

MANITOBA PUBLIC UTILITIES BOARD

Re: CENTRA GAS MANITOBA INC.
GENERAL RATE APPLICATION
2013/14

Before Board Panel:

Regis Gosselin	- Board Chairman
Marilyn Kapitany	- Board Member
Larry Soldier	- Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
June 14th, 2013
Pages 274 to 455



1 APPEARANCES

2 Bob Peters)Board Counsel

3 Sven Hombach (np))

4

5 Marla Boyd)Centra Gas Manitoba

6 Brent Czarnecki)Inc.

7

8 Brian Meronek, Q.C.)CAC (Manitoba) Inc.

9 D. Tomas Masi)

10

11 Nola Ruzycki (np))Just Energy

12

13 Paul Kerr (np))Shell Energy

14

15 Kim Johnston (np))CEPU

16

17

18

19

20

21

22

23

24

25

1	TABLE OF CONTENTS	
2		Page No.
3	List of Exhibits	277
4	List of Undertakings	278
5		
6	CENTRA PANEL 2, RESUMED:	
7	LLOYD KUCZEK, Resumed	
8	LOIS MORRISON, Resumed	
9	BRENT SANDERSON, Resumed	
10	LORI STEWART, Resumed	
11	Continued Cross-examination by Mr. Bob Peters	279
12	Cross-examination by Mr. Brian Meronek	413
13		
14	Certificate of Transcript	455
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	LIST OF EXHIBITS		
2	EXHIBIT NO.	DESCRIPTION	PAGE NO.
3	(CORRECTIONS TO JULY 13 EXHIBITS)		
4	(EXHIBITS BELOW REPLACE CENTRA-4-1 THROUGH 4-8)		
5	CENTRA-5-1	Witness Qualification of Darren	
6		Rainkie	
7	CENTRA-5-2	Witness Qualification of Lloyd	
8		Kuczek	
9	CENTRA-5-3	Witness Qualification of Lois	
10		Morrison	
11	CENTRA-5-4	Witness Qualification of Greg	
12		Barnlund	
13	CENTRA-5-5	Witness Qualification of Brent	
14		Sanderson	
15	CENTRA-5-6	Witness Qualification of Lori	
16		Stewart	
17	CENTRA-5-7	Witness Qualification of Henri	
18		Jacobs	
19	CENTRA-5-8	Witness Qualification of Manny	
20		Schultz	
21	CENTRA-5-9	Witness Qualification of Mark	
22		Prydun	
23	CENTRA-5-10	Witness Qualification of Kelly	
24		Derksen	
25			

1	LIST OF UNDERTAKINGS		
2	NO.	DESCRIPTION	PAGE NO.
3	3	Centra to file a revision of	
4		disbursements planned table in	
5		2013-'16 Power Smart plan, to show	
6		that the actual disbursements will	
7		be larger than what is projected	297
8	4	Centra to indicate, in general terms,	
9		how its prices compare to the prices	
10		being offered to a customer in	
11		Saskatchewan by a private entity on	
12		the fixed-price offerings	408
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

1 --- Upon commencing at 10:31 a.m.

2

3 THE CHAIRPERSON: Good morning. I
4 believe that everybody is in position so I will turn
5 the mic over to Mr. Peters.

6 Mr. Peters, please.

7

8 CENTRA PANEL 2, RESUMED:

9 LLOYD KUCZEK, Resumed

10 LOIS MORRISON, Resumed

11 BRENT SANDERSON, Resumed

12 LORI STEWART, Resumed

13

14 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

15 MR. BOB PETERS: Yes, thank you. And
16 good morning, Mr. Chairman, Board members, witness
17 panel, Centra personnel assisting, and ladies and
18 gentlemen.

19 Judging by the amount of coffee the
20 panel is drinking this morning it looks like the party
21 for Mr. Wiens last night was quite a success. So
22 we'll see if we can take advantage of the drowsiness
23 and see if we can get some answers here that will
24 cause some pause.

25 Let me start off by -- Mr. Kuczek,

1 yourself and Ms. Morrison and I were talking about the
2 furnace replacement program yesterday, you recall
3 that?

4 MR. LLOYD KUCZEK: Yes.

5 MR. BOB PETERS: And at Tab 22 of the
6 Board counsel book of documents which has been marked
7 as PUB Exhibit 10, and specifically on pages -- on
8 page 85, you told the Board, and Ms. Morrison told the
9 Board, that Centra's target is sixteen thousand
10 (16,000), approximately, standard efficiency furnaces
11 in the low income energy efficiency program, correct?

12 MR. LLOYD KUCZEK: Well, I hesitate to
13 say that because we're -- we really would like to see
14 all standard furnaces out of the market.

15 MR. BOB PETERS: All right. But let
16 me just make sure I understand your answer. Based on
17 Centra's target market there's sixteen thousand and
18 thirty-four (16,034) owners in the LICO market that
19 have a standard efficiency furnace that Centra is
20 targeting to replace under the furnace replacement
21 program?

22 MR. LLOYD KUCZEK: Yeah, it's -- I
23 guess to be more accurate, we are targeting all
24 eighteen (18) thous -- or -- yeah, eighteen thousand
25 (18,000). There are some that are in the rental

1 market that we've been successful to replace and are
2 in the pro -- process of replacing. So it's just a
3 question of how do we pursue that market and include
4 all eighteen thousand (18,000).

5 MR. BOB PETERS: And I think Board
6 member Kapitany had a question of Ms. Morrison
7 yesterday on that very point, the struggle that Centra
8 is indicating to the Board is that landlords are
9 responsible for the capital, sometimes the tenants pay
10 the bills, and it may be difficult to convince the
11 landlord to partake in the program.

12 MR. LLOYD KUCZEK: Yeah. You know,
13 there's -- there's that struggle and then there's the
14 struggle with how to include the private landlords.
15 So with MHA who rents out homes to the lower income
16 market, we have not included them as being eligible
17 because the furnaces, as we talked about yesterday,
18 are virtually at the end of their life and they're
19 going to be replaced anyway. So we would see that as
20 a transfer of money from the ratepayers to a
21 government agency responsible for that replacement of
22 furnaces, so we -- we didn't think that was
23 appropriate use of the -- the funds.

24 On -- with a -- another organization
25 called KINU (phonetic), we've actually worked out an

1 arrangement with them where they actually are eligible
2 for some dollars. And we did -- we undertook some
3 rational decision-making which made sense from our
4 perspective that allows them to participate, and
5 they're currently being replaced right now. And
6 there's about a hundred and sixty (160), I think, that
7 hopefully will be replaced this summer. And this a
8 non-profit organization that provides housing for
9 aboriginal Manitobans, low income Manitobans.

10 MR. BOB PETERS: So Manitoba Housing
11 Authority is on its own from Centra's perspective.
12 That's the appropriate policy decision?

13 MR. LLOYD KUCZEK: That's what we
14 decided, yes.

15 MR. BOB PETERS: And private
16 landlords, that's the void that Ms. Morrison spoke to
17 Board member Kapitany about yesterday?

18 MR. LLOYD KUCZEK: Yes. And -- and
19 our position is actually that they're eligible, it's
20 just a question of coming out with an arrangement such
21 that the low income customers would realize a -- a
22 significant portion of the benefits associated with
23 the furnace replacement.

24 So the struggle is we're using
25 ratepayer money to fund this, and so if you just look

1 at the cost of replacing these furnaces it's about --
2 I think it's -- well, it works out to about thirty-
3 three hundred dollars (\$3,300), thirty-four hundred
4 dollars (\$3,400). So the ratepayers are funding that.

5 And so if you look at who -- who is
6 benefiting when you're with a low income individual
7 that owns their own home, that individual is realizing
8 the benefits through two (2) channels. One (1) is
9 lower energy bills and the other is the lowered
10 capital cost to replace the furnace, which they would
11 have to do anyways within a short period of time. So
12 the savings to them is the capital -- avoided capital
13 cost and the reduction in energy costs after five (5)
14 years.

15 If we allow landlords to participate,
16 the challenge now becomes the landlord is going to
17 likely realize the capital reduction of twenty-two
18 hundred dollars (\$2,200) or some amount in that range.
19 And the low income person, if we can get the landlord
20 to agree not to raise the rent, the low income tenant
21 would realize the benefits.

22 Now, of course, you don't know what's
23 going to happen into the future, so what we're
24 thinking is, that if we could get the landlord to make
25 an -- to agree to rent to low income customers for a

1 number of years, you can actually capture that -- that
2 benefit for the low income customers.

3 So there's some challenges in terms of
4 what's reasonable in terms of using the ratepayer
5 money in this particular situation. And it's -- it's
6 challenging from other perspectives as well because
7 landlords actually have two (2) other options. One
8 (1) is to simply replace the furnace on -- on their --
9 on their own and -- and apply for a rent increase, and
10 so they're allowed to raise rent by -- we worked it
11 out to -- I think it was based on forty-five hundred
12 dollars (\$4,500). They could raise rents by sixty
13 dollars (\$60) approximately a month, so that's a very
14 attractive option for them as opposed to pursuing the
15 -- the LIEEP program.

