percent for the
16 common equity.

17 MR. SHEPHERD: Why would it make a difference that
18 somebody else holds the preferred equity?

19 MR. BROEDERS: It is viewed more as debt than equity.

20 MR. SHEPHERD: It is not debt, though. It is equity.

21 MR. BROEDERS: Okay.

22 MR. SHEPHERD: So, in fact, the cost of the
23 3.50 percent, you have to gross that up for tax, right?

24 MR. BROEDERS: Oh, yes, we do.

25 MR. SHEPHERD: Okay. And do you disagree with the
26 calculation of 273 million as the cost, if you're using the
27 structure that the electricity distributors use?

28 Will you accept that number as being a correct

UNION GAS LIMITED

Undertaking of Mr. Millar
To Mr. Broeders

Please explain what portion of preference equity is treated as debt versus equity by the auditors.

With the change to US GAAP all of Union's preference shares are classified as equity.

UNION GAS LIMITED

Undertaking of Mr. Brett
To Mr. Broeders

Please file undertakings given by Spectra to the OEB or Government in the context of assessing the risk of Union Gas, with reference to Standard & Poor's report filed at Exhibit A3, Tab 6.

Please see the Attachment.

Filed: 2012-07-24

EB-2011-0210

Exhibit J5.3

Attachment

Ontario
Executive Council
Conseil des ministres

Order in Council
Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation du soussigné, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil des ministres, décrète ce qui suit :

WHEREAS Westcoast Energy Inc., 1001142 Ontario Inc., Union Energy Inc., Union Gas Limited, and Union Shield Resources Ltd. provided Undertakings dated the 27th day of November, 1992 to the Lieutenant Governor in Council and these Undertakings were referred to in Order in Council No. 3639/92;

AND WHEREAS Enbridge Inc. (previously IPL Energy Inc.) and The Consumers' Gas Company Ltd. provided Undertakings dated the 21st day of June, 1994 to the Lieutenant Governor in Council and these Undertakings were referred to in Order in Council No. 1606/94;

AND WHEREAS, with the receipt of Royal Assent for the *Energy Competition Act, 1998* on the 30th day of October, 1998, it is considered expedient to approve new Undertakings provided by Union Gas Limited, Centra Gas Utilities Inc., Centra Gas Holdings Inc., Westcoast Gas Inc., Westcoast Gas Holdings Inc. and Westcoast Energy Inc. and by The Consumers' Gas Company Ltd., Enbridge Consumers Energy Inc., 311594 Alberta Ltd., Enbridge Pipelines (NW) Inc. and Enbridge Inc. (the "New Undertakings");

NOW THEREFORE the New Undertakings, attached hereto, are accepted and approved.

Recommended

Minister of Energy, Science & Technology

Concurred

Chair of Cabinet

Approved & Ordered

DEC 9 - 1998

Date

Lieutenant Governor

**UNDERTAKINGS OF UNION GAS LIMITED,
CENTRA GAS UTILITIES INC., CENTRA GAS HOLDINGS INC.,
WESTCOAST GAS INC., WESTCOAST GAS HOLDINGS INC.,
WESTCOAST ENERGY INC.**

TO: Her Honour The Lieutenant Governor in Council for the Province of Ontario

WHEREAS Centra Gas Utilities Inc. holds all the issued and outstanding common shares of Union Gas Limited ("Union");

AND WHEREAS Centra Gas Holdings Inc. holds all the issued and outstanding common shares of Centra Gas Utilities Inc.;

AND WHEREAS Westcoast Gas Inc. holds all the issued and outstanding common shares of Centra Gas Holdings Inc.;

AND WHEREAS Westcoast Gas Holdings Inc. holds all the issued and outstanding common shares of Westcoast Gas Inc.;

AND WHEREAS Westcoast Energy Inc. holds all the issued and outstanding common shares of Westcoast Gas Holdings Inc. ("Westcoast");

the above named corporations do hereby agree to the following undertakings:

1.0 Definitions

In these undertakings,

- 1.1 "Act" means the *Ontario Energy Board Act, 1998*;
- 1.2 "affiliate" has the same meaning as it does in the *Business Corporations Act*;
- 1.3 "Board" means the Ontario Energy Board;
- 1.4 "business activity" has the same meaning as it does under the Act or a regulation made under the Act; and
- 1.5 "electronic hearing", "oral hearing" and "written hearing" have the same meaning as they do under the *Statutory Powers Procedure Act*.

2.0 Restriction on Business Activities

- 2.1 Union shall not, except through an affiliate or affiliates, carry on any business activity other than the transmission, distribution or storage of gas, without the prior approval of the Board.

3.0 Maintenance of common equity

- 3.1 Where the level of equity in Union falls below the level which the Board has determined to be appropriate in a proceeding under the Act or a predecessor Act, Union shall raise or Westcoast and its affiliates shall provide within 90 days, or such longer period as the Board may specify, sufficient additional equity capital to restore the level of equity in Union to the appropriate level.

3

3.2 Any additional equity capital provided to Union by Westcoast or its affiliates shall be provided on terms no less favourable to Union than Union could obtain directly in the capital markets.

4.0 Head Office

4.1 The head office of Union shall remain in the Municipality of Chatham-Kent.

5.0 Prior Undertakings

5.1 These undertakings supersede, replace and are in substitution for all prior undertakings of Union, Westcoast and their affiliates.

6.0 Dispensation

6.1 The Board may dispense, in whole or in part, with future compliance by any of the signatories hereto with any obligation contained in an undertaking.

7.0 Hearing

7.1 In determining whether to grant an approval under these undertakings or a dispensation under Article 6.1, the Board may proceed without a hearing or by way of an oral, written or electronic hearing.

8.0 Monitoring

8.1 At the request of the Board, Union, Westcoast and their affiliates will provide to the Board any information the Board may require related to compliance with these undertakings.

4

9.0 Enforcement

- 9.1 The parties hereto acknowledge that there has been consideration exchanged for the receipt and giving of the undertakings and agree to be bound by these undertakings.
- 9.2 Any proceeding or proceedings to enforce these undertakings may be brought and enforced in the courts of the Province of Ontario and Westcoast, Union and their affiliates hereby submit to the jurisdiction of the courts of the Province of Ontario in respect of any such proceeding.
- 9.3 For the purpose of service of any document commencing a proceeding in accordance with Article 9.2, it is agreed that Union is the agent of Westcoast and its affiliates and that personal service of documents on Union will be sufficient to constitute personal service on Westcoast and its affiliates.

10.0 Release from undertakings

- 10.1 Westcoast, Union and their affiliates are released from these undertakings on the day that Westcoast no longer holds, either directly or through its affiliates, more than 50 per cent of the voting securities of Union or on the day that Union sells its gas transmission and gas distribution systems.

11.0 Effective Date

- 11.1 These undertakings become effective on March 31, 1999.

DATED this 7th day of December, 1998.

UNION GAS LIMITED

by *[Signature]*

CENTRA GAS UTILITIES INC.

by *[Signature]*

CENTRA GAS HOLDINGS INC.

by *[Signature]*

WESTCOAST GAS INC.

by *[Signature]*

WESTCOAST GAS HOLDINGS INC.

by *[Signature]*

WESTCOAST ENERGY INC.

by *[Signature]*

UNION GAS LIMITED

Undertaking of Mr. Aiken
To Mr. Broeders

Please calculate actual equity component.

The actual equity components are at a point in time and for the total company (regulated and unregulated business).

	<u>December 2011</u>	<u>June 2012</u>
Preference shares	2.85%	2.96%
Common equity	<u>33.29%</u>	<u>36.50%</u>
Total	<u>36.14%</u>	<u>39.46%</u>

1 number that makes it all work.

2 MR. SHEPHERD: You are asking the Board to approve a
3 total debt, a capital structure of 57.25 percent. Yes?

4 MR. BROEDERS: Yes.

5 MR. SHEPHERD: Okay. And that number, in fact, is
6 about \$2.126 billion?

7 MR. BROEDERS: That's correct.

8 MR. SHEPHERD: And you are proposing that the cost of
9 that will be 6.80 percent; right?

10 MR. BROEDERS: That's correct.

11 MR. SHEPHERD: And you are actually borrowing at an
12 average cost of 6.53 percent; correct?

13 MR. BROEDERS: For long-term debt, that's correct.

14 MR. SHEPHERD: Okay. And the effect of that - tell me
15 whether this is correct - is that that short-term debt
16 amount, \$108 million, you are actually paying just over
17 \$7 million for that in terms of the 6.53 percent long-term
18 debt rate; right?

19 MR. BROEDERS: If you apply the average rate to it,
20 again, you are imputing numbers based on how the rate base
21 calculation has to work, as opposed to what is really going
22 on with the financing within the company.

23 MR. SHEPHERD: All right. Now, the total cost of
24 capital here, 280 million under the existing capital
25 structure, 289 million under the proposed capital
26 structure, that difference is not the whole difference,
27 right? Because then you have to do a tax gross-up, as
28 well, right?

1 the point that the short-term debt is a result of our real
2 long-term debt.

3 MR. SHEPHERD: The reason I ask that is because one of
4 the effects of that is that the total cost of your debt is
5 actually higher than the cost of your long-term debt;
6 right? You didn't include in Exhibit J.E-1-1-1 the total
7 cost rate of your debt, but we've actually done that
8 calculation, 6.61 percent.

9 And that's the effective cost of all of your net debt,
10 right, under the existing capital structure? It is just
11 the total of -- the total interest cost divided into the
12 total debt, net debt?

13 MR. BROEDERS: Yes.

14 MR. SHEPHERD: Okay. And the reason for that is that
15 effectively this way of calculating assumes that, under the
16 existing capital structure, you borrow \$33 million at
17 6.53 percent, and then you invest it at 1.31 percent;
18 correct?

19 MR. BROEDERS: That's what the numbers are
20 insinuating, but that's not the cause of the negative
21 short-term debt.

22 MR. SHEPHERD: No. The cause is that you need to get
23 to the correct percentages; right?

24 MR. BROEDERS: The cause of negative short-term debt
25 is because there are items outside of rate base that the
26 utility has to invest in, such as construction work-in-
27 progress and the contributions in excess of the expense for
28 pension.

1 That amounts to, for 2013, about \$250 million.

2 MR. SHEPHERD: However, the effect of this is that you
3 have paid a little over \$2 million for that \$33 million at
4 6.53 percent, and you got \$433,000 back for it; right? The
5 difference is paid for by the ratepayers?

6 MR. BROEDERS: That's what these numbers are
7 implicitly showing, but it's not -- it is not what's
8 happening. We're not going out and investing or getting
9 long-term debt to charge ratepayers as 4 percent so we can
10 go earn 1 percent.

11 The negative short-term debt is just a result -- this
12 negative short-term debt, which is really -- it appears to
13 be a cash position, so similar to what you were saying, but
14 it's not what is actually happening on our short-term debt
15 when we're issuing commercial paper.

16 Our average borrowings for 2013 is predicted to be
17 about \$136 million for short-term, whereas this is
18 suggesting it would be investing.

19 MR. SHEPHERD: Okay. Then now I want to go to the
20 second section here, and we took the -- again,
21 the percentages, all the various percentages from the
22 settlement agreement.

23 If you could just go to page 5 of our materials, this
24 is where you've set these figures out. And I just want to
25 point out one thing, and I know you were going to point it
26 out, anyway, so I will give you the opportunity.

27 On line 9 at page 5 of our materials, you will see it
28 says the total debt is 2.142 billion or -- yes, billion.

1 Because there is no pattern here that would allow you
2 to predict over 40 years what the next number is, right?

3 MR. GARDINER: If the span was the full 40 years, you
4 are correct, it would be -- a trend line would be on the 80
5 line, basically.

6 MR. SHEPHERD: There wouldn't actually be a trend,
7 right? Because it would not be a significant trend?

8 MR. GARDINER: The trend would be the average.

9 MR. SHEPHERD: Exactly. Okay.

10 So then -- and without knowing anything about the
11 underlying data, you have no way of knowing what the best
12 way is to test for what the next number is in this series,
13 do you? You have to know something about the real world
14 this is representing to know how to test it, right?

15 MR. GARDINER: Correct.

16 MR. SHEPHERD: So then let's go to the transcript for
17 Tuesday.

18 You see the first set of pages is 35 through 38, and
19 if you look at page 4 of our material, page 36 of the
20 transcript, Mr. Aiken is asking you about the subcomponents
21 of the 20 years you tested. And you said at line 16:

22 "So it's not picking periods of time."

23 And you emphasize you started with the 20-year number.
24 Do you see that?

25 MR. GARDINER: I have line 16, yes, in front of me,
26 yes.

27 MR. SHEPHERD: And similarly, on the next page, you
28 say:

1 "But you are picking a period."

2 And if you go to line 12:

3 "The concept is not to look at patterns within
4 certain periods of time."

5 Do you see that?

6 MR. GARDINER: What page are you on, sorry?

7 MR. SHEPHERD: The next page. Line 12 of the next
8 page:

9 "The concept is not to look at patterns within
10 certain periods of time."

11 MR. GARDINER: Yes, I see that.

12 MS. HARE: Could you give us the page number, please?
13 Oh, we're on page 37.

14 MR. SHEPHERD: Yes. Page 5 of the materials, page 37
15 of the transcript.

16 Do you see that?

17 MR. GARDINER: Correct, yes.

18 MR. SHEPHERD: But in fact, that is exactly what
19 you're doing, isn't it? You are trying to look for a
20 pattern within a period of time, right? That is what a
21 trend is?

22 MR. GARDINER: Right.

23 MR. SHEPHERD: And that's why you use a time series,
24 because that time series has a direction, you think has a
25 direction?

26 MR. GARDINER: Right. And what we did in 2004 and
27 repeated this year is we looked at the trend that was
28 established in 1985 -- so going back to 65 -- and repeated

1 that process 26 times.

2 We tested the trend 26 times, and then we compared it
3 to the actual. We do that for the blend; same approach.
4 Repeat it 26 times.

5 MR. SHEPHERD: I understand that.

6 MR. GARDINER: Okay.

7 MR. SHEPHERD: But I am actually going in a different
8 direction than this.

9 You start with the assumption that it is getting
10 warmer, right?

11 MR. GARDINER: Yes.

12 MR. SHEPHERD: If you didn't have that to describe,
13 you couldn't use a trend as a predictor, because you
14 wouldn't know, as we saw with the meaningless graphic, you
15 wouldn't know which direction it was going to go. You
16 wouldn't know whether it was cyclical, whether it was a
17 trend in the right direction, whether it was random. You
18 wouldn't know that, right?

19 MR. GARDINER: We know from the experts that assisted
20 us in 2004 that climate change is occurring.

21 MR. SHEPHERD: Sorry, are you presenting that as
22 evidence here?

23 MR. GARDINER: I am going back to the 2004 case and
24 the discussions of Dr. Weaver, and we're not saying --
25 we're saying there is climate change. Where it is coming
26 from we're not -- we don't know, but it is occurring.

27 And we are seeing in the weather data the fact that
28 over time it's getting warmer. So how do we represent that

1 in a weather-normal?

2 MR. SHEPHERD: Okay.

3 MR. GARDINER: And because we have seen -- if you go
4 back, using the Toronto data and you plot that out, you see
5 it's getting warmer. That is the underpinning of the
6 concept. We're trying to keep it simple. Also, I'm not a
7 climatologist, meteorologist. I am a practising economist
8 doing demand forecasts, and I'm trying to get the best
9 forecast I can.