16 And the other option they actually have
17 to partici -- participate in the PAYS program, which
18 they might find attractive because, in that case, they
19 don't have to put up any capital. And -- and the low
20 income customer is no worse off, as well, because they
21 -- they could -- they can agree to take on the -- the
22 bill payment, the financing charge, and their total
23 bills would be roughly the same, including the lower
24 energy bills plus the financing cost.

25 So there's three (3) options for the

1 landlord if we allowed them into the LIEEP program.

2 And we're not sure which option they would take.

3 MR. BOB PETERS: But at this point in
4 time, the private landlord is still not fully involved
5 in the LIEEP program?

6 MR. LLOYD KUCZEK: No. We're actually
7 -- at this stage, we're -- what we're doing is we're
8 looking for a few landlords, and we have a few lined
9 up, to have them come in and discuss the options and
10 see if they would consider a particular design option
11 as being attractive through participating through the
12 LIEEP program.

13 MR. BOB PETERS: I wasn't going to
14 come to this, but let's just talk about the PAYS
15 program, P-A-Y-S program that you mentioned. That's
16 the Pay As You Save Program?

17 MR. LLOYD KUCZEK: Correct.

18 MR. BOB PETERS: And the program, the
19 particulars of which you'll know better than I, but
20 the essence of it is there will be financing costs
21 roughly equal to the lower energy costs that will be
22 realized by the owner?

23 MR. LLOYD KUCZEK: Yeah, you --
24 through the PAYS program you could finance any energy
25 efficient opportunity up to the amount of the bill

1 reduction for that first year.

2 THE CHAIRPERSON: You said first year?

3 You said first year?

4 MR. LLOYD KUCZEK: Yeah, because as
5 you move into the future, rate -- rates are going to
6 go up, or we don't know what the energy price is going
7 to be in the future. And I think that's the way the
8 legislation was written.

9

10 CONTINUED BY MR. BOB PETERS:

11 MR. BOB PETERS: But the fina --
12 what's the term of the financing on the PAYS program?

13 MR. LLOYD KUCZEK: That depends on the
14 measure being implemented, so for a furnace, it's
15 twenty (20) years; for insulation, twenty-five (25)
16 years.

17 MR. BOB PETERS: So you're not
18 suggesting to the chairman that the program ends after
19 one (1) year?

20 MR. LLOYD KUCZEK: No.

21 MR. BOB PETERS: It's just that Centra
22 can't assure the owner that the amount they pay in
23 financing will -- will be equivalent to what they
24 would save on their energy bill?

25 MR. LLOYD KUCZEK: What -- what

1 legisla -- what they did in legislation -- government
2 is, is they were attempting to protect the customer so
3 that they're -- they're not financing -- or their
4 total bills aren't higher. So what they put in
5 legislation is that you calculate what the anticipated
6 bill reduction would be that first year and the amount
7 that can be financed is up to that amount.

8 And it's based on the rates for that
9 year, so you don't know what the rates are going to be
10 in the future on the electric side. We're -- we know
11 that we're expecting it to go up on the natural gas
12 side. It's up and down, but overall, slightly up in
13 the future, right.

14 MR. BOB PETERS: But the financing
15 rate is locked in for the term of the energy
16 efficiency improvement?

17 MR. LLOYD KUCZEK: The financing rate
18 is locked in it for the first five (5) years, and then
19 after that it's adjusted.

20 MR. BOB PETERS: All right. Back to
21 page 85 if I could with you both. We covered
22 yesterday on the chart on page 85 at Tab 22 of Board
23 counsel's book of documents that the standard
24 efficiency furnace target market was the sixteen
25 thousand dollars (\$16,000) that -- that we've

1 mentioned?

2 MR. LLOYD KUCZEK: Sixteen thousand
3 (16,000) customers.

4 MR. BOB PETERS: I'm sorry, yes,
5 sixteen thousand (16,000) customers. And then if we
6 go to page 84 we see on page 84 that Centra, in term
7 of cumulative furnace installations in the chart by
8 2018/'19, Centra forecasts at the end of the furnace
9 replacement program that Centra will have changed out
10 eight thousand and eighty-eight (8,088) furnaces,
11 correct?

12 MR. LLOYD KUCZEK: That's our
13 projections.

14 MR. BOB PETERS: All right. And
15 yesterday I was -- I thought I had an agreement that
16 Centra is therefore mathematically looking to achieve
17 about half or 50 percent of the target of sixteen
18 thousand (16,000) furnaces?

19 While you would like to get them all,
20 you realistically think you're going to get closer to
21 eight thousand (8,000)?

22 MR. LLOYD KUCZEK: It -- it's a crude
23 estimate. And based on that crude estimate we think
24 that's the number of customers that are going to
25 participate through our program. And for other

1 reasons other -- those other customers will likely
2 replace their furnaces and not participate through the
3 program.

4 MR. BOB PETERS: And on page 83 of the
5 book of documents we see in the chart under the row
6 called, "Cumulative Furnace Installations," under the
7 2012/'13 projected year that Centra has, in essence,
8 done twenty-five hundred and fifty-five (2,555)
9 furnaces already?

10 MR. LLOYD KUCZEK: Correct.

11 MR. BOB PETERS: So of the eight
12 thousand (8,000) in target, of the twenty-five hundred
13 and fifty-five (2,555) that have been done, there's
14 about fifty-five hundred (5,500) left still to do
15 under the program.

16 Would that be correct?

17 MR. LLOYD KUCZEK: Yes.

18 MR. BOB PETERS: And we see also on
19 page 83, just up at the ending balance row, also under
20 the 2012/'13 year, that Centra is sitting with fifteen
21 million nine -- well, fifteen million eight hundred
22 and fifty-three thousand dollars (\$15,853,000) in the
23 furnace replacement program as of the end of fiscal
24 2013?

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: And presently, can
2 you tell the Board, Ms. Morrison, how much is included
3 in consumer rates on account of the furnace
4 replacement program?

5

6 (BRIEF PAUSE)

7

8 MR. GREG BARNLUND: Mr. Peters, rates
9 fund the program to the tune of \$3.8 million per year.

10 MR. BOB PETERS: All right. Thank
11 you, Mr. Barnlund. Ms. Morrison, you don't have any
12 finer point than that, do you? And so as I
13 understand, Ms. Morrison, the furnace replacement
14 program -- and I'm still looking at the -- the chart
15 on page 83, I note that funding from the SGS class
16 line, which is the third or fourth row -- third row
17 from the top of the chart, the three (3) thou --
18 sorry, the three million eight hundred thousand
19 dollars (\$3,800,000) a year that Mr. Barnlund
20 mentioned, Centra plans to charge that in the rates
21 that are part of this general rate application,
22 correct?

23 MR. GREG BARNLUND: Yes, that's
24 correct.

25 MR. BOB PETERS: And likewise, it's

1 forecast to be included in the rates for the fiscal
2 fifteen (15) year of Centra?

3 MR. GREG BARNLUND: Yes.

4 MR. BOB PETERS: But thereafter,
5 Centra doesn't -- doesn't forecast any continuation of
6 the funding at that point in time?

7 MR. GREG BARNLUND: That's correct.

8 MR. BOB PETERS: And so if we have a
9 balance today, Mr. Barnlund, Ms. Morrison, of about
10 fifteen million nine hundred thousand (15,900,000),
11 and we add two (2) more years of funding and rates,
12 that would be another \$7.6 million on top of the 15.9
13 million, would it not?

14 MR. GREG BARNLUND: Yes, it would.

15 MR. BOB PETERS: And in addition to
16 that, Mr. Barnlund, the Corporation has been accruing
17 interest as we see on the chart on page 83. And
18 cumulatively the interest that will be in that account
19 at the end of -- at the end of the program is in the
20 neighbourhood of \$3.9 million?

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: And I -- I -- Mr.

25 Barnlund, I don't have that number to -- to reference

1 on the chart with you, but subject to my math the --
2 that was just a -- the cumulative total of the
3 interest line that was going forward.

4 MR. GREG BARNLUND: I'd accept that,
5 yeah.

6 MR. BOB PETERS: So if -- if you're
7 still with me, Mr. Barnlund, Ms. Morrison, and Mr.
8 Kuczek, we have \$15.9 million already in the fund. We
9 have 7.6 million still to be added to the fund
10 according to Centra's forecasts, and on top of that
11 there will be another 3.9 million, which again rounds,
12 in my math, to \$27.4 million by the end of 2018/'19.

13 Do you accept that number for our
14 discussion?

15 MR. GREG BARNLUND: Subject to -- to
16 confirmation, but yes, I think we can accept that.

17 MR. BOB PETERS: All right. So what
18 I'm suggesting is that, if Centra continues to extract
19 in consumer rates the \$3.8 million a year, there'll be
20 \$27.4 million by the end of '18/'19 in which to
21 implement and work on the furnace replacement program.
22 Ms. Morrison, that's -- that's what you see in your --
23 in your budget line item from Mr. Kuczek and Mr.
24 Barnlund?