10 And I know back when we had the 30-year average, I was
11 always missing the target.

12 MR. SHEPHERD: So you had a discussion with Mr. Aiken
13 about the fact that in the last 14 years there's actually a
14 trend upwards; right?

15 MR. GARDINER: Yes.

16 MR. SHEPHERD: And your answer to that on page 38 of
17 the transcript was, the shorter the period, the more
18 variable the trend; right?

19 MR. GARDINER: Correct.

20 MR. SHEPHERD: And so a longer period is better?

21 MR. GARDINER: Yes.

22 MR. SHEPHERD: Now, if what you're trying to describe
23 is the warming of climate, then don't you have to know what
24 the period of time is over which it is warming in order to
25 know what the trend is?

26 MR. GARDINER: We saw that in the 2003 evidence. We
27 had a 30-year declining trend, and the 20-year declining
28 trend performed better. And also Mr. Root, he advised us

1 when looking at this -- because when you look at the annual
2 weather data, the decline in heating degree days becomes
3 really pronounced. It becomes evident in the '80s,
4 although -- our data, anyway, and he suggested that we use
5 -- he advised that we use 20 years.

6 MR. SHEPHERD: Mr. Root was a climatologist?

7 MR. GARDINER: No. Mr. Root is a -- I would have to
8 go back to his CV which was provided, which is on the
9 record. I know he is a meteorologist. Whether he is a
10 climatologist like Dr. Weaver, I am not sure, but his CV
11 has been provided.

12 MR. SHEPHERD: My point is that I didn't see in that
13 evidence, and I don't see in your evidence here before this
14 Panel, any justification for the 20-year period.

15 Do you have a justification for the 20-year period,
16 other than that's the one that was used last time?

17 MR. GARDINER: That is the one that was approved in
18 the blend, okay, and we have compared the 20-year trend,
19 which is a component of the blend, to the blend, to see
20 which one is more symmetric and accurate, and we -- making
21 the case that the 20-year trend, which the Board is
22 familiar with and intervenors are familiar with -- and what
23 we're saying is the trend is the true -- is truer than the
24 blend. That's the whole case.

25 MR. SHEPHERD: No, I understand that, but I am not --
26 I'm not asking about the blend. I'm asking about the 20
27 years.

28 You have said you have to discern the trend in a time

1 series of data. And my question is: Why is the time
2 series 20 years?

3 MR. GARDINER: Because --

4 MR. SHEPHERD: Why isn't it 30? Why isn't it ten?

5 [Witness panel confers]

6 MR. GARDINER: We focussed on the 20 years because
7 it's a component of the blend, which is Board-approved. It
8 came out of the 2004 analysis, and when we compared the
9 two, the blend against that, symmetry, accuracy -- and all
10 Union Gas is asking for is saying we're not changing the
11 weather-normal. You've got a 20-year trend, only it is
12 blended right now, okay?

13 And when we do the comparisons, the 20-year trend is
14 more accurate and symmetric. So that is why we're not
15 changing it, 21 or 20. It is a known and it is a
16 performing known.

17 MR. SHEPHERD: Let me come at this a different way.

18 You tested the 20-year trend for 26 different periods
19 to get these tests that we saw on the screen a minute ago;
20 right?

21 MR. GARDINER: Correct.

22 MR. SHEPHERD: And what the trend is is it's a slope;
23 right?

24 MR. GARDINER: Correct.

25 MR. SHEPHERD: You're going to use that slope to
26 predict 2013. That's what you're proposing to do?

27 MR. GARDINER: Correct.

28 MR. SHEPHERD: Okay. Those 26 years, the slope was

1 different every single year, wasn't it?

2 MR. GARDINER: Yes.

3 MR. SHEPHERD: So doesn't that mean that there was a
4 different trend every year?

5 MR. GARDINER: Yes.

6 MR. SHEPHERD: Then why do you think the trend this
7 year is right?

8 MR. GARDINER: Because it is the most current.

9 MR. SHEPHERD: But none of them were -- the fact that
10 they were most current in previous years wasn't relevant to
11 whether they were accurate, was it, because you didn't test
12 that?

13 MR. GARDINER: I disagree, because the test was to
14 repeat those 26 trend lines and the estimate for the test
15 year against the actual for the test year. And when we --
16 and then the statistics showed that when you look at those
17 26 tests for the test year, the 20-year trend, compared to
18 the other model, which is also changing because it's a
19 blend -- and even the average will change, because the 30-
20 year average is changing over time -- that the most current
21 is your best estimator of what happens, because the 26
22 tests indicated that.

23 MR. SHEPHERD: Well, that's what I'm trying to
24 understand.

25 You didn't test the most current against an earlier
26 one, for example. So you didn't test the most current
27 slope that you have today against the one from ten years
28 ago to see whether that slope would be more correct, did

1 you? So you don't know whether the most current is, in
2 fact, the most accurate. You haven't tested for that?

3 MR. GARDINER: No, because the methodology -- the
4 methodology is to use, in the blend, in the original
5 evidence which we prepared in early 2011, the most current
6 30-year average and the most current 20-year trend.

7 MR. SHEPHERD: I understand that, but that is
8 tautology.

9 MR. GARDINER: But the thing is, from regulatory
10 decisions, whenever we prepared demand forecasts, there is
11 a normal methodology and it's the most current one.

12 So in 2000, we didn't use the average from the '99
13 rate case. We used an average, 30-year average, up to
14 2002.

15 MR. SHEPHERD: Fine.

16 MR. GARDINER: Similarly, we would do in the original
17 evidence up to 2010.

18 MR. SHEPHERD: You haven't tested whether a ten-year
19 trend or a 15-year trend or 20 or 30 would be more
20 accurate, have you?

21 MR. GARDINER: No, we have not.

22 MR. SHEPHERD: Okay. It is actually not complicated
23 to do that; right? Once of your time series, Excel will do
24 it for you. It will tell you what your next number is,
25 depending on what the time series is you pick; right? It
26 is simple. You can do it in half an hour.

27 MR. GARDINER: Correct.

28 MR. SHEPHERD: I am going to ask you to undertake to

1 MR. AIKEN: So then my understanding is that you
2 didn't investigate, as part of the methodology for this
3 proceeding, the trend year methodology with other than 20
4 years of length?

5 MR. GARDINER: If I may refresh my memory?

6 In 2004 we looked at the 20-year trend, the 30-year
7 trend and a 20-year trend with forecast information.

8 MR. AIKEN: But with your additional eight years of
9 data, you didn't go back and look at those again?

10 MR. GARDINER: No, we did not.

11 MR. AIKEN: Okay. Now, if you could turn to page 1 in
12 the LPMA compendium, this is the graph of the northern and
13 southern degree days for 1992 through 2011. The data was
14 taken from the Excel file titled "2013 Regional Data File
15 April 2012", and specifically at the Toronto Union HDD
16 correlations tab, that Excel file was filed in response to
17 Exhibit J.C-2-2-1.

18 Now, when I look at this graph for the last 20 years
19 of actual heating degree days, one thing jumps out to me.
20 There seem to be two distinct periods for both the north
21 and the south. The first period is 1992 through 1997.
22 Over these six years, the degree days are relatively stable
23 and there does not appear to be much of a trend.

24 Would you agree with that?

25 MR. GARDINER: I disagree.

26 MR. AIKEN: Okay. Is there a statistically
27 significant trend between 1992 and 1997?

28 MR. GARDINER: No. I will go back to the testing

1 methodology of the way we analyzed the different
2 methodologies.

3 We actually started with data in 1985, went back to
4 that period, and said, If we were back in that time, what
5 would the 20 year trend be? What would the 30-year average
6 be? And every year we recalculated the blend and the 20-
7 year trend, and then we compared it to the actual.

8 And that's in the -- that's in the summary statistics
9 that are in the interrogatory responses. And, in the case
10 of the evidence, when we used Toronto as an illustration of
11 the concept and proof of the concept, we looked at those
12 statistics, the route means square error, the
13 mean percentage error, and the standard deviations, and it
14 is that data that tells you if the 20-year trend is
15 superior to the blend.

16 So it is not picking periods of time and looking at --
17 as Mr. Aiken is suggesting. It is saying, Go back, get as
18 much data as you can, estimate what the normals would be
19 for the test year, compare it to the actual. Do that to
20 the present, and which one is closer? It is the 20-year
21 trend.

22 MR. AIKEN: Okay. I think you agreed with me that
23 there is no statistically significant trend between 1992
24 and 1997; is that correct?

25 MR. GARDINER: When I look at the chart, Mr. Aiken, I
26 see that at the beginning of the period we were above 4,000
27 heating degree days, and, near the end of the period, in
28 the south we're somewhere around 36, 37, and in the north

1 we were 5,500, and then we're somewhere around 4,700. Both
2 are declining over time.

3 MR. AIKEN: I think you are lumping in 1998. If you
4 look at the table at the bottom of the graph, 1997 and
5 1992, in the south 4,031 in 1992; 4,005 in 1997; in the
6 north, 5,489 to 5,384.

7 MR. GARDINER: Right. But you are picking a period of
8 time here. Also, recall that the legacy weather normal for
9 Union Gas is a 30-year average, so we're going back even
10 further. And I'm sure if we looked at those charts, you
11 may see patterns.

12 The concept is not to look at patterns within certain
13 periods of time. It is to sort of say: Do I go from a 30-
14 year average to a blend or to a 20-year trend, by actually
15 doing the calculation? And then testing that, as I
16 described it before.

17 MR. AIKEN: Okay. One question before we break at
18 11:00. The second period is 1998 through 2011.

19 Now, over this 14-year period, there appears to be a
20 larger variation from year to year than in the 1992 through
21 1997 period.

22 First, would you agree with that?

23 MR. GARDINER: For the periods that you mentioned,
24 yes.

25 MR. AIKEN: And, again, do you believe that there
26 appears to be much of a trend in the 1998 through 2011
27 data?

28 MR. GARDINER: With any data, you can put a trend line

1 through it. The issue with that period of time is you only
2 have 12, 13 years, which is a very short period.

3 So if you -- and that's why Mr. Root advised us to use
4 20. Because if you use a short period, you will get a
5 trend that varies a lot, so you need to go to a longer
6 period, which is what the 20-year trend is.

7 MR. AIKEN: Would you take it -- subject to check, of
8 course -- that what trend there is in the 1998 through 2011
9 data is actually a positive trend for the south, but only
10 significant at an 80 percent level of confidence? While
11 there is no trend in the north data, even at a 50 percent
12 level of confidence?

13 [Witness panel confers]

14 MR. GARDINER: The difficulty I'm having, Mr. Aiken,
15 is you are proposing a new methodology based on a shorter
16 time period, and that's not what Union Gas is proposing.

17 Right now we have a blend. It's 55 percent 30-year
18 average, 30 years. And 45 percent 20-year declining trend.

19 We're proposing to go to straight 100 percent 20-year
20 declining trend; 13 years is not what we're proposing.

21 You could attach statistics to that. I will accept
22 your numbers, but that is not the proposal. It is too
23 short a period, and we're building on the methodology that
24 we've evolved over time from a 30-year average to a blend,
25 and now to the true 20-year declining trend.

26 MR. AIKEN: Thank you. You might be surprised that
27 that is not my proposal, going forward, but that might be a
28 good place to break.

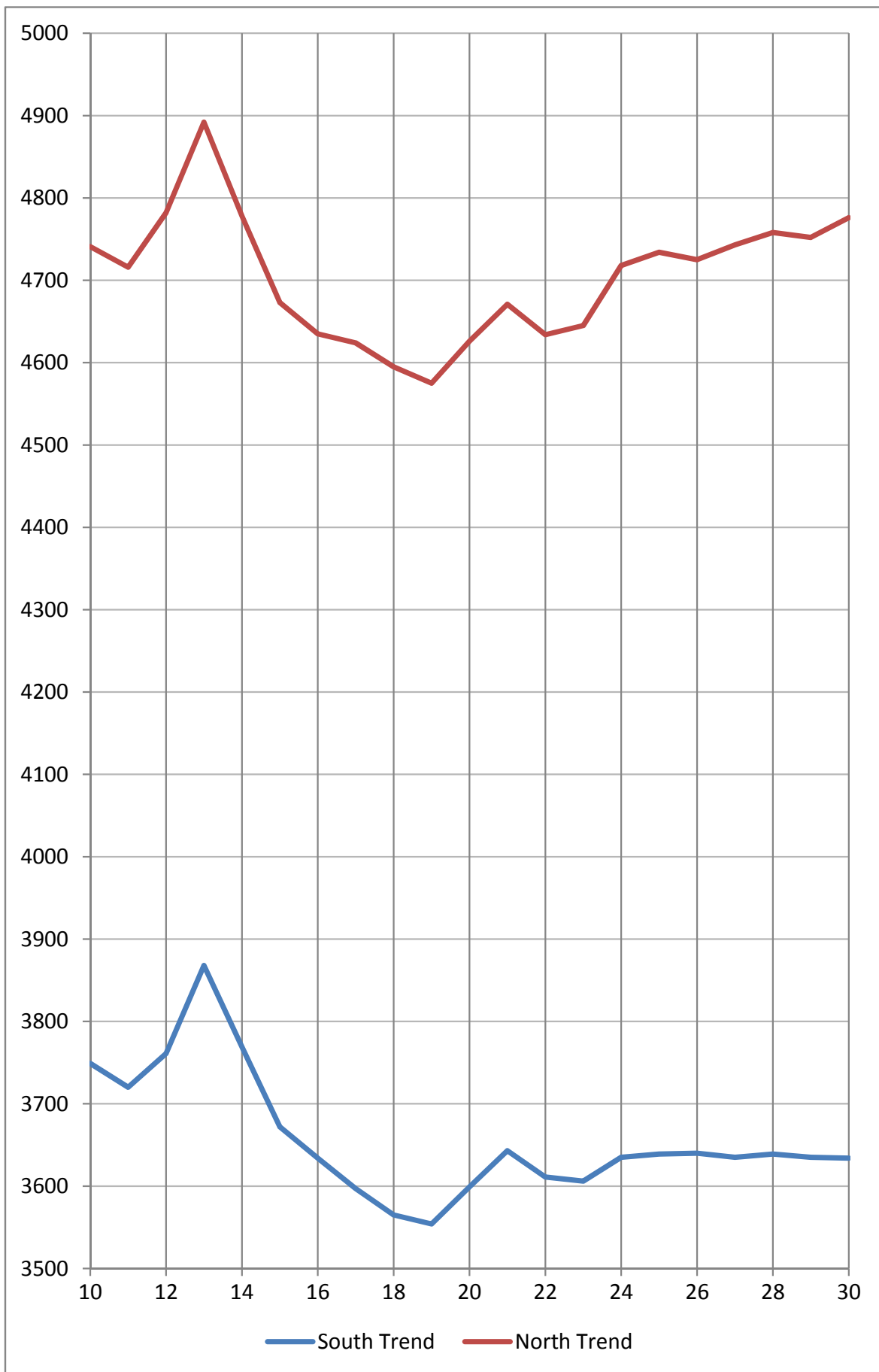
UNION GAS LIMITED

Undertaking of Mr. Shepherd
To Mr. Gardiner

Please provide 2013 degree days based on ten-year through to 30-year trend, keeping 2010 as the last year.