25 MR. GREG BARNLUND: I might note, Mr.

1 Peters, that I think that you're actually including
2 3.8 million of revenues beyond the '14/'15 year. And
3 our forecast does not include that. You took it out
4 to '18/'19, I believe, to the conclusion of the
5 program. And for IFF planning purposes, we're not
6 attributing the \$3.8 million to the furnace
7 replacement program in the years '15/'16 and beyond.

8 MR. BOB PETERS: I think -- I think
9 I'm agreeing with you, Mr. Barnlund, which not only
10 worries me, but I wonder where I went off the rails
11 with you, sir. What I was suggesting is that in the
12 current case before the PUB, plus the next fiscal year
13 of 2015, rates will include \$3.8 million on account of
14 the furnace replacement program?

15 MR. GREG BARNLUND: That's right.

16 MR. BOB PETERS: So for just two (2)
17 years. And if I misspoke I do apologize, but for the
18 -- the current year plus one (1) more year is what's
19 in IFF purposes for -- for Centra?

20 MR. GREG BARNLUND: I'd agree, yes.

21 MR. BOB PETERS: Okay. Thank you for
22 that clarification, sir.

23 MR. LLOYD KUCZEK: And then the total
24 is twenty-three point five (23.5) as opposed to
25 twenty-seven point four (27.4), roughly, right?

1 MR. BOB PETERS: If the interest was
2 added, Mr. Kuczek, of 3.9 million, does that bring it
3 closer to my number of twenty-seven point four (27.4)?

4 MR. LLOYD KUCZEK: Yeah, I didn't add
5 the interest, so.

6 MR. BOB PETERS: Okay. So I think
7 we're all on the same page in terms of the numbers,
8 Mr. Kuczek?

9 MR. LLOYD KUCZEK: I'm still
10 struggling.

11 MR. BOB PETERS: All right. I'll
12 leave you struggle. I'm going to go to page 85 with
13 the Board and -- and Ms. Morrison. And we see -- we
14 see that after the program would be over in -- and I
15 want to draw you to the first sentence, or the first
16 line on page 85 of -- of Board counsel's book of
17 documents:

18 "Centra is forecasting that the FRP
19 fund balance is estimated to be
20 \$14.8 million at the end of
21 2018/'19, based on Centra's forecast
22 activity."

23 Have I got that correct, Ms. Morrison?

24 MS. LOIS MORRISON: That is correct.

25 MR. BOB PETERS: And so from the \$27.4

1 million total, there'll be \$14.8 million left over, if
2 I may, in 2018/'19. And that means Centra's going to
3 spend another \$12.6 million on the program between the
4 test year and the sunset of the program.

5 MS. LOIS MORRISON: Based on our
6 current projections, yes.

7 MR. BOB PETERS: And, Ms. Morrison,
8 that \$12.6 million left to spent by Centra is to
9 replace the approximate five thousand five hundred and
10 thirty-three (5,533) furnaces that Centra sees as left
11 that it will replace as part of the -- the program?

12 MS. LOIS MORRISON: That is correct.

13 MR. BOB PETERS: When I do the math on
14 that, Ms. Morrison, the fifty-five hundred and thirty-
15 three (5,533) furnaces and \$12.6 million, my number
16 comes out to about two thousand two hundred and
17 eighty-three dollars (\$2,283) per -- per furnace. So
18 twenty-three hundred dollars (\$2,300) per furnace. Is
19 that -- is that consistent with your calculations?

20

21 (BRIEF PAUSE)

22

23 MS. LOIS MORRISON: Mr. Peters, when
24 we were updating our 2013 to '16 Power Smart plan, we
25 updated our -- we made revisions to our projections

1 based on what we were anticipating in the marketplace.
2 However, in our work to update we did not update the
3 disbursements planned, and you will notice that in the
4 disbursements line on page 83 that we held our
5 disbursements constant although we did change our
6 projections for the uptake of the furnaces and the
7 boilers.

8 So the error is on our part and we will
9 undertake to file a revision to this table for you to
10 show that the actual disbursements will be larger than
11 what is projected here.

12 MR. BOB PETERS: Ms. Morrison, I know
13 what disbursements are on a legal bill and my client
14 does, too. What are they in respect of --

15 MS. LOIS MORRISON: Oh.

16 MR. BOB PETERS: -- the furnace
17 replacement program?

18 MS. LOIS MORRISON: Disbursements
19 being what we're paying out to replace the furnaces
20 and to run the program. So it's the cost of the
21 program running. So we didn't adjust to reflect the
22 changes in the projections for the number of furnaces.
23 So essentially the -- the disbursements or the -- the
24 costs of the program should have varied based on the
25 number of furnaces going forward and we didn't make

1 that adjustment in the planning.

2 MR. LLOYD KUCZEK: Yeah, I mentioned
3 earlier that the cost per furnace is about thirty-
4 three (33), thirty-four hundred dollars (\$3,400).

5 MR. BOB PETERS: All right. Ms.
6 Morrison, I'm going to accept your undertaking, but
7 I'm going to ask if I can stretch it a little bit.
8 And, on page 83, which is in response to PUB/Centra
9 2nd Round question 172-C, whether you could extend
10 that table to include out to 2018/'19 for numbers?

11 MS. LOIS MORRISON: Yes, we can.

12 MR. BOB PETERS: It would be
13 appreciated and thank you for that.

14

15 --- UNDERTAKING NO. 3: Centra to file a revision
16 of disbursements planned
17 table in 2013-'16 Power
18 Smart plan, to show that
19 the actual disbursements
20 will be larger than what
21 is projected

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: So, Ms. Morrison, in
25 light of that clarification and Mr. Kuczek's

1 suggestion that the furnaces will be more in the range
2 of thirty-three hundred dollars (\$3300), which is
3 currently the -- the amount expended, there will still
4 be even under those totals pretty close to \$9 1/2
5 million left over by 20 -- by 2018/'19 fiscal year?

6 MS. LOIS MORRISON: That is correct.

7 MR. BOB PETERS: So you've \$9.4
8 million left over out of this fund that won't be spent
9 on replacing furnaces if the program goes according to
10 your forecast?

11 MS. LOIS MORRISON: That's correct.

12 MR. BOB PETERS: And so one (1) of the
13 options could be to stop the funding of the \$3.8
14 million a year currently in the furnace replacement
15 program, could it not?

16 MR. LLOYD KUCZEK: Yes.

17 MR. BOB PETERS: Is that something
18 that Centra would support?

19 MR. LLOYD KUCZEK: We -- we don't have
20 a concern about stopping it earlier.

21 MR. BOB PETERS: And that's because
22 there's going to be more than enough money left over
23 according to Centra's forecast of the program?

24 MR. LLOYD KUCZEK: Yes.

25 MR. BOB PETERS: And if the furnace

1 replacement program funding was discontinued we'll
2 probably hear from your rates panel that they'd like
3 to leave that \$3.8 million in the -- in the rates, but
4 that would offset up to two-thirds (2/3) of the
5 revenue deficiency that the next panel is going to
6 speak about?

7 MR. LLOYD KUCZEK: I'll let them lobby
8 for what they want to use it for. I'd prefer to use
9 it for energy efficiency.

10 MR. BOB PETERS: But you don't have a
11 plan for using it for energy efficiency at this time?

12 MR. LLOYD KUCZEK: Not written down.

13

14 (BRIEF PAUSE)

15

16 MR. BOB PETERS: And not written down,
17 Mr. Kuczek, it's not written down in the updated
18 fifteen (15) year plan that we spoke about late
19 yesterday?

20 MR. LLOYD KUCZEK: That's correct.

21 MR. BOB PETERS: So it's still in its
22 incubator stage?

23 MR. LLOYD KUCZEK: In Lloyd's head.

24 MR. BOB PETERS: And when it becomes
25 something that's tested and -- and plotted out

1 further, the Board can expect to see that by way of a
2 subsequent application or an update to the Power Smart
3 plan?

4 MR. LLOYD KUCZEK: I would leave that
5 up to the Board to decide. But, I mean -- and -- and
6 I won't leave you wondering what I'm thinking about,
7 but, you know, clearly there's a lot of homes that
8 need to be upgraded in terms of insulation yet, so.
9 And the -- provided there is available funds through
10 the affordable energy fund that's great, but there's a
11 num -- a number of homes that are being insulated and
12 upgraded that are natural-gas heated, so.

13 MR. BOB PETERS: Ms. Morrison, I
14 understood that through the LIEEP program Centra
15 conducted pre-audits or evaluations of the homes?

16 MS. LOIS MORRISON: When a customer is
17 deemed eligible or applies to the program we send out
18 an energy advisor to do a pre-inspection as to what
19 opportunities are available.