TREND YEAR NORMAL ESTIMATION: last year 2010
with 9 comparisons between the test year estimate and the actual year

Trend Time Span	UNION SOUTH		UNION NORTH	
	2013 Estimate HDDs	Ranking	2013 Estimate HDDs	Ranking
10 Year	3,749	18	4,741	19
11 Year	3,720	17	4,716	18
12 Year	3,761	20	4,782	20
13 Year	3,868	21	4,892	21
14 Year	3,769	19	4,778	17
15 Year	3,672	16	4,673	16
16 Year	3,634	15	4,635	15
17 Year	3,597	14	4,624	14
18 Year	3,565	8	4,595	9
19 Year	3,554	4	4,575	3
20 Year	3,599	3	4,626	1
21 Year	3,643	2	4,671	2
22 Year	3,611	1	4,634	4
23 Year	3,606	5	4,645	5
24 Year	3,635	7	4,718	6
25 Year	3,639	11	4,734	7
26 Year	3,640	12	4,725	8
27 Year	3,635	13	4,743	10
28 Year	3,639	10	4,758	11
29 Year	3,635	9	4,752	12
30 Year	3,634	6	4,776	13



UNION GAS LIMITED

Undertaking of Mr. Pankrac
To Mr. Shepherd

Please provide the analysis done to show customers clustered near the average.

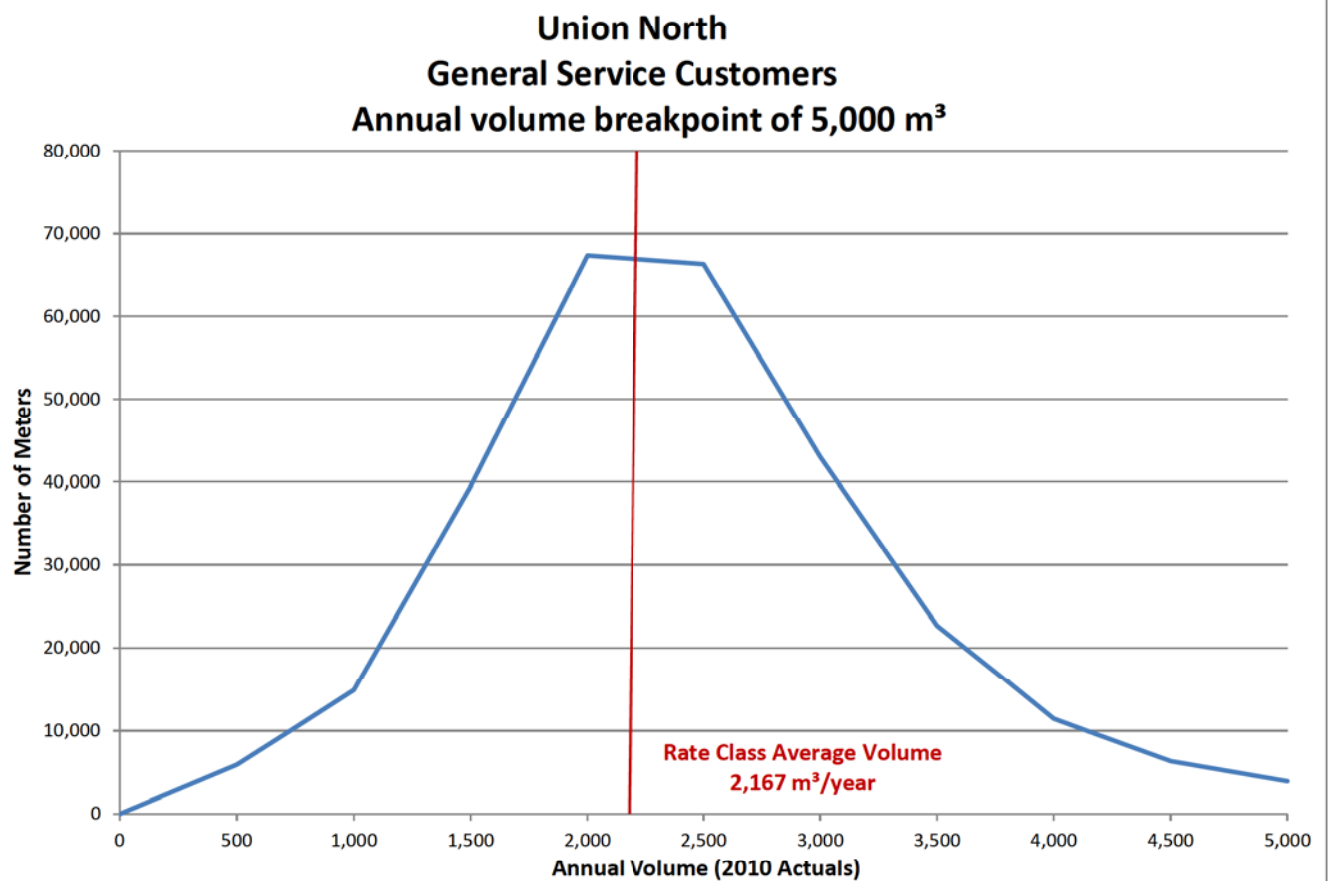
Please see Attachment 1 for Union North General Service Customers and Annual Volume Breakpoint of 5,000 m³.

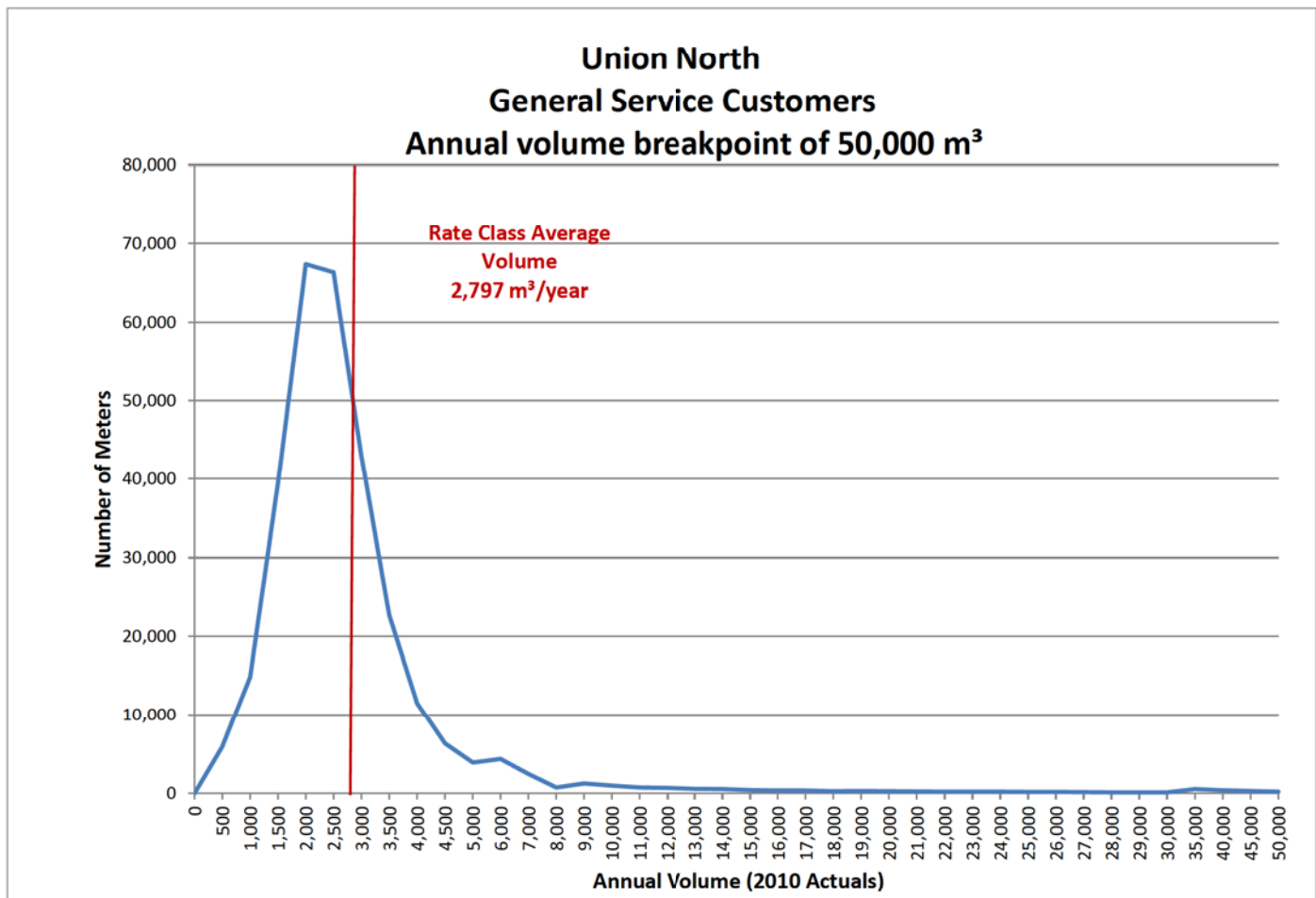
Please see Attachment 2 for Union North General Service Customers and Annual Volume Breakpoint of 50,000 m³.

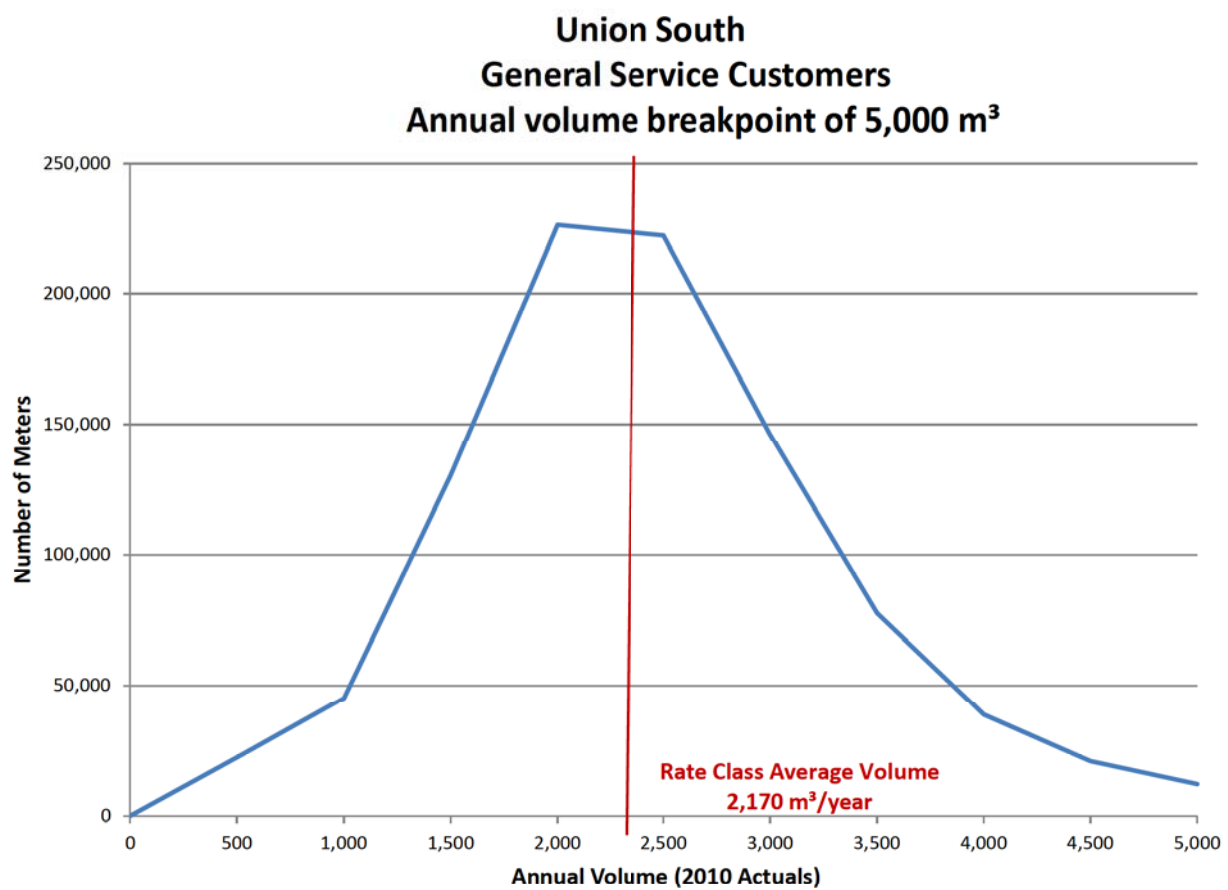
Please see Attachment 3 for Union South General Service Customers Annual Volume Breakpoint of 5,000 m³.

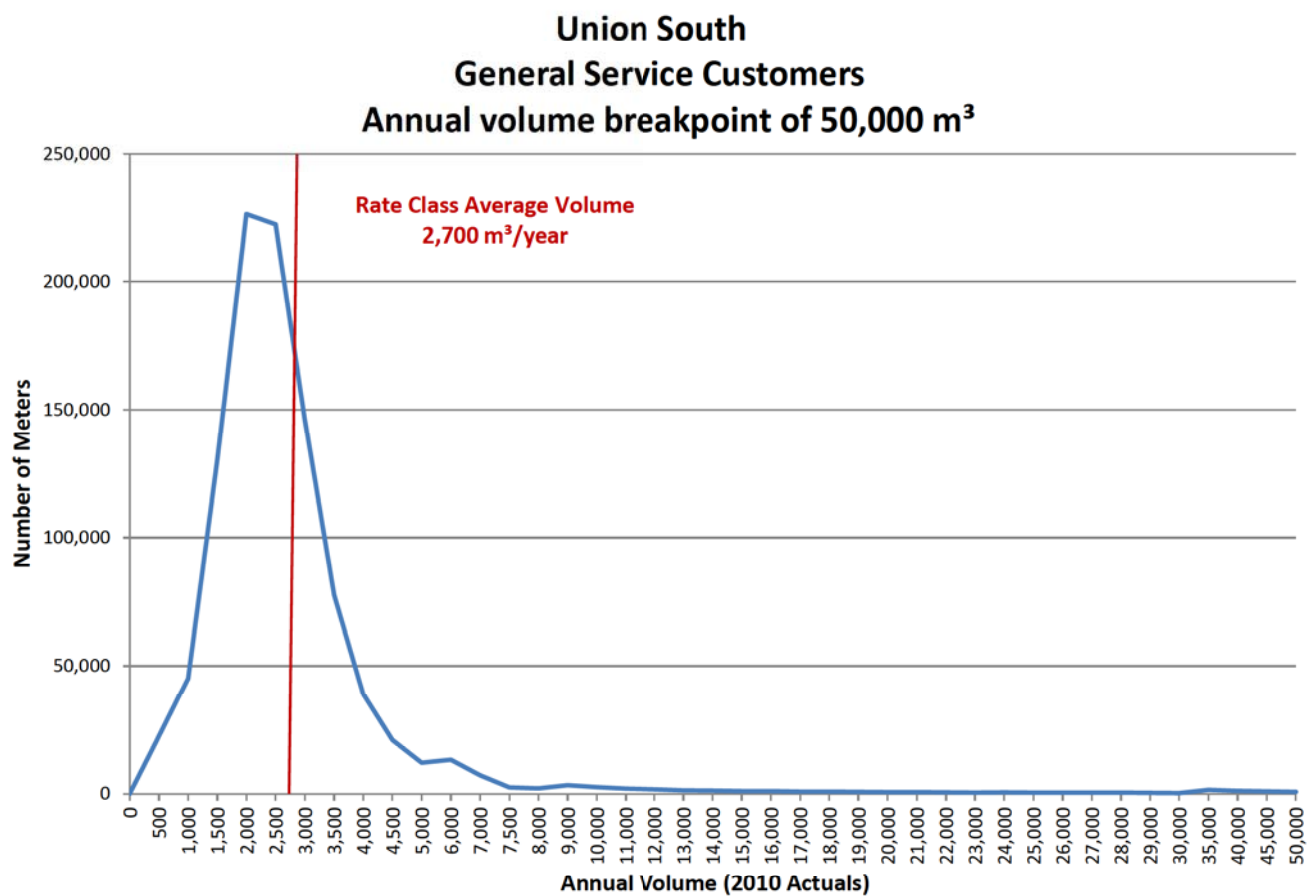
Please see Attachment 4 for Union South General Service Customers Annual Volume Breakpoint of 50,000 m³.

The charts attached demonstrate that by moving to a 5,000 m³ breakpoint for both the North and South results in a more normal distribution of customers around the mean.









1 And I understand that the reason why you were
2 proposing that is that it's simply not practical to
3 implement it by January 1st, 2013; right?

4 MR. TETREAULT: Correct.

5 MR. SHEPHERD: Is there another reason or is that the
6 only reason?

7 MR. TETREAULT: That's the only reason. We need --
8 should the Board approve our proposal, we need the time to
9 update administrative systems, billing systems, to actually
10 implement for January of 2014.

11 MR. SHEPHERD: And so I take it from that that you
12 agree that based on your more recent information, the
13 50,000 breakpoint is no longer appropriate; right?

14 MR. TETREAULT: That's correct.

15 MR. SHEPHERD: Okay. And you'll agree, I think, that
16 it produces some strange results that are unfair to some
17 customers? That is one of the reasons why you want to
18 change it?

19 MR. TETREAULT: That's fair.

20 MR. SHEPHERD: Okay. And I think you'll agree that if
21 you can avoid it, you would rather not have customers
22 subjected to a big increase followed by a big decrease. Is
23 that true, generally speaking?

24 MR. TETREAULT: Yes, if it were practical to do so.

25 MR. SHEPHERD: Okay. Then I think those are my
26 questions. Thank you, Madam Chair.

27 MS. HARE: Thank you. Mr. Thompson?

28 MR. SHEPHERD: And, Madam Chair, if the Board will

1 line 14, Mr. Tetreault. Do you recall that discussion?

2 MR. TETREault: Yes, I do.

3 MR. SMITH: And I guess the question is: Union hasn't
4 forecast anything in relation to those revenues now, and --
5 well, let me just ask it this way.

6 What is the impact of not having a forecast for those
7 revenues?

8 MR. TETREault: The effect of the FT RAM forecast
9 being zero is lower S&T margin than it would otherwise be.

10 MR. SMITH: And when you refer to "the alternative,"
11 what is it you're referring to in the alternative proposal?

12 MR. TETREault: The alternative is laid out in the
13 response to J.H-1-1-2, and, in there, as a possible rate
14 mitigation measure, we had discussed that if there were FT
15 RAM revenue, the margin could potentially be streamed
16 directly to north ratepayers to manage the 2013 proposed
17 rate impacts, with the caveat that Union would require
18 deferral account protection should TCPL be successful in
19 eliminating the program.

20 MR. SMITH: You were asked -- or you used the
21 expression "homogeneity", and this came out of a question
22 urban asked by Mr. Millar, but, just broadly, what happens
23 when you have a class that lacks homogeneity? What does
24 that reflect inside the class?

25 MR. TETREault: Generally speaking, what that will
26 result in is, frankly, unusual rate results or rate impacts
27 for customers. You want to have -- you want to have
28 sizeable homogeneous rate classes so that you have, on an

1 ongoing basis, sustainable rates that represent the costs
2 associated with that rate class.

3 Where you lack homogeneity, you will tend to have
4 intra-class subsidies amongst the customers that are in the
5 class, and that is something that you want to avoid when
6 designing rate classes and rates.

7 MR. SMITH: And you mentioned size a number of times,
8 but what happens when rate classes are not of a sufficient
9 size, in your view?

10 MR. TETREAULT: When rate classes are not of a
11 sufficient size, as customers for a variety of reasons join
12 or leave that rate class, they obviously bring their costs,
13 their revenues, their volumes, with them. And if you lack
14 that class size, the impact of a customer entering or
15 leaving the rate class can be dramatic on the rest of the
16 customers in the rate class. And you want to avoid those
17 type of circumstances, where possible.

18 MR. SMITH: Earlier in your examination, I believe it
19 was by Mr. Wolnik, you were asked about whether or not you
20 had taken the north proposals to senior management or if
21 senior management were aware of them.

22 And I guess I'm going to ask you: What, if any, was
23 the reaction of senior management to the north increases?

24 MR. TETREAULT: As we were, senior management was
25 concerned. Specifically they asked us to review the cost
26 allocation study and ensure that we were comfortable with
27 the results, and that all of the data and all of the
28 calculations in the cost study were working as they needed

UNION GAS LIMITED

Undertaking of Mr. Pankrac
To Mr. Shepherd

Please provide Exhibit H, Tab 1, Tables 11 and 12, with an additional two columns for 2012 Actual at the existing breakpoint.

Please see Attachment 1 for Table 11 and Attachment 2 for Table 12.

Union North
Annual General Service Delivery Bill Impacts of
2014 Rate Proposals

Line No.	Annual Volume (m ³ /year)	2012 Approved (1) - Annual Volume		2013 Proposed - Annual Volume		2014 Proposed - Annual Volume		Annual Bill Impacts	
		Breakpoint of 50,000 m ³		Breakpoint of 50,000 m ³		Breakpoint of 5,000 m ³			
		Rate 01 (\$)	Rate 10 (\$)	Rate 01 (\$)	Rate 10 (\$)	Rate 01 (\$)	Rate 10 (\$)	(\$)	(%)
1	1,800	383.49		422.31		421.12		(1.19)	-0.3%
2	2,200	411.33		458.73		457.04		(1.69)	-0.4%
3	2,600	438.84		494.80		492.79		(2.01)	-0.4%
4	3,000	466.13		530.67		528.39		(2.28)	-0.4%
5	5,000	598.23		705.54		705.23		(0.31)	0.0%
6	7,000	726.61		876.55			889.80	13.25	1.5%
7	10,000	914.59		1,128.39			1,090.00	(38.39)	-3.4%
8	20,000	1,531.22		1,957.51			1,755.24	(202.27)	-10.3%
9	30,000	2,142.17		2,780.82			2,419.31	(361.50)	-13.0%
10	50,000	3,359.60		4,422.82			3,743.64	(679.18)	-15.4%
11	80,000		4,805.71		5,899.52		5,626.55	(272.97)	-4.6%
12	100,000		5,683.78		7,037.89		6,863.64	(174.24)	-2.5%
13	200,000		9,932.35		12,571.60		12,626.80	55.19	0.4%
14	300,000		13,864.38		17,752.05		17,917.17	165.12	0.9%
15	500,000		21,371.97		27,715.09		28,150.63	435.54	1.6%

Notes:

(1) Calculated using January 2012 QRAM rates as approved by the Board in EB-2011-0382. Includes monthly customer charge and delivery commodity portions only.

Union South
Annual General Service Delivery Bill Impacts of
2014 Rate Proposals

Line No.	Annual Volume (m ³ /year)	2012 Approved (1) - Annual Volume		2013 Proposed - Annual Volume		2014 Proposed - Annual Volume		Annual Bill Impacts	
		Breakpoint of 50,000 m ³		Breakpoint of 50,000 m ³		Breakpoint of 5,000 m ³			
		Rate M1 (\$)	Rate M2 (\$)	Rate M1 (\$)	Rate M2 (\$)	Rate M1 (\$)	Rate M2 (\$)	(\$)	(%)
1	1,800	313.37		323.12		324.97		1.85	0.6%
2	2,200	325.75		337.57		339.58		2.01	0.6%
3	2,600	338.01		351.94		354.09		2.14	0.6%
4	3,000	350.20		366.20		368.47		2.27	0.6%
5	5,000	410.12		436.44		439.21		2.77	0.6%
6	7,000	468.81		505.38			651.36	145.98	28.9%
7	10,000	556.60		608.53			749.11	140.58	23.1%
8	20,000	845.99		948.89			1,073.28	124.39	13.1%
9	30,000	1,134.90		1,288.78			1,396.41	107.64	8.4%
10	50,000	1,712.75		1,968.54			2,038.38	69.85	3.5%
11	80,000		3,730.75		4,031.07		2,987.00	(1,044.07)	-25.9%
12	100,000		4,428.16		4,804.38		3,616.58	(1,187.80)	-24.7%
13	200,000		7,761.05		8,521.82		6,720.25	(1,801.58)	-21.1%
14	300,000		10,999.89		12,148.30		9,797.39	(2,350.91)	-19.4%
15	500,000		17,381.76		19,308.57		15,922.58	(3,385.98)	-17.5%

Notes:

(1) Calculated using January 2012 QRAM rates as approved by the Board in EB-2011-0382. Includes monthly customer charge and delivery commodity portions only.

Average Unit Cost Data from J12.5

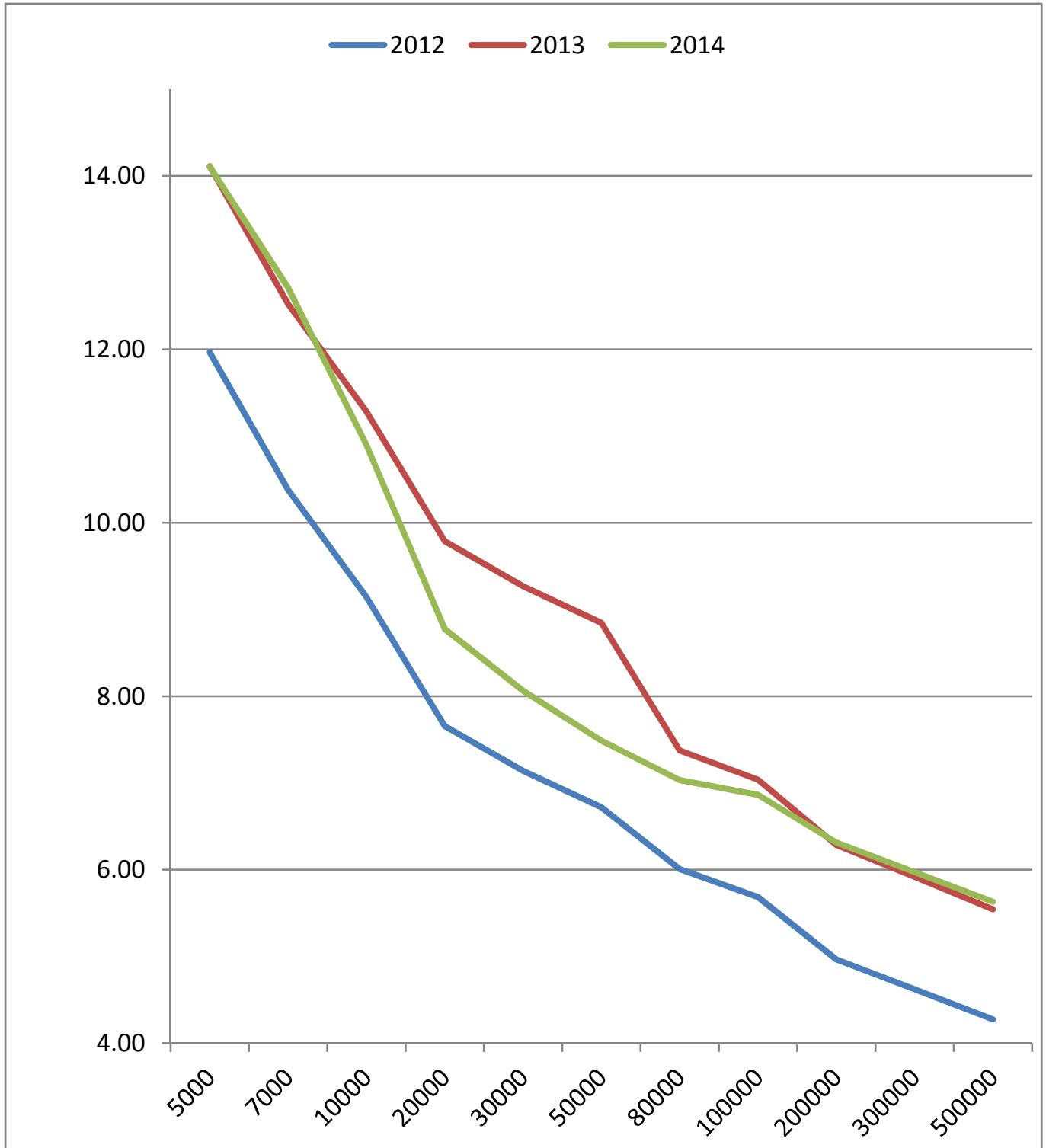
(cents per M3)

Union North

Volume	2012 Rates		2013 Rates		2014 Rates	
	01	10	01	10	01	10
5000	11.96		14.11		14.10	
7000	10.38		12.52			12.71
10000	9.15		11.28			10.90
20000	7.66		9.79			8.78
30000	7.14		9.27			8.06
50000	6.72		8.85			7.49
80000		6.01		7.37		7.03
100000		5.68		7.04		6.86
200000		4.97		6.29		6.31
300000		4.62		5.92		5.97
500000		4.27		5.54		5.63

Union South

Volume	2012 Rates		2013 Rates		2014 Rates	
	M1	M2	M1	M2	M1	M2
5000	8.20		8.73		8.78	
7000	6.70		7.22			9.31
10000	5.57		6.09			7.49
20000	4.23		4.74			5.37
30000	3.78		4.30			4.65
50000	3.43		3.94			4.08
80000		4.66		5.04		3.73
100000		4.43		4.80		3.62
200000		3.88		4.26		3.36
300000		3.67		4.05		3.27
500000		3.48		3.86		3.18





UNION GAS LIMITED

Undertaking of Mr. Shepherd
To Mr. Tetreault

Please provide the costs allocated to M1, M2, 01, and 010 for 2013 and 2014; and what adjustments were made to get from one to the other.

Please see the Attachment for the re-allocation of 2014 general service delivery-related costs. The methodology used to re-allocate delivery-related costs between Rate 01 and Rate 10 and Rate M1 and Rate M2 is consistent with the methodology approved by the Board in 2007 to split the Rate M2 rate class into Rate M1 and Rate M2.

The Attachment, page 1 summarizes the general service delivery-related costs in 2013 and 2014. As shown at lines 3 and 6, columns (c) and (f), total general service delivery-related costs remain unchanged in 2013 and 2014 by operating area.

The Attachment, page 2 summarizes the re-allocation of customer-related costs for Rate 01 and Rate 10 and Rate M1 and Rate M2 based on the proposed 2014 annual volume breakpoint of 5,000 m³.

Customer-related costs are re-allocated between Rate 01 and Rate 10 and Rate M1 and Rate M2 using a weighted number of customers based on 2010 actual customers identified at Exhibit H1, Tab 1, Updated, Tables 5 and 6. The weighted number of customers is derived by applying weights to the actual customer counts to ensure a proper allocation of costs. The weights used are 1.0 for residential, 1.5 for commercial and 2.0 for industrial. Based on the weighted number of customers by rate class, the customer-related costs are allocated between Rate 01 and Rate 10 and Rate M1 and Rate M2 as shown at lines 1 to 18.