20 MR. BOB PETERS: And I think in one
21 (1) of the -- one (1) of the reports that was provided
22 to the Board, up until at least December 31 of 2012,
23 would you accept that Centra had done four thousand
24 five hundred and thirty-one (4,531) of those pre-
25 audits or evaluations?

1 MS. LOIS MORRISON: Subject to check,
2 yes.

3 MR. BOB PETERS: And as a result of
4 those pre-audits, is there a direct correlation to
5 support the number of furnaces that are considered
6 standard efficiency through your 2009 residential
7 survey?

8

9 (BRIEF PAUSE)

10

11 MR. LLOYD KUCZEK: I don't think you
12 could use the information from those audits to
13 substantiate the -- the numbers of available standard
14 furnaces in the marketplace. As I mentioned
15 yesterday, what we're looking at doing is updating
16 that -- our -- our residential survey. And I think
17 that'll provide us with a more accurate estimate of
18 the number of standard efficient furnaces in the
19 marketplace, including those in low income homes.

20

21 (BRIEF PAUSE)

22

23 MR. LLOYD KUCZEK: Just to add a
24 little more information, our plans are to undertake
25 that updated residen -- residential survey this fall

1 and -- and hopefully have the information next year.

2

3 (BRIEF PAUSE)

4

5 THE CHAIRPERSON: I wonder if we
6 shouldn't take a few minutes just to give a chance to
7 the witnesses to relax a little bit.

8

9 --- Upon recessing at 10:59 a.m.

10 --- Upon resuming at 11:06 a.m.

11

12 THE CHAIRPERSON: Mr. Peters...?

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: Yes. Thank you, sir.
16 I'd like to continue and, Ms. Morrison, unfortunately,
17 it's with you, but -- and I meant that only because of
18 your -- your coughing. But in terms of home heating
19 cost comparisons at Tab 24 in Board counsel's book of
20 documents you had mentioned to the panel yesterday
21 that with the drop in natural gas costs there may be
22 instances where the savings per month to someone who
23 partakes in the furnace replacement program is
24 actually less than nineteen dollars (\$19) a month?

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: Would that be --
2 would that be for the typical home that Centra has
3 identified as the average single family residence?

4 MS. LOIS MORRISON: But the typical
5 home I think -- what we'd have to do is take a more
6 in-depth look. The -- the comment I made was more in
7 general, depending on the size of the home and such.
8 So right now, based on the typical home, it's about
9 eighteen dollars (\$18) a month in savings.

10 MR. BOB PETERS: All right. And on
11 page 92 and 93 of Board counsel's book of documents
12 are some coloured bar charts that we'll -- we'll talk
13 about. Are you suggesting then that it's the average
14 single family residence that gave rise to these
15 charts, the -- the typical savings would be eighteen
16 dollars (\$18) a month?

17

18 (BRIEF PAUSE)

19

20 MS. LOIS MORRISON: Sorry, depending
21 on which chart you're looking at, the -- if you're
22 looking at the -- the chart where the rates are
23 effective February 1st --

24 MR. BOB PETERS: Which is on page 92
25 of the book of documents.

1 MS. LOIS MORRISON: Which is on 92,
2 then the -- the difference is about eighteen dollars
3 (\$18) a month.

4 MR. BOB PETERS: And, Mr. Chairman,
5 and Board members, the -- the page on 93 wasn't part
6 of Centra's GRA filing, but it did come off of
7 Centra's website. And, Ms. Morrison, the difference
8 between the typical space and water heating costs
9 shown on page 92 compared to what's on 93 is that
10 those on page 93 were updated for the May 1st increase
11 in respect of electricity rates as well as primary gas
12 issues?

13 MS. LOIS MORRISON: That is correct.

14 MR. BOB PETERS: And so if we just
15 take a minute then on page 93 and we go to the top of
16 the page. The top of the page is the space heating,
17 the furnace costs, correct?

18 MS. LOIS MORRISON: That is correct.

19 MR. BOB PETERS: And the bottom half
20 deals with water heaters?

21 MS. LOIS MORRISON: Yes.

22 MR. BOB PETERS: And in terms of the
23 space heating costs we can see under the electricity
24 column that for this typical single family residence
25 as of -- with rates in effect as of May 1 a -- an

1 annual bill would be about twelve hundred dollars
2 (\$1,200), one thousand one hundred and ninety-three
3 dollars (\$1,193)?

4 MS. LOIS MORRISON: That is correct.

5 MR. BOB PETERS: Contrast that, Ms.
6 Morrison, to the high efficiency furnace at 92 percent
7 efficiency shown under the natural gas column, and
8 that would be the blue bar on the left side of the
9 natural gas column, correct?

10 MS. LOIS MORRISON: That is correct.

11 MR. BOB PETERS: And so there you're
12 indicating that the annual heating costs are
13 approximately 50 percent of the electricity costs?

14 MS. LOIS MORRISON: Yes.

15 MR. BOB PETERS: And we see also on
16 the bottom in terms of water heating costs the
17 percentage savings is -- is even -- even greater by
18 using natural gas compared to electricity for -- for
19 water heating?

20 MS. LOIS MORRISON: That is correct.

21 MR. BOB PETERS: So two hundred and
22 fifty-nine dollars (\$259) for electric high efficiency
23 water heater, compared to the eighty-one dollars (\$81)
24 for the gas efficiency, correct?

25 MS. LOIS MORRISON: Most people don't

1 have the high efficiency condensing natural gas water
2 tank that you're referring to. That's what you would
3 probably -- most people would have in their
4 homes would be the -- either the energy star water
5 heater at a hundred and nine dollars (\$109) or the
6 conventional water heater at a hundred and twenty-four
7 (124).

8 MR. BOB PETERS: In either case, it's
9 less than half -- half of the electricity?

10 MS. LOIS MORRISON: Yes.

11 MR. BOB PETERS: So just assist the
12 Board in understanding the condensing water heater is
13 a natural gas water heater that is -- it's a new
14 technology?

15 MR. LLOYD KUCZEK: It uses the same
16 technology as high efficient furnaces.

17 MR. BOB PETERS: And it has a side
18 vent and no need for a chimney?

19 MS. LOIS MORRISON: Yes. This is the
20 power vent version of the natural gas water tank.

21 MR. BOB PETERS: If we flip to page 9
22 -- 94 and 95, these were filed by Centra and these
23 numbers, Ms. Morrison, if I recall, reflect the
24 increase in the gas costs as contained in this
25 application, are included on this home heating cost

1 comparison.

2 Have I got that right?

3 MS. LOIS MORRISON: They reflect the
4 changes that we were proposing for the non-gas
5 components of the rate.

6 MR. BOB PETERS: Okay. Carefully
7 worded, but thank you. So you're trying to depict
8 here to the Board this is what it would look like if
9 Centra's application was approved as filed?

10 MS. LOIS MORRISON: That is correct.

11 MR. BOB PETERS: Except I think the
12 electricity -- the high efficiency elect -- sorry, the
13 high efficient natural gas may not have been updated
14 for May 1?

15 MS. LOIS MORRISON: That is correct.
16 When we prepared the response to this interrogatory it
17 was prior to that --

18 MR. BOB PETERS: All right.

19 MS. LOIS MORRISON: -- new rate for
20 the primary gas.

21 MR. BOB PETERS: So instead of five
22 hundred and ninety dollars (\$590) shown for the
23 natural gas high efficiency furnace, that would be
24 increased by somewhere between thirty (30) and thirty
25 five dollars (\$35) per year?

1 (BRIEF PAUSE)

2

3 MS. LOIS MORRISON: Yes, its about
4 thirty-four dollars (\$34).

5 MR. BOB PETERS: All right. So we can
6 notionally make that correction, add thirty-four
7 dollars (\$34) on to the natural gas high efficiency
8 furnace to have a -- a more accurate comparison. But
9 it's still at approximately 50 percent of the
10 electricity?

11 MS. LOIS MORRISON: Yes.

12 MR. BOB PETERS: Ms. Morrison, does
13 Centra ever sit back and say, How much more would gas
14 have to go up before it was equal to the electricity?
15 Where's the crossover point for the home -- the
16 individual homeowner?

17 MS. LOIS MORRISON: We did undertake
18 in the fuel switching study the point at which
19 electricity -- sorry -- what natural gas prices would
20 have to be to be comparable to using electric heat.

21 MR. BOB PETERS: Do you recall, as a
22 percentage of current rates, how much that would have
23 to go up?

24 MR. LLOYD KUCZEK: It was high
25 thirties, low forties. I don't recall the exact

1 number, but it's significant increase in primary gas
2 rates relative to, you know, the -- the eleven dollars
3 (\$11) that we're at today, or -- eleven (11) cents per
4 cubic metre that we're at today.

5 MS. LOIS MORRISON: We can -- what we
6 had looked at, and this is the electric rates for
7 those current in 2011, when we -- or, 2012, when we
8 prepared the study. But we would have to see primary
9 natural gas rate go up to the eleven (11) to fourteen
10 dollar (\$14) per gigajoule, or forty-two (42) cent to
11 fifty-two (52) cents a cubic metre to be close to the
12 equivalent of heating with electric heat.