The Attachment, page 3 summarizes the re-allocation of the remaining delivery-related costs for Rate 01 and Rate 10 and Rate M1 and Rate M2. The remaining delivery-related costs are re-allocated between rate classes by operating area based on 2010 actual volumes and the 5,000 m³ annual volume breakpoint. The allocation of the remaining delivery-related costs is shown at lines 1 to 6.

2013 and 2014 Delivery-related Costs
for Rate 01, Rate 10, Rate M1 and Rate M2

Line No.	Particulars (\$000's)	Proposed 2013 General Service Revenue Requirement			Proposed 2014 General Service Revenue Requirement		
		with Annual Volume breakpoint at 50,000 m ³			with Annual Volume breakpoint at 5,000 m ³		
		Customer-Related	Other Delivery	Total	Customer-Related	Other Delivery	Total
		(a)	(b)	(c)	(d)	(e)	(f)
<u>Union North</u>							
1	Rate 01	117,795	(1)	47,066	111,039	35,211	146,250
2	Rate 10	3,770	(2)	15,476	10,527	27,330	37,857
3	Total- Union North	<u>121,565</u>		<u>62,542</u>	<u>121,566</u>	<u>62,542</u>	<u>184,107</u>
<u>Union South</u>							
4	Rate M1	282,101	(3)	99,137	269,086	75,911	344,998
5	Rate M2	8,992	(4)	36,461	22,006	59,687	81,693
6	Total - Union South	<u>291,093</u>		<u>135,598</u>	<u>291,093</u>	<u>135,598</u>	<u>426,691</u>

Notes:

- (1) Exhibit H3, Tab 1, Schedule 2, page 1, line 1, column (e).
(2) Exhibit H3, Tab 1, Schedule 2, page 2, line 1, column (e).
(3) Exhibit H3, Tab 1, Schedule 2, page 5, line 1, column (e).
(4) Exhibit H3, Tab 1, Schedule 2, page 5, line 11, column (e).

2014 Allocation of Customer-related Costs
for Rate 01, Rate 10, Rate M1 and Rate M2
based on an annual volume breakpoint of 5,000 m³

Line No.	Particulars	2010 Actual Number of Customers at 50,000 m ³ breakpoint (a)	2010 Actual Number of Customers at 5,000 m ³ breakpoint (b)	Weighting (c)	Weighted Number of Customers (d)= (b) * (c)	Percentage (e) based on (d)	Customer-Related Costs (\$000's) (f)	General Service Allocated Costs Attachment Reference (g)
<u>Union North</u>								
Rate 01								
1	Residential	272,963	267,742	1.0	267,742			
2	Commercial	26,413	13,498	1.5	20,247			
3	Industrial	33	6	2.0	12			
4	Total	299,409 (1)	281,246 (3)		288,001	91.3%	111,039 (9)	
Rate 10								
5	Residential	4	5,225	1.0	5,225			
6	Commercial	1,619	14,534	1.5	21,801			
7	Industrial	112	139	2.0	278			
8	Total	1,735 (2)	19,898 (4)		27,304	8.7%	10,527 (10)	
9	Total - Union North	301,144	301,144		315,305	100.0%	121,565	Page 1, line 3, column(a)
<u>Union South</u>								
Rate M1								
10	Residential	915,184	898,064	1.0	898,064			
11	Commercial	73,418	42,241	1.5	63,362			
12	Industrial	3,982	1,432	2.0	2,864			
13	Total	992,584 (5)	941,737 (7)		964,290	92.4%	269,086 (11)	
Rate M2								
14	Residential	41	17,161	1.0	17,161			
15	Commercial	5,078	36,255	1.5	54,383			
16	Industrial	1,109	3,659	2.0	7,318			
17	Total	6,228 (6)	57,075 (8)		78,862	7.6%	22,006 (12)	
18	Total - Union South	998,812	998,812		1,043,151	100.0%	291,093	Page 1, line 6, column (a)

Notes:

- (1) Exhibit H1, Tab 1, Page 18, Table 6, lines 13-16, column (b).
- (2) Exhibit H1, Tab 1, Page 18, Table 6, lines 13-16, column (c).
- (3) Exhibit H1, Tab 1, Page 18, Table 6, lines 5-8, column (b).
- (4) Exhibit H1, Tab 1, Page 18, Table 6, lines 5-8, column (c).
- (5) Exhibit H1, Tab 1, Page 16, Table 5, lines 13-16, column (b).
- (6) Exhibit H1, Tab 1, Page 16, Table 5, lines 13-16, column (c).
- (7) Exhibit H1, Tab 1, Page 16, Table 5, Rate M1 customers in column (b) above per Table 5, lines 5-8, column (b).
- (8) Exhibit H1, Tab 1, Page 16, Table 5, Rate M2 customers in column (b) above per Table 5, lines 5-8, column (c).
- (9) Rate 01 Customer-Related costs at the 5,000 m³ annual volume breakpoint: 91.3% * 121,565 = \$111,039.
- (10) Rate 10 Customer-Related costs at the 5,000 m³ annual volume breakpoint: 8.7% * 121,565 = \$10,527.
- (11) Rate M1 Customer-Related costs at the 5,000 m³ annual volume breakpoint: 92.4% * 291,093 = \$269,086.
- (12) Rate M2 Customer-Related costs at the 5,000 m³ annual volume breakpoint: 7.6% * 291,093 = \$22,006.

2014 Allocation of Other Delivery-related Costs
for Rate 01, Rate 10, Rate M1 and Rate M2
based on an annual volume breakpoint fo 5,000 m³

Line No.	Particulars	2010 Actual Annual Volume (m ³) at 50,000 m ³ breakpoint (a)	2010 Actual Annual Volume (m ³) at 5,000 m ³ breakpoint (b)	Percentage (c) based on (b)	Other Delivery Costs (\$000's) (d)	General Service Allocated Costs Attachment Reference (e)
<u>Union North</u>						
1	Rate 01	837,395,960 (1)	609,371,320 (3)	56.3%	35,212 (9)	
2	Rate 10	244,955,407 (2)	472,980,046 (4)	43.7%	27,330 (10)	
3	Total - Union North	<u>1,082,351,367</u>	<u>1,082,351,367</u>	<u>100.0%</u>	<u>62,542</u>	Page 1, line 3, column (b)
<u>Union South</u>						
4	Rate M1	2,679,588,627 (5)	2,043,883,921 (7)	56.0%	75,911 (11)	
5	Rate M2	971,362,682 (6)	1,607,037,388 (8)	44.0%	59,687 (12)	
6	Total - Union South	<u>3,650,951,309</u>	<u>3,650,921,309</u>	<u>100.0%</u>	<u>135,598</u>	Page 1, line 6, column (b)

Notes:

- (1) Exhibit H1, Tab 1, Page 18, Table 6, lines 13-16, column (a).
- (2) Exhibit H1, Tab 1, Page 18, Table 6, lines 13-16, column (d).
- (3) Exhibit H1, Tab 1, Page 18, Table 6, lines 5-8, column (a).
- (4) Exhibit H1, Tab 1, Page 18, Table 6, lines 5-8, column (d).
- (5) Exhibit H1, Tab 1, Page 16, Table 5, lines 13-16, column (a).
- (6) Exhibit H1, Tab 1, Page 16, Table 5, lines 13-16, column (d).
- (7) Exhibit H1, Tab 1, Page 16, Table 5, lines 5-8, column (a).
- (8) Exhibit H1, Tab 1, Page 16, Table 5, lines 5-8, column (d).
- (9) Rate 01 Other Delivery-related costs at the 5,000 m³ annual volume breakpoint: 56.3% * 62,542 = \$35,212.
- (10) Rate 10 Other Delivery-related costs at the 5,000 m³ annual volume breakpoint: 43.7% * 62,542 = \$27,330.
- (11) Rate M1 Other Delivery-related costs at the 5,000 m³ annual volume breakpoint: 56.0% * 135,598 = \$75,911.
- (12) Rate M2 Other Delivery-related costs at the 5,000 m³ annual volume breakpoint: 44.0% * 135,598 = \$59,687.

Cost Allocation Methodology for Transition

<i>North</i>	<i>Number of Customers</i>	<i>Customer - related costs</i>	<i>Per Customer</i>	<i>Delivery - related costs</i>	<i>Per Customer</i>	<i>Volumes</i>	<i>Delivery costs per unit</i>	<i>Total Costs</i>	<i>Per Customer</i>
Up to 5,000 (01)	281,246	\$111,039	\$394.81	\$35,211	\$125.20	609,371,320	\$0.057783	\$146,250	\$520.01
5,000 to 50,000 (01-10)	18,163	\$6,756	\$371.96	\$11,854	\$652.65	228,024,639	\$0.051986	\$18,610	\$1,024.61
Over 50,000 (10)	1,735	\$3,770	\$2,172.91	\$15,476	\$8,919.88	244,955,407	\$0.063179	\$19,246	\$11,092.80
Totals - North	301,144	\$121,565	\$403.68	\$62,541	\$207.68	1,082,351,366	\$0.057783	\$184,106	\$611.36

<i>South</i>	<i>Number of Customers</i>	<i>Customer - related costs</i>	<i>Per Customer</i>	<i>Delivery - related costs</i>	<i>Per Customer</i>	<i>Volumes</i>	<i>Delivery costs per unit</i>	<i>Total Costs</i>	<i>Per Customer</i>
Up to 5,000 (01)	941,737	\$269,086	\$285.73	\$75,911	\$80.61	2,043,883,921	\$0.037141	\$344,997	\$366.34
5,000 to 50,000 (01-10)	50,847	\$13,015	\$255.96	\$23,226	\$456.78	635,674,706	\$0.036538	\$36,241	\$712.75
Over 50,000 (10)	6,228	\$8,992	\$1,443.80	\$36,461	\$5,854.37	971,362,682	\$0.037536	\$45,453	\$7,298.17
Totals - South	998,812	\$291,093	\$291.44	\$135,598	\$135.76	3,650,921,309	\$0.037141	\$426,691	\$427.20

Source for all figures: JT2.27

Cost figures '000s omitted as per source

UNION GAS LIMITED

Undertaking of Mr. Pankrac
To Mr. Shepherd

Please confirm in 2013 Union proposing the average delivery-related cost per m³ for Rate 10 is 6.3 cents/m³, and confirm cost allocation method implies delivery-related costs are 5.8 cents/m³.

The calculation of the average cost of 6.3 cents/ m³ and 5.8 cents/ m³ is confirmed. The average costs correspond with the three subgroupings indicated, however they do not correspond to Union's proposed two 2014 general service rate classes. Union's proposed rates are based on the average costs for the rate classes, not subgroupings.

1 the weights that you're proposing to use -- I'm sorry.
2 Does it cause you any concern that if you believe in the
3 weights that you are using, that there may be a problem
4 with the cost allocation model, that it is giving you
5 significantly different results?

6 MR. TETREAULT: No, I don't have any concerns with the
7 accuracy of the 2013 cost study. My challenge with page 26
8 of your compendium, Mr. Aiken, is what I mentioned earlier,
9 which is trying to apply -- trying to reverse-engineer the
10 cost allocation results.

11 And, in my mind, that isn't appropriate to attempt to
12 do, to take 2010 actuals and derive an implied cost
13 allocation, when we have a proper 2013 forecast number of
14 customers for the classes in question.

15 So I'm very comfortable with the results of the 2013
16 cost study.

17 MR. AIKEN: Can you go back to page 18 of the SEC
18 compendium? Now, I couldn't recall, but I think Mr.
19 Shepherd brought you to this at some point on Thursday, and
20 did you accept the calculations as they're laid out here?

21 MR. PANKRAC: No, we didn't, because in the top thing,
22 what we have is you have a number of groupings that do not
23 necessarily correspond to rate class. And as we pointed
24 out to Mr. Shepherd, really the up to 5,000 is one rate
25 class, and then the next two, the 5,000, the 50,000 and
26 over 50,000, in fact constitutes the other rate class we're
27 proposing.

28 So this approach does not line up with the class rate-

1 making. So to the extent you pick a subset of that class,
2 you will get different results.

3 MR. AIKEN: Okay. Well, let's talk about those
4 different results. I'm going to concentrate on the south.

5 So if we look at the 5,000 to 50,000 group, do you
6 agree that there are 50,847 customers based on your
7 evidence in this group?

8 MR. PANKRAC: I'm sorry, was there a question?

9 MR. AIKEN: Yes. Do you agree that there are 50,847
10 customers in the group 5,000 to 50,000 based on your
11 evidence?

12 MR. PANKRAC: Yes, I see that.

13 MR. AIKEN: And do you agree that the customer-related
14 costs associated with these customers that will be moving
15 is the \$13,015,000?

16 MR. PANKRAC: I understand how Mr. Shepherd has done
17 his derivation, and I accept that that is the number you
18 would get.

19 MR. AIKEN: And do you also accept that the per-
20 customer charge of 255.96 is based on the two numbers from
21 your evidence?

22 MR. PANKRAC: I accept that.

23 MR. AIKEN: And similarly, do you accept those
24 calculations for the up to 5,000 and the over 50,000, that
25 these numbers are calculated based on figures taken
26 directly from your evidence?

27 MR. PANKRAC: I accept that.

28 MR. AIKEN: Now, does it make sense to you that the

1 customer-related costs per customer for the group of
2 customer that you want to move from rates M1 and 01 to M2
3 and 10 are lower than that for the smaller customers they
4 are leaving behind as shown on page 18 of Mr. Shepherd's
5 compendium?

6 MR. PANKRAC: That is the result of the approach Mr.
7 Shepherd has taken, which is not a class approach. It's
8 not a rate class approach. And so if you mechanically
9 calculate that, that's the result you get.

10 However, if you take the 5,000 to 50,000 and the over
11 50,000, you will in fact have a customer-related charge
12 that is more meaningful.

13 MR. AIKEN: You keep calling this "Mr. Shepherd's
14 approach", but this is your approach, is it not?

15 MR. PANKRAC: No, we proposed to do this along class
16 rate-making lines. This is not --

17 MR. AIKEN: But your approach is to move 50,847
18 customers. Your approach is that you've allocated
19 13,015,000 to those customers that you propose to move from
20 one group to another. So this is not Mr. Shepherd's
21 approach. This is Union's approach; is it not?

22 MR. PANKRAC: Yes, we prefer that that approach be
23 stated on a rate class basis, but it is our approach.

24 MR. AIKEN: If you had decided to have three rate
25 classes instead of two --

26 MR. SMITH: Mr. Aiken, I think Mr. Tetreault is going
27 to explain.

28 MR. TETREAULT: Mr. Aiken, it might be worthwhile --

1 sorry, it is worthwhile to look at Exhibit H3, tab 1,
2 schedule 3. What that schedule does is show the average
3 unit rate in the general service rate class. And implied
4 in Mr. Shepherd's questions on Friday was that the average
5 unit rate in the large volume rate classes is higher than
6 the average unit rate in the small volume rate classes, and
7 I can't accept that. It's not true.

8 And Exhibit H3, tab 1, schedule 3 I think shows that
9 quite succinctly. And as we're focussed on the south, if
10 you look at page 2 of this schedule, line number 1, which
11 is the delivery line, you can see that considering the
12 total revenue for the class, total volumes for the class,
13 the average rate for M1 is approximately 13 cents, 13.01.

14 Similarly, if we look at line 4, which is the delivery
15 line for M2, you can see that the average unit rate for M2
16 -- again, the class as a whole in 2013, is 4.3 cents.

17 So what you're truly seeing is the economies of scale
18 that you would expect with volume.

19 Unfortunately, we have not filed a similar schedule
20 for 2014, but I can tell you that the same declining trend
21 is happening in 2014 as we see in 2013. And that gives us
22 a great deal of comfort that, overall, the cost allocation
23 and the rate design for the general service classes is
24 appropriate.

25 MR. AIKEN: If we just stick with page 18 of Mr.
26 Shepherd's compendium, I think you're getting hung up on
27 the fact that you're not proposing this third rate class.
28 So let me ask the question this way.

1 If you were proposing three rate classes instead of
2 two in the south, so that you had M1 up to 5,000 as you're
3 currently proposing, but you were maintaining M2 at over
4 50,000 and you had M1.5 that was for everybody in between,
5 would your numbers, the number of customers and the related
6 costs that you're proposing to move into that new M1.5 rate
7 class, would that be different than the numbers shown here?

8 MR. PANKRAC: In another IR response, we were asked to
9 address the issue of: Should there be three rate classes?
10 And our point was that one of our bases for differentiating
11 rate classes was that there should be reasonable
12 differences between those classes.

13 And, also, if we were to go to three rate classes, you
14 can see the problem you would have with a continuum. You
15 would literally have results that are not meaningful and
16 class sizes that are not meaningful either. We would
17 still, for example, have not addressed that we have a
18 problem with the over 50,000 in the north only having 1,700
19 customers.

20 And to put that into context, if we were to look back
21 in our evidence, the problem we have with the largest of
22 those classes being over 50,000 cubic metres currently is
23 that, for example, in Union north we used to, in 2007, have
24 about 3,000 customers, and that has now gone to 1,700
25 customers. And so you can see it's just a dramatic thing.

26 And our goal has in fact been to restore the rate
27 class sizes. So that is why the weakness of the approach
28 of taking three is it still doesn't address, for the

1 gives us what we feel is the appropriate homogeneity in the
2 small volume classes with the proper rate class size in the
3 large volume general service classes.

4 And of all of the various break points that you see in
5 table 5, in our judgment, the 5,000 break point best
6 balances those two goals.

7 MR. SHEPHERD: I see, okay. And the -- and so what
8 you ended up doing, then, is you moved or you are proposing
9 to move 69,000, roughly 69,000, customers from 01 and M1 to
10 10 and M2, right, 18,163 from 01 to 10, and 50,847 from M1
11 to M2?

12 MR. TETREAULT: That's correct.

13 MR. SHEPHERD: Okay. By the way, I presume you will
14 agree that that 69,000 customers includes most of the
15 schools in your franchise area?

16 MR. TETREAULT: I believe so, yes, to the extent that
17 schools fall within the 5,000 and 50,000 volume range.

18 MR. SHEPHERD: Okay. Well, but that's roughly
19 correct; right?

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

21 MR. SHEPHERD: Okay. So then let's -- tell me whether
22 this is correct. You have three groups of customers here.
23 You have those under 5,000 cubic metres per year, and
24 they're going to be in either M1 or 01 regardless under
25 your proposal; right? They're staying where they are?

26 MR. TETREAULT: Correct.

27 MR. SHEPHERD: Then at the other extreme you have ones
28 that are over -- by the way, that is about 1.2 million

1 customers?

2 MR. TETREAULT: Correct.

3 MR. SHEPHERD: And then you've got ones that are
4 50,000 cubic metres per year, or more, who will be in M2 or
5 10, regardless, and that's about 8,000 customers?

6 MR. TETREAULT: That's correct.

7 MR. SHEPHERD: And then you've got the ones in
8 between, 5,000 to 50,000 customers, who are currently in M1
9 or 01, and under your proposal would move as of January
10 1st, 2014 to M2 and 10, and that's about 69,000 customers?

11 MR. TETREAULT: Correct.

12 MR. SHEPHERD: Okay. Now, when you move these 69,000
13 customers from one rate class to another, you have to move
14 their costs, as well; right? In order to set rates for M2,
15 for example, you have to take the costs that apply to those
16 customers and move them into M2; right?

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

18 MR. SHEPHERD: Same is true with 10?

19 MR. TETREAULT: Correct.

20 MR. SHEPHERD: And, conversely, when you are setting
21 the rates for M1 and 01, you have to take those costs out,
22 because those customers aren't in there anymore; right?

23 MR. TETREAULT: Yes. We need to reallocate the costs
24 based on the new proposed break points.

25 MR. SHEPHERD: So my friend, Mr. Thompson, asked you
26 an interrogatory about that, which you will see at page 11
27 of our materials - the reference is J.G-1-14-2 - saying
28 basically, with all of these rate design things: How did

1 you do the cost allocation?

2 I am going to ask you about the actual method you used
3 in this case, but I would like you to first explain b) in
4 that answer, because I didn't understand that, actually.

5 So I wonder if you could just go to that answer b) and
6 tell us what that actually means?

7 MR. TETREAULT: What we are saying in part b) is,
8 should the Board approve our proposals for the four general
9 service rate classes when Union's next cost of service
10 proceeding comes around, whenever that may be, the new rate
11 classes with the new volume break point would be reflected
12 in the cost allocation study that is prepared at that time.

13 MR. SHEPHERD: So you haven't done a cost allocation
14 study based on your proposed new rates; right?

15 MR. TETREAULT: Correct.

16 MR. SHEPHERD: And so you won't actually find out what
17 the right costs are under the new classes you are proposing
18 not just here, but elsewhere in your application, until
19 after the Board says yes?

20 MR. TETREAULT: No, I wouldn't agree with that, Mr.
21 Shepherd.

22 We have performed a cost allocation for 2014 for the
23 general service rate classes.

24 MR. SHEPHERD: Well, I'm going to take you to that,
25 but that's not a cost allocation study as anybody in the
26 gas industry thinks of a cost allocation study, is it?

27 MR. TETREAULT: It's a cost allocation methodology.

28 MR. SHEPHERD: It's a shortcut?

1 MR. TETREAULT: I don't know -- I don't know that I
2 would call it a shortcut. It is a methodology consistent
3 with how Union would have split the original M2 class in
4 2007.

5 MR. SHEPHERD: I wonder if you could go to pages 12
6 and 13 of our materials. We asked you in the technical
7 conference about this cost allocation and how you did it.

8 I take it that I can -- that that can be summarized as
9 you used a weighting methodology, which we're going to get
10 to in a second, and that methodology was not in the
11 evidence until we asked about it; right? Is that a fair
12 characterization of what that page is?

13 MR. TETREAULT: What we had in evidence were the
14 resulting proposed rates of that cost allocation
15 methodology, but, yes, you are correct. We did not include
16 the methodology, the details of that methodology, in
17 prefiled evidence.

18 MR. SHEPHERD: And so you undertook to provide that,
19 and that response is JT2.27, which is included in our
20 material starting at page 14. Do you see that?

21 MR. TETREAULT: Yes, I do.

22 MR. SHEPHERD: And this is your evidence; right?

23 MR. TETREAULT: Yes.

24 MR. SHEPHERD: Okay. And so let me just -- why don't
25 we start with -- why don't you give a brief summary of what
26 you did to reallocate these costs, what the methodology
27 was? I will take you to the details in a second, but let's
28 start at a high level, and then we will work down to the

Unit Delivery Costs Before and After Rate Redesign

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>
		<i>Delivery - related costs</i>	<i>Volumes</i>	<i>Delivery costs per unit</i>	<i>Pre-Move Costs</i>	<i>Pre-Move Volumes</i>	<i>Pre-Move Unit Costs</i>	<i>Post-Move Costs</i>	<i>Post-Move Volumes</i>	<i>Post-Move Unit Costs</i>
North										
1 Up to 5,000 (01)		\$35,211	609,371,320	\$0.057783	\$47,065	837,395,959	\$0.056204	\$35,211	609,371,320	\$0.057783
2 5,000 to 50,000 (01-10)		\$11,854	228,024,639	\$0.051986						
3 Over 50,000 (10)		\$15,476	244,955,407	\$0.063179	\$15,476	244,955,407	\$0.063179	\$27,330	472,980,046	\$0.057783
4 Totals - North		\$62,541	1,082,351,366	\$0.057783	\$62,541	1,082,351,366	\$0.057783	\$62,541	1,082,351,366	\$0.057783
		<i>Delivery - related costs</i>	<i>Volumes</i>	<i>Delivery costs per unit</i>	<i>Pre-Move Costs</i>	<i>Pre-Move Volumes</i>	<i>Pre-Move Unit Costs</i>	<i>Post-Move Costs</i>	<i>Post-Move Volumes</i>	<i>Post-Move Unit Costs</i>
South										
5 Up to 5,000 (M1)		\$75,911	2,043,883,921	\$0.037141	\$99,137	2,679,558,627	\$0.036998	\$75,911	2,043,883,921	\$0.037141
6 5,000 to 50,000 (M1-M2)		\$23,226	635,674,706	\$0.036538						
7 Over 50,000 (M2)		\$36,461	971,362,682	\$0.037536	\$36,461	971,362,682	\$0.037536	\$59,687	1,607,037,388	\$0.037141
8 Totals - South		\$135,598	3,650,921,309	\$0.037141	\$135,598	3,650,921,309	\$0.037141	\$135,598	3,650,921,309	\$0.037141

Source for all figures: JT2.27

Cost figures '000s omitted as per source

1 would get roughly the same numbers. What is your basis for
2 saying that?

3 MR. TETREAULT: As it relates to what we're proposing
4 for 2014, I think the basis is that we have used that
5 methodology prior in the split of the former M2 class into
6 M1 and M2, which goes back to 2007, and that that
7 methodology was approved by the Board in that case.

8 So we have applied the same methodology for the 2004
9 proposal.

10 MR. SHEPHERD: All right. Let me, then, take you to
11 the next page, which is your split of delivery-related
12 costs, which I now understand includes demand related,
13 right, demand related and commodity related?

14 MR. PANKRAC: That is correct.

15 MR. SHEPHERD: Okay. And so can you give us a brief
16 explanation of how this worked?

17 MR. PANKRAC: Yes. So since these costs -- and we
18 know what in total the delivery-related costs are. So at
19 line 3D, for example, in the south -- in the north, we know
20 that that is 62-and-a-half million dollars.

21 And so what we have done is we have proportioned those
22 into the volumes based on the 2010 actual data, as appears
23 in column B.

24 MR. SHEPHERD: So you are basically making the
25 simplifying assumption that these costs are entirely driven
26 by volume, and they will be the same regardless of how many
27 units there are; right?

28 MR. PANKRAC: What we're saying is that volume is a

1 good proxy for this calculation.

2 MR. SHEPHERD: All right. So the effect of this
3 process is to remove -- when you -- taking a look at that
4 page, for example, when you restate your costs in this
5 column D, that has the effect of moving delivery-related
6 costs from 01 to 10, and those are the costs that represent
7 those customers you moved; right?

8 MR. PANKRAC: I'm not following your point about how
9 that moves costs.

10 MR. SHEPHERD: Well, okay. You had a split here where
11 you had -- for example, in rate 01 you had volume of 837.4
12 billion, and rate 10 was 245. And now you have a different
13 split, 609.4 and 472 -- 473.

14 So that percentage means that you have to split up the
15 costs differently; right?

16 MR. PANKRAC: Yes. You have to split up the costs
17 based on the 5,000 volume break point.

18 MR. SHEPHERD: And in doing that, what happens is that
19 the costs that would be in rate 1 are lower and the costs
20 that would be in rate 10 with higher; right?

21 MR. PANKRAC: I disagree. You would have to use the
22 volume proportions for the new classes.

23 MR. SHEPHERD: Your whole methodology starts from the
24 assumption that you have to move costs over.

25 And I asked you the question: Do you have to move the
26 costs of those 9,000 customers over, and you said yes. Is
27 that not true anymore?

28 MR. PANKRAC: What we do is we redetermine the costs.

1 We don't take a subset and say these are the costs of
2 moving customers.

3 What we do is we look at the costs determined by the
4 2013 cost study, in total, and what we do is we say, What
5 is the proper basis to allocate those costs?

6 And so it is not like we take a subset and that we're
7 moving it. What we do is we take the total class and say:
8 Based on this redetermined break point, what is a
9 reasonable allocation of those costs?

10 MR. SHEPHERD: All right. Let's go back to page 16
11 for a second. We will do this a simpler way.

12 If you take a look at the figure 111 million there,
13 you see, under column F, customer-related costs for rate
14 01, 111 million?

15 MR. PANKRAC: Yes, I see that.

16 MR. SHEPHERD: At the break point, 50,000, we know
17 what the number is, because that's your break point in
18 2013, and that number is 117 million, isn't it?

19 MR. PANKRAC: The 117 million is not based on the 2010
20 actual number of customers. The 117 million will be based
21 on the 2013 forecast number of customers.

22 MR. SHEPHERD: How does that make a difference?

23 MR. PANKRAC: Why does that make a difference? It is
24 because I am determining my cost split based on -- it's
25 data driven. I am using the actual data I have and what I
26 know on my most recent forecast of how that split will look
27 at 5,000 cubic metres, and I'm saying that that is the most
28 -- is the most accurate way I have of apportioning that.

1 MR. SHEPHERD: Okay. Let me do this a different way.

2 I didn't actually think this was the hard part, Mr.

3 Pankrac.

4 Take a look at line 9. You see the figure for Rates 1

5 and 10 is 121,565,000. That is the total costs; right?

6 MR. PANKRAC: Yes.

7 MR. SHEPHERD: And that's the number for 2013, in

8 fact; right? It's the same number for 2013?

9 MR. PANKRAC: That is correct.

10 MR. SHEPHERD: Okay. So you have allocated that

11 between 01 and 10 for 2013, haven't you?

12 MR. PANKRAC: Yes. I have taken the 2013 costs, as I
13 indicated earlier.

14 MR. SHEPHERD: Am I right that in 2013, that that
15 allocation is 117 million to 01, and about 3 million-and-
16 change to 10; is that right?

17 MR. PANKRAC: Subject to check.

18 MR. SHEPHERD: And so the effect of this methodology
19 is to reallocate \$6,756,000 which was in 01. You moved it
20 over to 10; right?

21 MR. PANKRAC: I'm just looking up another sheet. Bear
22 with me.

23 MR. SHEPHERD: If you want, these numbers are all
24 calculated on page 18.

25 MR. PANKRAC: We are moving costs to reflect the
26 different characterization of the class.

27 MR. SHEPHERD: And am I correct that the costs you
28 have moved from 01 to 10 from 2013 to 2014 are 6,756,000?

1 And I did that -- I'm looking on page 15. I did that
2 simply by looking at line 1 and subtracting column A and D.
3 That's the correct way to do it; right?

4 MR. PANKRAC: Could you repeat that last part, please?

5 MR. SHEPHERD: Okay. The question is: Did you move
6 -- are you proposing to move \$6,756,000 of costs from 01 to
7 10? And the way I calculated that is line 1 of page 15 of
8 our materials, page 1 of attachment to JT2.27, 117,795 is
9 the allocation in 2013 and 111,039 is the allocation in
10 2004. The difference is 6,756,000; right?