13 MR. BOB PETERS: Thank you, Ms.
14 Morrison. Just to make sure, and I appreciate we're -
15 - now we're using a little bit of dated numbers, but
16 they go back to when the fuel switching report was
17 prepared, correct?

18 MS. LOIS MORRISON: That is correct.

19 MR. BOB PETERS: And in terms of cost,
20 I just want to catch Mr. Kuczek's comment. Natural
21 gas would have to go from eleven (11) cents a cubic
22 metre to fifty-two (52) cents a cubic metre to -- to
23 provide a -- kind of a break-even point as between gas
24 and electric space heat?

25

1 (BRIEF PAUSE)

2

3 MS. LOIS MORRISON: Yes, the primary
4 gas rate would have to go to 42 percent for it to be
5 break even with electric -- for electric space
6 heating.

7 MR. BOB PETERS: I'm just not sure I'm
8 understanding your answer. Primary gas would have to
9 go from its current rate of -- of -- I think Mr.
10 Kuczek said about eleven (11) cents. It would have to
11 go up to fifty-two (52) cents?

12 MR. LLOYD KUCZEK: I think we had two
13 (2) numbers in the fuel switching report. One (1)
14 number was based on whether or not you included the --
15 the basic charge for natural gas, and the other
16 excluded it. So, it -- it's one (1) or the other
17 number, but it's a substantial increase in -- in
18 primary gas cost.

19 MR. BOB PETERS: All -- all right. So
20 if I wrote down a percentage number after that I was
21 in error. It would -- and if I heard that it was
22 meant to be -- it would have to go to forty-two (42)
23 cents or fifty-two (52) cents a cubic metre to be
24 comparable?

25 MS. LOIS MORRISON: Yes.

1 MR. LLOYD KUCZEK: It depends on how
2 you analyzed it, but, yes.

3 MR. BOB PETERS: All right.

4

5 (BRIEF PAUSE)

6

7 THE CHAIRPERSON: I -- I wonder if I
8 could ask you a question here in -- Mr. Peters, in
9 respect of the chart that we're seeing? The
10 announcement yesterday about geothermal investments
11 with First Nations, the cost for heating a home using
12 geothermal on a First Nations would be -- can we --
13 can we -- can I assume that it would be in the nature
14 of approximately four hundred dollars (\$400)? Is that
15 -- is that a -- based on -- I'm looking at page 94 in
16 the book of documents.

17

18 (BRIEF PAUSE)

19

20 MR. LLOYD KUCZEK: Four (4) to five
21 hundred dollars (\$500) depends on the size of the
22 home, depends on how well it's insulated but...

23 THE CHAIRPERSON: And that would
24 compare to what in terms of a typical household on a
25 First Nations now paying for heating?

1 MR. LLOYD KUCZEK: You can use a
2 factor for, just crudely, three (3) times that.
3 Twelve hundred dollars (\$1200).

4 THE CHAIRPERSON: And the investment
5 per household with the geothermal would be what,
6 approximately?

7 MR. LLOYD KUCZEK: Yeah. So the --
8 the investments vary significantly and -- and with
9 this particular project it's -- it's similar to the
10 Waverley West thing in terms of trying to drive the
11 costs down. So they're installing a hundred and they
12 got bulk purchasing price advantages through that and
13 so the cost -- trying to recall the cost that --
14 fifteen thousand (15,000), just under that, is roughly
15 the cost per home.

16

17 CONTINUED BY MR. BOB PETERS:

18 MR. BOB PETERS: There -- in -- in
19 response to the Chairman's question, Mr. Kuczek, is
20 the geothermal only available to those homes on First
21 Nations that use electricity currently as a heat
22 source or is the geothermal program also available to
23 those homeowners who use fuel oil?

24

25 (BRIEF PAUSE)

1 MR. LLOYD KUCZEK: We -- we generally
2 allow customers to participate in our Power Smart
3 programs if they're using fuel oil. The -- the
4 program that we launched yesterday is a community
5 initiative, it's not a -- on an individual basis. So
6 if you were to get geothermal system installed and got
7 a quote in the marketplace you're going to be well
8 over twenty thousand dollars (\$20,000). So the
9 economics are substantially different when you do it
10 on an individual basis. So this approach is taking a
11 utility community model and getting the cost down --
12 driving the cost down so that it's economic to do.

13 MR. BOB PETERS: You paused when I
14 asked if fuel oil could be the -- the change out of
15 fuel to go to the geothermal. Is there a policy
16 reason why that would extend -- may not extend to fuel
17 oil or would it also extend to propane and other heat
18 sources?

19 MR. LLOYD KUCZEK: Well, generally
20 speaking what we've done is use the affordable energy
21 fund to support those customers to participate in any
22 other programs -- any other Power Smart programs that
23 are el -- or that customers are eligible for that have
24 natural gas or use natural gas or electricity. So we
25 just launched the program yesterday and really hadn't

1 thought through too much about how we're going to deal
2 with the fuel oil customers and propane customers, but
3 -- so that's why I hesitated.

4 MR. BOB PETERS: Does geothermal
5 require supplemental or supplementary heat?

6 MR. LLOYD KUCZEK: It generally does
7 but it doesn't have to, it depends on how you design
8 it. You can actually design it so that it doesn't
9 have to have backup heat. But most systems aren't
10 designed that way because it's not economic to do it
11 that way. You have to have a longer loop and a bigger
12 system. So usually what you do is you design it so
13 that it'll kick in at a -- well, my system --
14 actually, the first system I put in kicked in about
15 minus 25 degrees and then the backup came on. And
16 it's basically just an electric heater -- electric
17 furnace at that point. And the current system I got
18 kicks in at about minus 18 degrees, so.

19 MR. BOB PETERS: And for these
20 community programs that were announced yesterday, is
21 it anticipated that supplemental electric heat will be
22 needed?

23 MR. LLOYD KUCZEK: Yes.

24 MR. BOB PETERS: And --

25 MR. LLOYD KUCZEK: I should be careful

1 there. I think that this -- it's going to depend on
2 the home. Some homes are -- may not, so.

3 MR. BOB PETERS: How many homes in
4 Waverley West are geothermal besides yours?

5 MR. LLOYD KUCZEK: I'm not in Waverley
6 West, but, you know, I don't know the number offhand.
7 I do know at the end the government designated at
8 least one (1) side of a street to geothermal, so there
9 might have been forty (40) lots, in that range sort of
10 thing.

11 MR. BOB PETERS: But you're not sure
12 what the uptake has been?

13 MR. LLOYD KUCZEK: Oh, you know, that
14 -- that whole initiative that we're -- it was in the
15 paper, I mean we all read about it, but -- and I
16 worked on it for three (3) years of my life, but at
17 the end of the day it was not an economic thing to do.
18 And, you know, with natural gas prices the way they
19 are today, putting geothermal in when you have access
20 to natural gas does not make economic sense. There's
21 no economics to it.

22 MR. BOB PETERS: So you're changing
23 your system?

24 MR. LLOYD KUCZEK: No.

25 MR. BOB PETERS: No, I'm just kidding,

1 Mr. Kuczek.

2 MR. LLOYD KUCZEK: I --

3 MR. BOB PETERS: You don't have to
4 answer that.

5 MR. LLOYD KUCZEK: No. Well, I just
6 changed my system, but I did keep geothermal, but I
7 got a good price, so.

8 MR. BOB PETERS: Mr. Kuczek, this
9 might be -- this is a fair bit off topic, so we'll see
10 if Mr. Czarnecki gives me a bit of rope here, but can
11 this geothermal technology be implemented in diesel
12 communities?

13 MR. LLOYD KUCZEK: In diesel community
14 -- communities it doesn't make sense. To run
15 geothermal you need electricity to start with. So --
16 so one (1) option is just to use the fuel oil -- use
17 the fuel oil to heat the home directly. The other
18 option is use geothermal. And to -- and to run
19 geothermal you need electricity. So what you do is
20 you burn fuel oil inefficiently to create that
21 electricity.

22 So at about a 30 percent efficiency you
23 create the electricity. And then when -- you lose all
24 that efficiency lost -- or the efficiency gain you
25 gain through geothermal you lose on the -- the

1 creation of generation, so it works out to no
2 efficiency gain. So you might as well burn it
3 directly and heat the home that way.

4 MR. BOB PETERS: So for the four (4)
5 communities in Manitoba that are connected to the grid
6 and use diesel generation as their source, this
7 geothermal program doesn't appear to be an economic
8 solution?

9 MR. LLOYD KUCZEK: No.

10 MR. BOB PETERS: All right, thank you.
11 And I thank Mr. Czarnecki for letting me go out-of-
12 bounds on that one. Would it be correct to suggest
13 that in the City of Winnipeg, people building new
14 homes and if they have access to -- to natural gas,
15 the uptake is virtually 98 percent, as shown on page
16 97 of Tab 25 of the book of documents?