11 MR. TETREAULT: That's correct, Mr. Shepherd.

12 MR. SHEPHERD: Okay. And we can do that for each line
13 and we can determine -- in fact, you will see that if you
14 take ten-five-twenty-seven, the 2014 Rate 10 number, and
15 subtract 3,770,000, the 2013 number for Rate 10, you get
16 the same 6,756,000, because that is how much you moved;
17 right?

18 MR. TETREAULT: Correct. And the total obviously
19 needs to remain the same.

20 MR. SHEPHERD: The same will be true of M1 and M2?

21 MR. TETREAULT: That's correct.

22 MR. SHEPHERD: Except the amount moved was 13,015,000.
23 Will you accept that subject to check?

24 MR. TETREAULT: Yes, I will.

25 MR. SHEPHERD: So here is what I am trying to figure
26 out, and I want you to move to page 18 of our material.
27 This is the spreadsheet we provided to you on Wednesday.
28 You have seen this spreadsheet?

1 MR. PANKRAC: Yes, we have.

2 MR. SHEPHERD: And this calculates all of those
3 numbers exactly how we just did those ones. It calculates
4 all of the numbers in your reallocation. Does this
5 spreadsheet calculate those numbers correctly?

6 MR. PANKRAC: At the top of the page, I would point
7 out that those are not rate classes. Those are just
8 groupings --

9 MR. SHEPHERD: True.

10 MR. PANKRAC: -- and really are -- if you recalculate
11 that based on our proposed groupings, you would only at the
12 top of the page have two groupings, and one would say up to
13 5,000 cubic metres, and the other rate class, over 5,000
14 cubic metres.

15 MR. SHEPHERD: Absolutely true, but that is not the
16 question I'm asking. I'm asking: Does this correctly
17 calculate the costs that your methodology says apply to
18 each of these three groupings?

19 MR. PANKRAC: No. By the fact that, for example, if
20 you look at the volumetric rate, you can see that between
21 5,000 and 50,000 cubic metres, it calculates a volumetric
22 of 5.1 cents, and the over-50,000 cubic metres calculates a
23 rate of 0.63 cents.

24 The problem with that is -- is that the rate really
25 should be calculated on the rate class, and if you sum
26 those groupings you would get your 0.57783.

27 And so the effect of the partitioning, which is not
28 along rate class lines, will start to produce anomalies.

1 MR. SHEPHERD: Yes, no, the anomalies are the result
2 of your methodology, Mr. Pankrac.

3 And so I am going to take you through it and let's see
4 if we can see whether that is true.

5 So let's go back to page 15. All right? And on page
6 15, let's just start with -- what was the one you just
7 raised? Oh, yes. The shift from 01 to 10 of volumetric
8 costs. All right?

9 So take a look at line 1 on page 15 of our materials.
10 In 2013, the "other delivery" -- that is the volumetric
11 component -- is 47 million and change, right?

12 MR. PANKRAC: Yes.

13 MR. SHEPHERD: And then in 2014, that number is
14 35 million 211, right?

15 MR. PANKRAC: Yes.

16 MR. SHEPHERD: And that means that you have
17 reallocated - tell me whether this is correct - 11 million
18 854 from 01 to 10?

19 MR. PANKRAC: We have captured the difference there,
20 because there is also -- in redefining the break point, you
21 have also redefined the volume. And so --

22 MR. SHEPHERD: I will come to the volume. I am just
23 asking: On the movement of the costs, is that what you
24 did?

25 MR. PANKRAC: Yes, based on the movement in volume.

26 MR. SHEPHERD: Okay. Now let's look at the volumes.

27 So in the volumes, if you go to page 17 of our
28 materials, line 1, you will see that the volume you start

1 with is 837,395. You go to 609,371, and the difference, by
2 our calculation, is 228 million; is that right?

3 MR. PANKRAC: That is correct.

4 MR. SHEPHERD: Okay. So then it seems to us to be
5 relatively math-related to say: 11,854,000 in dollars,
6 228 million m³, means 5.2 cents per m³.

7 That math is correct, isn't it?

8 MR. PANKRAC: Yes. Subject to check, I will accept
9 that.

10 MR. SHEPHERD: Okay. And similarly, if we look at --
11 where's the best place to look at it? Okay. Take a look
12 at page 15, column E, line 2 of your response.

13 You have 27 million 330, is the delivery-related costs
14 that you allocate in 2014 to Rate 10, right?

15 MR. PANKRAC: That is correct.

16 MR. SHEPHERD: Okay. And then let's look at page 17,
17 which is on line 2, column B.

18 473 million m³ is the resulting m³ in that rate class
19 after you moved the customers over, right?

20 MR. PANKRAC: That's correct.

21 MR. SHEPHERD: And the result of that is, if you --
22 that the volume that relates to the over-50,000 guys is 6.3
23 cents per kilowatt -- per kilowatt-hour, per m³; isn't that
24 right?

25 MR. PANKRAC: I accept that calculation.

26 MR. SHEPHERD: All right. So that does seem a bit
27 strange, don't you think, that the over-50s would have a
28 volumetric cost? Because these are costs now; these are

1 not rates, these are costs, rights?

2 MR. PANKRAC: What it shows is you have not
3 disaggregated it based on the rate class we are proposing,
4 and any time you select a subgroup of that class, you will
5 get variances.

6 MR. SHEPHERD: Well, yes, that assumes that the class
7 is right, but that's what we're discussing, is whether the
8 class is right.

9 MR. PANKRAC: The basis of our proposal -- and we have
10 laid it out -- is a break point of 5,000 cubic metres, and
11 our claim is if you break it at 5,000 cubic metres, then in
12 fact your average delivery rate is the same.

13 If you were to aggregate the 5,000 to 50,000, and the
14 50,000 and over, and determine a delivery rate, you would
15 get the average delivery rate for our proposed class.

16 MR. SHEPHERD: Yes, but I guess the problem is --
17 remember we started this discussion trying to understand --
18 you agree that, in order to change the break point, you
19 have to move costs from one class to the other class,
20 right? You have agreed to that already?

21 MR. PANKRAC: Yes. That is the effect of a change in
22 break point.

23 MR. SHEPHERD: All right. So we have identified what
24 costs you moved, and we have identified how many customers
25 you moved and what their volumes were.

26 Isn't that supposed to be the costs associated with
27 those customers? Isn't that what you are supposed to move
28 over?

1 MR. PANKRAC: Well, as I said earlier, we haven't done
2 a move-over exercise. What we've done is we've taken the
3 total class, and what we've done is said: If you select a
4 break point of 5,000 instead of 50,000, here are the
5 effects.

6 MR. SHEPHERD: And the effects are that your
7 methodology assumes that the five to 50,000 customers are
8 -- have lower volumetric costs than the smaller customers,
9 but also lower than the larger customers, right?

10 MR. PANKRAC: When you do it along rate class lines,
11 in fact, the average delivery costs per unit are the same.

12 MR. SHEPHERD: Well, yes, but if you do it along rate
13 class lines, you can't identify the costs that you move
14 over, now, can you? You have to identify the costs for
15 those customers, don't you?

16 MR. PANKRAC: Our claim is that we've moved over costs
17 on a rate class basis, not on a particular subset of a rate
18 class. The minute you begin partitioning any rate class,
19 you will have those kinds of anomalies.

20 MR. SHEPHERD: But you are partitioning the class.
21 You're saying to those 69,000 customers: We're going to
22 move you over to another class. Right?

23 MR. PANKRAC: That is correct.

24 MR. SHEPHERD: And we're going to move over your costs
25 and your volumes too, and set new rates.

26 MR. PANKRAC: That's correct.

27 MR. SHEPHERD: And what your methodology appears to
28 show is you think that serving them is cheaper than serving

1 the smaller customers and serving the larger customers;
2 isn't that right?

3 MR. PANKRAC: Are you speaking only of delivery costs?

4 MR. SHEPHERD: Well, no, because if you look at the
5 per-customer, customer-related costs, they're also lower.
6 I was going to get to that.

7 MR. PANKRAC: Well, actually, there's a very simple
8 exercise that you can do. And that is that, if you look at
9 the total costs that you have indicated as the per-customer
10 costs, what you have to do is you have to associate that
11 with an average volume of use.

12 And so your first one, if we take the first line up to
13 5,000 cubic metres, the cost of \$520.01 is a per-customer
14 cost that relates to an average volume of 21.67.

15 The cost of 1024.61 relates to an average volume of
16 12,554 cubic metres, and finally the cost of 11,092 relates
17 to an annual volume of 141,185.

18 So what you have to do is you have to associate those
19 costs with the relevant volumes, and the relevant volumes
20 are determined on your schedule just by taking the annual
21 volumes for each of the subgroupings, divided by the number
22 of customers.

23 And so from your schedule, we can determine the costs
24 but also we have to say is: This cost is based on a
25 certain average volume use within that grouping.

26 MR. SHEPHERD: So you're saying if we take -- let's
27 take the number 1024.61; that number is correctly
28 calculated, right? There is nothing wrong with the math?

1 MR. PANKRAC: Can you point me to the line you are
2 referring to?

3 MR. SHEPHERD: Sorry, this is page 18.

4 MR. PANKRAC: Page 18?

5 MR. SHEPHERD: The column you were just talking about,
6 per-customer, 1024.61, you see?

7 MR. PANKRAC: Yes.

8 MR. SHEPHERD: Okay. So you're saying if we take that
9 and we apply the average use of those customers that you
10 moved over to your proposed rates, we'll get a number just
11 like that? Is that what you're saying?

12 MR. PANKRAC: What I'm saying is that when you look at
13 the per-customer cost, that's one way of expressing it.
14 But a per-customer cost is, in a sense, a bit of a
15 corruption, because you know that there is a fair bit of
16 the costs that are also allocated per volume.

17 And so what I did is I did a further calculation on
18 your thing and said this cost that I am determining for
19 each of these sub-groupings has to be associated with the
20 volume related to that group.

21 MR. SHEPHERD: So you're saying that ten-twenty-four-
22 sixty-one is associated with a volume of 12,000 what?

23 MR. PANKRAC: 554. And the 12,554 is just if you take
24 the volume divided by the number of customers in your sub-
25 grouping that you indicated -- not your rate class, but
26 your sub-grouping.

27 MR. SHEPHERD: So you work backwards from the bill to
28 the volumes that your rates would create; right?

1 MR. PANKRAC: What I am saying is that the per-
2 customer cost has to be associated with a different volume
3 use.

4 MR. SHEPHERD: All right, I understand.

5 Let me just ask one final question in this area, and
6 to do that I want you to go, if you could, please, to page
7 15, line 2. You see here your -- in column B, your other
8 delivery costs for rate 10 are fifteen-four-seventy-six;
9 right?

10 MR. PANKRAC: That's correct.

11 MR. SHEPHERD: That's your actual cost allocation at
12 the 50,000 break point for rate 10 for 2013; right? You
13 have actually done a cost allocation study to get that
14 number?

15 MR. PANKRAC: That's correct.

16 MR. SHEPHERD: Okay. And that number, then, we know
17 the volumes that relate to that, because you have given
18 them to us on page 17, line 2, column A, which is two-
19 forty-four-nine-fifty-five; right?

20 MR. PANKRAC: That's right.

21 MR. SHEPHERD: And if we do the math on that, two-
22 forty-four-nine-fifty-five, we're going to show that your
23 cost allocation method, your main study, shows that the
24 cost to serve those customers is 6.3 cents per m³. Isn't
25 that what it is going to tell us?

26 These are your numbers. I didn't make any of these
27 up, right. These are all directly from you.

28 [Witness panel confers]

1 MR. PANKRAC: I don't know. I need to check that.

2 MR. SHEPHERD: Okay. Well, could you undertake to
3 confirm that in 2013 you are proposing that the average
4 volumetric charge -- the average volumetric costs, sorry,
5 delivery -- related cost for per m³ for rate 10 is 6.3 cents
6 per m³, okay?

7 Then, secondly, I am going to ask you to look at the
8 same page, 15, but now I am going to ask you to look at
9 column E. And column E is -- on line 1, is 35,211,000.
10 That's the costs that you say are applicable to customers
11 up to 5,000 m³ for delivery-related costs; right?

12 MR. PANKRAC: That is correct.

13 MR. SHEPHERD: Okay. And their volumes in 2014, if I
14 understand it correctly, are on page 17, line 1, column B,
15 six-o-nine-three-seventy-one; right?

16 MR. PANKRAC: Yes, I see that.

17 MR. SHEPHERD: And will you confirm that your cost
18 allocation method implies that their costs are 5.8 cents
19 per m³, delivery-related costs?

20 MR. PANKRAC: For both of those calculations, we will
21 undertake to do that.

22 MR. SHEPHERD: Thank you very much.

23 MR. MILLAR: J10.4.

24 **UNDERTAKING NO. J10.4: TO CONFIRM IN 2013 UNION**
25 **PROPOSING THE AVERAGE DELIVERY-RELATED COST PER M³ FOR**
26 **RATE 10 IS 6.3 CENTS PER M³, AND CONFIRM COST**
27 **ALLOCATION METHOD IMPLIES DELIVERY-RELATED COSTS ARE**
28 **5.8 CENTS PER M³.**

1 MR. SHEPHERD: You generally use declining block rates
2 to recover volumetric costs. Why is that?

3 MR. PANKRAC: Can you repeat your question, again?

4 MR. SHEPHERD: Yes. Within any rate class --

5 MR. PANKRAC: Yes.

6 MR. SHEPHERD: -- you recover your volumetric -- your
7 delivery-related costs through volumetric rates using a
8 declining block structure; right?

9 MR. PANKRAC: That's correct.

10 MR. SHEPHERD: Why is it that you use a declining
11 block structure as opposed to an increasing block structure
12 or just one volumetric rate?

13 MR. PANKRAC: There is a number of reasons we use a
14 declining block structure. One is that we recognize that a
15 proportion of fixed costs that is recovered in volumetric
16 rates is recovered over a certain level of volumes.

17 What we also --

18 MR. SHEPHERD: Let me stop you there. That is partly
19 the fact that you don't recover all of your customer-
20 related costs in the fixed charge, and partly that you have
21 demand-related costs that are in the volumetric rate;
22 right?

23 MR. PANKRAC: That is correct.

24 MR. SHEPHERD: Okay. Go on, sorry.

25 MR. PANKRAC: There are a number of other objectives
26 that we have in mind. One is the relationship to contract
27 rates, the other one is that we look at the declining
28 blocks previously approved, and unless there is a basis to

1 say that there is a reason for striking different
2 differentials, we will maintain those same interblock
3 differentials.

4 And in Union's 2013 proposal, the reason that we have
5 done constant increases to each of the rate blocks was, in
6 fact, to maintain those differentials.

7 MR. SHEPHERD: Okay. Is part of the reason for the
8 differentials the fact that as you deliver a higher volume,
9 generally speaking, you have some economies of scale?

10 MR. PANKRAC: Generally, there are economies of scale.

11 MR. SHEPHERD: Okay. So it's not intuitive, is it,
12 that a customer with over 50,000 cubic metres of use has a
13 higher unit cost for delivery than a customer who is under
14 5,000, is it? That isn't consistent with your normal
15 expectation, is it?

16 MR. PANKRAC: The rates are done at a class level,
17 rather than at a particular volume level. So what we do is
18 we set rates for the class.