17 MS. LOIS MORRISON: That is correct.

18 MR. BOB PETERS: And so the market
19 penetration rate by Centra in the home heating market
20 for single detached homes in Winnipeg is -- is
21 virtually a hundred percent?

22 MS. LOIS MORRISON: That is correct.
23 Developers have the standard within their building to
24 install natural gas.

25 MR. BOB PETERS: And if I flip the

1 page though to 98 I see an entirely different picture,
2 do I not, Ms. Morrison, where a single detached home
3 outside of the City of Winnipeg, where there is a
4 choice between gas and electricity, gas is really less
5 than 50 percent of the -- the fuel of choice?

6 MS. LOIS MORRISON: That is correct.

7 MR. BOB PETERS: How does Centra
8 explain that?

9 MS. LOIS MORRISON: In the south gas
10 available area the developers are making the choice to
11 install or not install the heating sys -- sorry, the
12 builders are making the choice to install or not
13 install the heating systems.

14 So in many cases, the builders are
15 choosing to go with the lower capital cost outlay
16 option. What we're looking at here is another case
17 again of a split incentive. The operating costs are
18 not as much of a concern for the builders, and so
19 they'll be looking for the least cost approach for
20 building a home. And if there's not an outstanding
21 demand or an expectation for a natural gas furnace to
22 be installed, the customer isn't asking for it, the
23 builder won't deliver that.

24 So as we testified to before the
25 electric -- during the electric panel, Manitoba Hydro

1 recognizes that this is a concern as -- and has
2 undertaken a number of steps to help better educate
3 customers to make a choice that best suits them, and
4 recognizing that they may still choose electricity but
5 that they are making an informed choice based on the
6 economics and the environmental impacts.

7 And we are also working with builders
8 to better educate them and to better align their fuel
9 choices.

10 MR. BOB PETERS: But on that answer,
11 Mr. Morrison, why do the builders in Winnipeg provide
12 homeowners with the gas option, whereas outside the
13 perimeter highway it appears to be the builders are
14 only providing the electric option?

15 MS. LOIS MORRISON: There is a
16 difference in their -- their model. So -- so home
17 builders in Winnipeg traditionally have always
18 installed natural gas. Their -- their processes and
19 their -- their housing designs are structured in such
20 a way to install natural gas furnaces, so it's not --
21 it's not a change to how they do business.

22 And they can do much -- they do much
23 larger construction projects, so they're able to get
24 prices down on their furnaces. And so there's no real
25 price differential for them. They'll usually have a

1 gas fitter on staff, or as part of their work crew.

2 So there's a number of pieces in place
3 for them just because of the -- due to the nature of
4 them being larger. You will notice that there are, in
5 the Winnipeg area, still projected to be a small
6 percentage of houses that are built without natural
7 gas in them for space heating.

8 And what you'll find is those will be
9 the smaller builders, the one-offs, the startups, who
10 may not have a gas fitter on staff. They'll hire an
11 electrician. You have to hire an electrician anyway
12 for the house to be constructed. And so they'll just
13 have the electrician put in an electric furnace.

14 So those are some of the dynamics that
15 you see within the Winnipeg market that are not as
16 evident in the south gas available area. You're
17 dealing with smaller developers, smaller builders.
18 They may not have a gas fitter on staff. Their
19 processes for building may require an adjustment to
20 how they schedule work and how -- when they bring in
21 their subtrades to bring in the gas fitter.

22 So -- so when we -- when we've met with
23 and discussed the concept of -- of natural gas as a
24 space heating source with some of the developers and
25 builders in the south gas available area, those are

1 things that they brought up, was issues related to
2 upfront capital costs, sequencing and timing of their
3 -- their operations and how it would affect them.

4 So these are some of the things that we
5 recognize we have to work with the builders in terms
6 to try to help encourage them to make a better choice
7 for their customers.

8 MR. BOB PETERS: Does Centra show the
9 homeowner pages 94 and 95 of the book of documents, or
10 the equivalent to that and say, Here, make up your own
11 choice?

12 MS. LOIS MORRISON: We have been much
13 more engaged in the market to make sure that
14 homeowners have this information. We recognize though
15 that when a homeowner is building a new home we are
16 competing in their decision-making process as to what
17 they're making dec -- when they're building a home
18 we're trying to get them to focus on the heating
19 system whereas they're trying to pick out their
20 granite countertops.

21 So when -- when -- we're trying to get
22 the messaging out to them at the appropriate time when
23 they're making these decisions at the home building
24 point, but we're also making sure that this
25 information is out in -- in that area to help them

1 when they go to make the decision to buy a home or to,
2 say, purchase a new heating system that they're making
3 the heating system choice that best suits their
4 economic situation.

5 MR. BOB PETERS: And, Ms. Morrison,
6 based on pages 94 and 95 at Tab 24 of Board counsel's
7 book of documents, there's no debate that there are
8 economic benefits to Manitoba Hydro and Centra Gas'
9 customers to use gas for space heat as opposed to
10 electricity, and likewise for hot water?

11 MS. LOIS MORRISON: No, there's no
12 debate.

13 MR. BOB PETERS: All right. In terms
14 of the environmental benefits you mentioned briefly,
15 does this panel correctly understand that if
16 Manitobans use more natural gas, that will allow
17 Manitoba Hydro's electricity utility to export more
18 electricity, which will displace coal-generated
19 electricity, and therefore provide a global
20 environmental benefit?

21 MS. LOIS MORRISON: Where a customer
22 has access to natural gas as an option for space
23 heating we are -- we do recognize that there is a
24 benefit from a -- from a -- globally from an
25 environmental perspective at this point in time where

1 the customer -- if they choose natural gas as opposed
2 to electric heat, that then does free up electrons
3 that can be available within our surplus supply pool
4 that could be exported to the MISO territory that we
5 trade to.

6 I cannot say specifically what it's
7 displacing, whether it's coal or a combination of
8 coal, natural gas, et cetera. At this time we do see
9 there to be an offset that is beneficial from the
10 environmental perspective -- for a global
11 environmental perspective.

12 MR. BOB PETERS: That benefit is to
13 export more electricity by using more natural gas in
14 Manitoba?

15 MS. LOIS MORRISON: That's correct.

16 MR. BOB PETERS: I didn't gather from
17 your previous answers, yours and Mr. Kuczek's to the
18 panel, does Centra currently have incentives to
19 encourage fuel switching, or at least a choice to go
20 natural gas at the -- at initial instance rather than
21 electricity?

22 MS. LOIS MORRISON: We do not
23 currently have incentives that encourage customers to
24 choose natural gas over electric heat. We do have
25 other tools in place that allow or aid customers in

1 making that decision, such as they can use our
2 residential Power Smart Pays program to finance the
3 conversion, and we do provide quite a bit of
4 information about the benefits of doing so.

5 MR. LLOYD KUCZEK: I -- I can add to
6 that. I -- I can say that the Corporation takes this
7 very seriously. Our strategy is to aggressively try
8 to educate customers so that the -- the demand is
9 there on the builders and the developers to get them
10 to install natural gas space heating in the homes.
11 And we're also reviewing our service extension
12 policies to see if that's an appropriate tool to use.
13 But we don't think it's a good thing for customers to
14 have electric space heating put in their homes when
15 they have access to natural gas.

16 MR. BOB PETERS: Will the Corporation,
17 Mr. Kuczek, go so far as to put in disincentives to
18 use electric -- electric heat?

19 MR. LLOYD KUCZEK: I can only say
20 we'll consider it.

21 MR. BOB PETERS: And is it being
22 considered, or has it been? Can you tell the panel?

23 MR. LLOYD KUCZEK: Yes.

24 MR. BOB PETERS: And presently, they -
25 - there are none or there -- are there any?

1 MR. LLOYD KUCZEK: There are none, but
2 we are considering it.

3 MR. BOB PETERS: Okay. I think that's
4 as far as you want to go with me on that. And, Mr.
5 Chairman, I just want to make sure with Mr. Czarnecki
6 that I'm clear that my questions on cost allocation
7 changes for demand-side management are best put to Ms.
8 Derksen when she appears on the revenue requirement
9 panel?

10 MR. BRENT CZARNECKI: That's correct,
11 Mr. Peters.

12 MR. BOB PETERS: Thank you, sir.
13 Likewise, Mr. Czarnecki, in terms of bill impacts,
14 that would be a matter again best reviewed with Ms.
15 Derksen?

16 MR. BRENT CZARNECKI: Correct again.

17 MR. BOB PETERS: All right. Then my
18 last issue, Mr. Chairman, with this panel is the fixed
19 rate primary gas service.

20 THE CHAIRPERSON: I would ask a -- a
21 question, if you don't mind, Mr. Peters, with respect
22 to demand-side management in particular. And it -- it
23 relates to what we've been talking about. And -- and
24 specifically, you know, at the last electricity rate
25 application this Board addressed the issue of the

1 threshold evaluation tests that are used at the
2 program level to determine whether or not a particular
3 program would be worthwhile from Manitoba Hydro's
4 perspective.

5 And PUB suggested that those threshold
6 tests be reviewed. Can you please advise the panel
7 whether there has been any progress made with respect
8 to addressing that particular element of the Board
9 order?

10 MR. LLOYD KUCZEK: Maybe -- let me --
11 let me start with explaining how we come up with the
12 rationale on the natural gas side because it's -- it
13 is a little different than the electric side and less
14 complicated. So on the natural gas side, what -- what
15 we do is, there's no economic benefit from the utility
16 end to pursue energy conservation initiatives. So
17 what ends up happening is there is benefits for the
18 participating customers.

19 And so when we say that an opportunity
20 is economic that's, first of all, looking at it
21 irrespective of who is going to pay for it. But it's,
22 generally speaking, the benefits accrue to the
23 participating customer and -- and the avoided cost
24 would be the costs associated with buying the natural
25 gas and transporting it to Manitoba. So that's the

1 avoided cost.

2 So we -- we think it's the appropriate
3 thing to do, is have some energy conservation programs
4 promoting the efficient use of the energy -- natural
5 gas in Manitoba. So in -- a number of years ago we --
6 we launched the energy efficiency programs for natural
7 gas. The challenge we had was trying to decide what
8 was a -- and -- and we still have today with each
9 program, is deciding what's an appropriate level of
10 investment on behalf of all ratepayers to achieve
11 this, because the benefits accrue to the -- the
12 participating customer.

13 So -- and -- and we also found that it
14 was important to be aggressive in the marketplace. So
15 what we did is we -- we set some crude benchmark
16 levels for pursuing those opportunities. And -- and
17 the marginal cost that I -- I talked about was they
18 avoided primary gas costs as well as transportation
19 and -- and we calculated the levelized cost of using
20 that energy that we can avoid. And on the residential
21 side, to give you an example, today that's thirty-four
22 (34) cents.

23 So the -- there's two (2) options. One
24 (1) would be -- that would be the value that the
25 participating customers are saving by not using that

1 energy. So we should never spend more than that in
2 theory, because otherwise you might as well just pay
3 that -- the -- the bill reductions to -- or provide
4 those to participating customers with the -- the
5 dollars, so -- as opposed to implement the energy
6 efficient measures, if you just think of it from an
7 economic perspective.

8 So, generally speaking, we were in the
9 residential market thinking -- this is prior to the
10 cost of gas dropping, that we shouldn't spend much
11 more than half of that from -- from all -- using
12 ratepayer dollars for that, because the -- the
13 participating customers are realizing all the
14 benefits. And when we design programs that's the
15 upper limit, and the objective is is to try to get
16 customers to participate in those programs without
17 investing more than you need to. So, you know, that's
18 a judgment call.

19 So for -- give you an example, our home
20 insulation program costs us eleven point three (11.3)
21 cents levelized. The avoi -- voided costs or the
22 value to the participating customer is thirty-four
23 (34) cents. So that -- that gives you a benchmark.

24 Where we struggle with and I mentioned
25 this earlier was the furnace replacement program, if

1 you analyze that one it's over a hundred cents per
2 cubic metre. So it's a very expensive program, it's
3 not an economic program. So -- so the -- we struggle
4 with that in our own minds in terms of whether that's
5 appropriate use of ratepayer funds. But that program
6 was ordered actually by this Board.

7 And the lower income program actually
8 costs forty-one point eight (41.8) cents so it's not
9 economic either. We -- we see more value in that
10 program for -- for a different reason and that's
11 because we don't think those homes will ever be
12 insulated or likely will ever be insulated. Whereas
13 the furnace program, the furnaces are going to be
14 replaced anyway, so we're not as concerned there. But
15 we're -- we're still pursuing that program and -- and
16 promoting it because -- because of the order. And so
17 -- so that's the rationale underlying the natural gas
18 program.

19 So the RIM doesn't really come into
20 play. We calculated -- and I was listening to the
21 discussion at the hearings and there certainly is an
22 over-emphasis on our use of RIM that's not appro --
23 that's not valid.

24 We look at all these tests and at the
25 end of the day we look at them, as Mr. Dunskey

1 suggested, as guidelines, and you make a judgment call
2 in terms of how can you achieve those energy efficient
3 opportunities within the marketplace and being
4 fiscally responsible in terms of spending ratepayer
5 dollars.

6 On the electric side it's a little
7 different. The RIM does have more value on the
8 electric side but the economics there are different.
9 And then if you want me to get into that I can, but
10 it's -- it's more complicated.

11 THE CHAIRPERSON: I'm concerned about
12 introducing topics that some of the Board members have
13 not been exposed to.

14 Let me reflect on that some more
15 whether we should have a longer discussion on this and
16 we can -- I'll consult with Mr. Peters who can consult
17 with Mr. Czarnecki to address that. Thank you.

18

19 (BRIEF PAUSE)

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: Can the panel briefly
23 explain to the Board the acronym "FRPGS"?

24 MS. LOIS MORRISON: "FRPGS" stands for
25 Fixed Rate Primary Gas Service.

1 MR. BOB PETERS: And we'll probably
2 just call it the fixed rate service for our hearing,
3 unless you want to use the -- the acronyms. That
4 started back in 2009, Ms. Morrison?

5 MS. LOIS MORRISON: That is correct.

6 MR. BOB PETERS: And gas flowed under
7 the fixed rate program back in May of 2009, correct?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: And under this
10 program, Centra Gas offers consumers an option that,
11 rather than purchase gas and have their primary gas
12 purchased from Centra subject to the quarterly price
13 changes, customers can pick a fixed-term price from
14 Centra Gas?

15 MS. LOIS MORRISON: Yes, they can
16 select a fixed price for a fixed term.

17 MR. BOB PETERS: And in addition to
18 Centra offering a fixed price for a fixed term, there
19 are natural gas retailers or brokers in the market
20 that likewise offer fixed-rate prices, correct?

21 MS. LOIS MORRISON: That is correct.

22 MR. BOB PETERS: And on page -- Tab 31
23 of the book of documents, if we can turn to that, on
24 page 117 we see a bit of a history of the fixed rate
25 program that Centra has offered, correct?

1 MS. LOIS MORRISON: That is correct.

2 MR. BOB PETERS: And just by way of an
3 example, back in -- I guess we'll go to the top of the
4 chart -- May and June of 2011, on the far right-hand
5 column Centra's quarterly price was about fifteen and
6 a half (15 1/2) cents a cubic metre, Ms. Morrison, for
7 the July -- May 1st to July 31st portion of the year?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: And if a customer
10 chose, they could purchase gas from a broker at
11 whatever the broker was charging or they could
12 purchase from Centra a three (3) year contract at
13 nineteen point seven five (19.75) cents a cubic metre?

14 MS. LOIS MORRISON: That is correct.

15 MR. BOB PETERS: And that nineteen
16 point five (19.5) cents a cubic metre was locked in
17 for three (3) years?

18 MS. LOIS MORRISON: Yes.

19 MR. BOB PETERS: And likewise, for
20 five (5) years Centra had a little bit higher price,
21 twenty point nine five (20.95) cents?

22 MS. LOIS MORRISON: Correct.

23 MR. BOB PETERS: And this program was
24 designed for customers who do not want volatility in
25 their primary gas rate?

1 MS. LOIS MORRISON: Yes.

2

3 (BRIEF PAUSE)

4

5 MR. BOB PETERS: If we look down to
6 the bottom of the page -- well, while we're at the top
7 of the page, the difference between the -- the Centra
8 fixed price options and the Centra quarterly rate that
9 this Board sets is somewhere in the range of maybe
10 four (4) to five (5) cents, or 25 percent more. Would
11 you agree with that?

12 MS. LOIS MORRISON: For that
13 particular offering, yes.

14 MR. BOB PETERS: If we go to the
15 bottom of your chart, Ms. Morrison, and we see -- just
16 a second, please. There's a -- perhaps a typo in the
17 chart at the bottom of the page, a typographical. The
18 -- the last offering shown in the chart is the
19 February 8th to March 11th, 2013, offering, not 2012?

20 MS. LOIS MORRISON: Yes. We
21 apologize.

22 MR. BOB PETERS: Well, no -- no
23 worries. I didn't see it until just now. And it --
24 it's for the gas that was to flow on May the 1st of
25 2013?

1 MS. LOIS MORRISON: That is correct.

2 MR. BOB PETERS: And in that
3 particular instance, the current Centra quarterly rate
4 from February to April was about nine point six seven
5 (9.67) cents per cubic metre?

6 MS. LOIS MORRISON: That is correct.

7 MR. BOB PETERS: And yet the fixed
8 rate offering Centra was offering are set higher, more
9 like sixteen point nine (16.9) cents up to nineteen
10 (19) cents, correct?

11 MS. LOIS MORRISON: That is correct.

12 MR. BOB PETERS: So the difference
13 there is about a hundred percent more under the fixed
14 rate offering than the Centra quarterly offering,
15 correct?