19 MR. SHEPHERD: That doesn't really respond to what I
20 was talking about.

21 The principle I am asking about is, if you have a
22 class with higher volumes, typically the unit cost to
23 deliver to them - that is, the volumetric rates, the
24 variable costs - are going to be lower than the smaller
25 customers; true? Typically that's true?

26 MR. PANKRAC: It's a function of a number of things.
27 It is a function of the customer-related costs. It is also
28 a function of the demand-related costs. As size increases,

1 you may have increased meter size. You may have increased
2 pipe size.

3 And so what you might have is you might actually have
4 a situation where the costs are increasing.

5 MR. SHEPHERD: Is it your evidence that you believe
6 that the unit cost to deliver to your over 50,000 m³
7 customers is higher than the unit cost to deliver to your
8 under 5,000 customers? It's a simple question.

9 MR. PANKRAC: The unit cost appears higher. However,
10 we have responded to that in an earlier interrogatory
11 response by indicating that the level of customer-related
12 costs means that the balance of the customer-related costs
13 and all of the demand costs are recovered in volumetric
14 rates.

15 So you could have a situation where the resulting
16 volumetric rate, as is currently the case, may be higher.
17 And that is appropriate in terms of achieving cost recovery
18 for the class.

19 MR. SHEPHERD: But I'm not asking you about rates.
20 I'm asking you about costs.

21 This is about cost allocation here. These are the
22 costs you allocated.

23 MR. PANKRAC: Yes.

24 MR. SHEPHERD: You have allocated costs on the basis
25 that the costs per unit are higher over 50 than under five.
26 Nothing to do with rates. Costs. So help me understand
27 that.

28 [Witness panel confers]

1 MR. PANKRAC: Based on the cost allocation, the costs
2 may be higher.

3 MR. SHEPHERD: And can you tell us why that is?

4 MR. PANKRAC: As I indicated to you, it is a function
5 of the size of the meters, the size of the pipe, the length
6 of the pipe, and typically larger customers will have
7 larger meters, will have larger pipe. And so what you can
8 have is, if you express it as a volumetric rate, you can
9 have a higher volumetric rate, a cost-based volumetric
10 rate.

11 MR. SHEPHERD: So you're saying this is just normal?
12 Because I have never seen it before; that's why I asked.
13 Now, you're the expert. I'm not the expert. I have never
14 seen this.

15 MR. PANKRAC: Well, we do have higher volumetric rates
16 currently in our Rate M2 as compared to Rate M1, and we do
17 have higher volumetric rates in our current Rate 10
18 compared to our Rate 1.

19 MR. SHEPHERD: You have higher volumetric rates in
20 your 10 than 1?

21 MR. PANKRAC: Yes. So if, for example -- I'm sorry,
22 I'm referring to M1 and M2.

23 MR. SHEPHERD: And this is what started us on this
24 path, is in 10 and 01, the volumetric rates in 10 are much
25 lower than the rates in 01. But in M2 and M1, your
26 volumetric rates were not, before, higher, but are now
27 higher. You are proposing that they now be higher in M2,
28 the larger class. It seems strange.

1 MR. PANKRAC: Are you speaking of the rates in 2013 or
2 2014?

3 MR. SHEPHERD: I guess I was looking at 2013. Pages
4 2, 3, 4 of our materials have your proposed rates.

5 MR. PANKRAC: Yes. And the effect of our proposed
6 redesign is to rebalance that in a way that makes the
7 volumetric rates of Rate M2 lower than the volumetric rates
8 of Rate M1.

9 MR. SHEPHERD: That's because you moved a bunch of
10 customers in, so there is more volume to pick up the costs?

11 MR. PANKRAC: The rebalancing results in lower
12 volumetric rates.

13 MR. SHEPHERD: Madam Chair, if it is convenient for
14 the Board, this might be a good time to break.

15 MS. HARE: Thank you. Now, the Panel actually thought
16 it might be more efficient to hear the submissions before
17 the break, on the question of e-mails. I see Mr. Warren --
18 do you think he is just in the hallway, Mr. Thompson?

19 MR. THOMPSON: I think if you will indulge us, we
20 haven't had a chance to speak to Union about this, and it
21 -- maybe we could resolve it. So I apologize, but if we
22 could do that, that might work.

23 MS. HARE: Okay. Thank you. So we will take the
24 break now, and return at -- how much time do you think you
25 will need? Twenty minutes?

26 MR. THOMPSON: Not long. It's only Mr. Smith.

27 MR. SMITH: I don't even know what to say.

28 [Laughter]

1 be important to that process.

2 MR. SHEPHERD: Yes, I understand you had a discussion
3 with Mr. Aiken this morning about that, and I'm trying not
4 to cover that ground again.

5 But I will ask you this. Can you look at line 9 of
6 that table? So you've got a customer with a volume of
7 about 30,000 that's going to pay you around \$2,800 in 2013
8 and drop down to \$2,400 in 2014; right?

9 MR. PANKRAC: Yes, I see that.

10 MR. SHEPHERD: In 2012, that customer pays about
11 2,100; right?

12 MR. PANKRAC: I'll take that subject to check.

13 MR. SHEPHERD: Well, I'm actually going to ask you to
14 do this. I'll ask you to give us this table 11 with an
15 additional two volumes -- two columns for 2012 actual at
16 the existing breakpoint. Can you do that?

17 MR. SMITH: Yes, we'll do that.

18 MR. MILLAR: J12.5.

19 **UNDERTAKING NO. J12.5: TO PROVIDE EXHIBIT H, TAB 1,**
20 **TABLES 11 AND 12, WITH AN ADDITIONAL TWO COLUMNS FOR**
21 **2012 ACTUAL AT THE EXISTING BREAKPOINT.**

22 MR. SHEPHERD: That will be quite useful, but can you
23 tell me, am I correct in understanding that for most of the
24 customers in the group that's moving, what you're proposing
25 is quite a substantial increase from 2012 to 2013, and then
26 a decrease from 2013 to 2014? Is that right?

27 MR. PANKRAC: Yes, that is the effect of our proposal.

28 MR. SHEPHERD: Okay. And, generally speaking, do you

1 think it's good rate-making to have a group of customers
2 with a substantial increase followed by a substantial
3 decrease?

4 MR. PANKRAC: It reflects the timing of the
5 implementation.

6 MR. SHEPHERD: So it's just a fact that you can't get
7 the change done earlier enough to avoid that?

8 MR. PANKRAC: Well, there's the implementation,
9 there's the communication, and there's also a need of an
10 approval of our proposed structures.

11 MR. SHEPHERD: Certainly. But I take it what you're
12 saying is that if there were some way you could do it for
13 2013, you would prefer that, right, rather than have this
14 up and down?

15 MR. TETREAULT: I don't think, Mr. Shepherd, that's,
16 practically speaking, possible to do, of course, given
17 timing and implementation.

18 And to answer your original question, I'm comfortable
19 with the rate-making in terms of the change we're seeing
20 from current approved rates to '13 to '14. The range from
21 '12 to '13 really represents the update for the test year
22 forecast and the resulting revenue deficiencies, and those
23 are the rate increases we were discussing.

24 But I think it's entirely appropriate for there to be
25 decreases for certain customers associated with a rate
26 design proposal recognizing, of course, that everything
27 we're doing in '14 in general service is revenue neutral.

28 MR. SHEPHERD: Is understood. But from the point of

1 view of the customers, it's up, and then down?

2 MR. TETREAULT: There is a degree of -- degree of
3 volatility there, yes, but over the balance of that period,
4 we're comfortable that that's appropriate.

5 MR. PANKRAC: I think we need to put that in context,
6 also, that when you look at this table, it's not like
7 there's the same number of customers at all the volume
8 levels. So, for example, in Union north, most of the
9 300,000 customers would be in that lines 1 to 5. The
10 lion's share of our customers in that market are
11 residential, and their impacts are minimal. It is really
12 only that transition group reflected at lines 6 to 10 that
13 are impacted in terms of up in 2013, and then down in 2014.

14 However, net, it's still an increase. So that middle
15 group is a relatively small part of the entire group.

16 MR. SHEPHERD: Of course it does include the schools.

17 MR. PANKRAC: I'm sorry?

18 MR. SHEPHERD: The schools are in there, though;
19 right?

20 MR. PANKRAC: Yes, schools would be impacted. To the
21 extent you tell me that they're in the 20- to 50,000 range
22 on average, then they're impacted by that; that's correct.

23 MR. SHEPHERD: And then the last question I want to
24 ask on this table is: Do I understand correctly that the
25 effect of moving the -- it's about 50,000, I think we
26 agreed, was the number -- no, sorry. How many customers
27 was it? 18,000.

28 You moved 18,000 customers into a -- from 01 to 10;

1 you've -- you have said in that response that after you did
2 the revenue-to-cost ratios -- I think this is what I
3 understand -- you then -- or, no, let me put it another
4 way. You have set revenue-to-cost ratios on average at 1
5 without taking into account the S&T transactional credits,
6 and then that reduces them further; is that right?

7 MR. TETREAULT: Yes.

8 MR. SHEPHERD: And would we be right in looking at the
9 revenue-to-cost ratios that you have reported for each
10 class and simply deducting 4.7 percent from each one, or is
11 it not allocated that way?

12 MR. PANKRAC: No, it's not allocated that way.

13 MR. SHEPHERD: Then is it possible for you to give us
14 a table that shows the revenue-to-cost ratios before and
15 after, or is it in the evidence somewhere? Because I
16 looked and I couldn't find it, but maybe it's -- there is a
17 lot of material. Maybe it's in there.

18 MR. PANKRAC: We can undertake to provide that.

19 MR. SHEPHERD: Wonderful, thank you.

20 MR. MILLAR: JT2.23.

21 **UNDERTAKING NO. JT2.23: TO PROVIDE A TABLE SHOWING**
22 **THE REVENUE-TO-COST RATIOS BEFORE AND AFTER**

23 MR. SHEPHERD: Now, the next one is related to J.H-1-
24 15-1 and -2, and maybe -- I have given you a written
25 question, and I know you are looking at it, but let me just
26 give you some numbers that we have been calculating since
27 then to try to understand this more clearly. And I will
28 ask you a couple of questions associated with that.

1 What we did is we calculated the annual distribution
2 bill at your published rates for 2012, '13, and proposed
3 '14 for 49,999 annually -- annual M-cubed and 50,001, so
4 that covers your breakpoint; right? That's immediately
5 before and after your breakpoint.

6 To try to get a -- but it's different rate classes.
7 And what we got is that for 2012 -- and you can tell me
8 whether I am roughly in the ballpark -- for 49,999 the
9 annual bill is just under \$1,800, and for 50,001, 2 M-cubes
10 more, it's over \$2,600. Am I in the ballpark there?

11 MR. TETREAULT: I don't know, Mr. Shepherd. We are
12 still working on responses to your questions. So I
13 wouldn't want to attempt to do the math while I am here.

14 MR. SHEPHERD: I am not asking you to do math, and
15 that's why I didn't give you the precise numbers. If it's
16 more expensive to go those extra couple of M-cubes into
17 rate M2, that's very unusual; right? It's very unusual
18 that if you go into a higher similar rate class your cost
19 is greatly higher for a similar volume, isn't it? Put it
20 this way: I have never seen it before. And I have seen
21 lots and lots of rate schedules for various types of
22 utilities. Have you seen it before?

23 MR. SMITH: I am struggling with what aspect of the
24 evidence you are seeking to clarify in that question.

25 MR. SHEPHERD: We asked interrogatories dealing with
26 precisely this point, which is that when you go from M1 to
27 M2 at the breakpoint it's not a smooth transition, and in
28 fact it's a counterintuitive transition, and the responses

1 we got were, No, everything's fine, so I am trying to
2 understand why everything's fine. I asked the question,
3 and it appears that your witness wasn't even aware that
4 there was a problem of this magnitude.

5 MR. SMITH: Well, what the witness has indicated is
6 that he has not had an opportunity to review the answers
7 and complete the questions that you provided. That's what
8 the witness has indicated.

9 MR. SHEPHERD: Okay. So I am asking the -- at a
10 higher level -- I am still going to ask for the details,
11 and I am going to ask you to provide that to us later.
12 That's fine. But at the higher level, were you aware -- or
13 let me put it to you a different way.

14 Are you aware that an M2 customer right now at the
15 breakpoint pays a great deal more, something like
16 40 percent more, than an M1 customer at the breakpoint?

17 MR. SMITH: Mr. Shepherd, the question that you are
18 positing is premised upon the math that you have done which
19 the witness has not had an opportunity to do. And so while
20 I appreciate you are saying it's not the same question or
21 it's a higher-level question, it's -- the premise of that
22 question is what's still out for Union to consider. That's
23 the problem.

24 MR. SHEPHERD: Yes, except that we asked a question
25 saying that this was a problem, so we gave lots and lots --
26 a month notice that there was a problem here at the
27 breakpoint, and so it's legitimate for me to -- let me put
28 it to you a different way.

1 The point of having an oral technical conference is so
2 that we can explore these issues and figure out what the
3 right answers are and make sure that we don't have any
4 loose ends. That's what I am trying to do.

5 I understand that there are numbers involved, but this
6 is too big a difference for a rate-design person not to
7 know it if it's correct.

8 MR. SMITH: I don't know what we are supposed to say
9 in response to that, Mr. Shepherd. That's not a question.
10 That's just a statement.

11 MR. SHEPHERD: No, I am explaining to you why I want
12 my question answered.

13 MR. SMITH: You have Mr. Tetreault's answer.

14 MR. SHEPHERD: Actually, I have your answer, saying
15 no, don't answer it.

16 All right. Then I am going to put to you some
17 numbers, which -- they will be in the transcript, I guess,
18 but I can give them to you by e-mail, as well, and ask you
19 to confirm that these are correct and to do some
20 calculations.

21 MR. SMITH: We will do that.

22 MR. SHEPHERD: And the numbers are as follows.

23 In 2012 at 49,999 annual M-cubed, 2012 annual
24 distribution bill 1,791.79.

25 In 2013, as proposed, you are proposing a 16.9 percent
26 increase for that same customer to 2,095.45.

27 And for 2014 you are proposing that customer, who will
28 now be in M2, would be charged 2,148.84, a 2.5 percent

1 increase.

2 If that customer has two more M-cubes to 50,001 under
3 M2, current M2 in 2012, their annual distribution bill will
4 be 2,622.54.

5 You're proposing in 2013 to increase that by
6 11.5 percent to 2,924.01.

7 And you're proposing in 2014 to reduce it by
8 26.5 percent to 2,149.65.

9 Do you understand what each of those numbers are that
10 I am putting to you?

11 MR. TETREAULT: I do.

12 MR. SHEPHERD: Okay. I have similar numbers for '01
13 and '10, which I won't read into the record but I will
14 provide you, and I am going to ask you to calculate the
15 same numbers conceptually for a 5,000 breakpoint, that is
16 49,999 to 50,001, again for all three years.

17 So can you do that?

18 MR. SMITH: Yes.

19 MR. MILLAR: JT2.24.

20 **UNDERTAKING NO. JT2.24: TO PROVIDE A RESPONSE TO THE**
21 **DESCRIBED CALCULATION**

22 MR. SHEPHERD: Do you know whether, under your current
23 proposal, somebody who is a small customer in M2 under your
24 proposal would have a substantial increase in 2013 and a
25 substantial decrease in 2014? Do you know whether that's
26 true?

27 MR. PANKRAC: Is there a particular response that we
28 provided that you are referring to?