16 MS. LOIS MORRISON: That is correct.

17 MR. BOB PETERS: And do you know what
18 your competitors are offering gas for at this point in
19 time relative to the offerings that you have in the
20 chart, at least the bottom -- the bottom quadrant?

21

22 (BRIEF PAUSE)

23

24 MS. LOIS MORRISON: It's usually quite
25 close to what we're offering. But we can get the

1 exact details for you if you would like us to.

2 MR. BOB PETERS: Well, I think it
3 would assist the Board if they knew what comparable
4 offerings were from -- from other gas retailers. And
5 it looks like Mr. Sanderson is either taking an
6 undertaking or has the answer.

7 MR. BRENT SANDERSON: We're
8 undertaking to get the equivalent offering prices from
9 major retail competitors during the period that this
10 offering was in the marketpla -- marketplace.

11 But typically, in recent years, the
12 major marketers targeting the residential and small
13 commercial market would be offering prices a few
14 hundredths of a cent per cubic metre below Centra's
15 offering prices, would be the typical relationship.

16 MR. BOB PETERS: All right. And then,
17 Ms. Morrison, if you would undertake to provide the
18 Board with the comparable offerings by the -- the
19 major gas retailers, that would assist the Board.

20 MS. LOIS MORRISON: Yes, we can do so.

21 MR. BOB PETERS: Thank you, ma'am.

22 MR. GREG BARNLUND: Mr. Peters, if I
23 might add, the Public Utilities Board is good enough
24 to be posting those comparative rates on their
25 website, and if that makes sense, we would just access

1 that information for this request.

2 MR. BOB PETERS: This is where I say

3 we'll take that as very reliable. Thank you, Mr.

4 Barnlund. Does Centra have any other market

5 reconnaissance but that -- but going to that website?

6 MS. LOIS MORRISON: Those of us on the

7 side offering the program do not.

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: Ms. Morrison, I'll

12 just put it on the record here and you can -- I'd ask

13 you to take this con -- subject to check, and then you

14 won't have an undertaking that for the comparable

15 offerings shown on the quadrant that is on page 117,

16 that your major residential small general service con

17 -- competitor, their rate isn't nineteen (19) cents a

18 cubic metre, it's eighteen point nine nine (18.99)

19 cents a cubic metre.

20 Would you accept that subject to check?

21 MS. LOIS MORRISON: Yes.

22 MR. BOB PETERS: All right. So then

23 we don't need that undertaking. But if we do hear

24 from you it's because you don't agree with my number

25 and I certainly will respect that.

1 Let's talk to the Board, if we can,
2 about what the uptake has been relative to this --
3 these offerings by turning to page -- Tab 32 of the
4 book of documents. And there's a chart on page 120
5 where the Board will see what the customer reaction
6 has been to Centra's fixed rate offering, Ms.
7 Morrison?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: The number of
10 customers shown on the left-hand side of the graph
11 corresponds with the -- with the -- the bar chart,
12 correct?

13 MS. LOIS MORRISON: Yes.

14 MR. BOB PETERS: And the Board will
15 see that the number of customers that have enrolled --
16 and these are residential customers, or do you know
17 the -- not necessarily, correct?

18 MS. LOIS MORRISON: They are a
19 combination of residential, small commercial, and LGS.

20 MR. BOB PETERS: And so for the
21 edification of the Board, Centra makes available and
22 did make available a gas offering of a certain
23 quantity, and it was first-come first-served.

24 Would that be true?

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: And so the Board sees
2 that in the early days back in '09 that there were
3 customers in Mar -- in May of 2009 there was probably
4 around ninety-five (95) customers. It peaked out at
5 about a hundred and sixty (160) customers the next
6 flow offering that was made and the uptake has been on
7 the -- in the decline virtually since then?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: And overlaid on this
10 graph for the Board, Ms. Morrison, is the quarterly
11 rate of Centra's published rate, and it also is shown
12 in the line graph with the -- the little squares that
13 are connected. That just depicts where Centra's
14 quarterly approved rate is from the Public Utilities
15 Board?

16 MS. LOIS MORRISON: That is correct.

17 MR. BOB PETERS: And when the rate was
18 higher, up as much as twenty-five (25) cents a cubic
19 metre, now it's down to less than ten (10) cents a
20 cubic metre, there appears to be a correlation with
21 the number of customers that are interested in -- in
22 the fixed rate program.

23 Is that something that Centra concurs
24 in?

25 MS. LOIS MORRISON: Yes, we concur.

1 MR. BOB PETERS: You concur with that
2 conclusion?

3 MS. LOIS MORRISON: Yes.

4 MR. BOB PETERS: It might help the
5 Board, Mr. Chairman, if we turned back to Tab 15 in
6 the book of documents to page 54. And, Ms. Morrison,
7 and witness panel, if you could also follow with us.

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: Ms. Morrison, on page
12 54, at Tab 15 of PUB Exhibit 10 is an Information
13 Request response from the Utility that provides some
14 customer numbers.

15 Do you have that?

16 MS. LOIS MORRISON: Yes, I do. Thank
17 you.

18 MR. BOB PETERS: And there is along
19 the left margin at line items -- line item 12, the
20 fixed price supply heading. And that is the customers
21 that have elected to purchase their gas by way of a
22 fixed-price contract.

23 Is that correct?

24 MS. LOIS MORRISON: Through Centra's
25 fixed-price contract, yes.

1 MR. BOB PETERS: And the reason you
2 differentiated is that your competitor's customers
3 would be shown elsewhere on the chart?

4 MS. LOIS MORRISON: Yes, they would be
5 shown under the western transportation service.

6 MR. BOB PETERS: And they'd be shown
7 under line 18, the western transportation service SGS
8 residential customers, specifically as we talk about
9 the residential customers at this time?

10 MS. LOIS MORRISON: Yes.

11 MR. BOB PETERS: And looking back to
12 line items -- line item 13, the SGS residential, here
13 the number of residential customers is shown, but this
14 represents the average number of customers in a year
15 that are on Centra's fixed-price program, correct?

16 MS. LOIS MORRISON: That currently
17 have active contracts, yes.

18 MR. BOB PETERS: And so what -- at any
19 point in time what you're saying in the 2013/'14
20 forecast is there are four hundred and eighty-six
21 (486) customers out of Centra's three hundred and
22 thirty-five thousand (335,000) customers that are
23 taking their gas from Centra on a fixed-price
24 contract.

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: And some of those
2 would be on a one (1) year term, some would be on a
3 three (3) year term, and some would still be on a five
4 (5) year term?

5 MS. LOIS MORRISON: That is correct.

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: Does Centra find the
10 participation lower than what was expected by Centra?

11 MS. LOIS MORRISON: The participation
12 is in line with what we had anticipated based upon the
13 customer survey that was undertaken prior to launching
14 the initiative. In that sur -- in that survey, the
15 findings did show that as the price differential
16 between the quarterly rate and the fixed-rate offering
17 increased, participation decline -- would decline.

18 MR. LLOYD KUCZEK: There -- there was
19 two (2) things that came out of that market research.
20 One (1) was -- and I don't recall the specific
21 numbers, but customers were interested in -- expressed
22 an interest in fixed-price products. And there was a
23 -- a significant percentage of those, and I -- that's
24 the number that I don't recall.

25 But the component Ms. Morrison is

1 mentioning is that when you drill down further and ask
2 them questions about how much they're willing to pay,
3 if the differential was too high they weren't willing
4 to pay that. So as the differential increased, very
5 few customers were interested. And so that's in --
6 the participation in our program is in line with that
7 research in general.

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: And back to page --
12 sorry, to page 117 at Tab 31, what you're saying, Mr.
13 Kuczek, is that as the -- as the price of the fixed
14 program gets further and further away from Centra's
15 quarterly rate, Centra expects the customer uptake to
16 be reduced and diminished?

17 MR. LLOYD KUCZEK: Correct.

18 MR. BOB PETERS: And the only
19 customers that -- that are perhaps taking the fixed-
20 rate offering at -- at current numbers would be those
21 who are what you would consider very risk adverse, and
22 they don't want to see any fluctuation. They don't
23 want any negative surprises in their gas bill?

24 MR. LLOYD KUCZEK: Yeah, we don't --
25 we really don't know why all those customers are --

1 are doing that, but you -- there certainly is the --
2 some customers that are probably still feeling the --
3 the pain from the -- the per -- the decade of 2000
4 when the prices were volatile. And so they were
5 signing up.

6 I can give you an example. My dad
7 signed up for the fixed-price products when we first
8 launched them, paid twenty-seven (27) cents, suffered
9 for three (3) years, and he was still willing to sign
10 up after three (3) years. But he didn't after talking
11 to me.

12 MR. BOB PETERS: If we can turn with -
13 - to page -- Tab 33 in the book of documents, let's
14 just see if your father or someone similar in
15 demographics is recorded here, Mr. Kuczek. The
16 question that I want to ask is on -- in Tab 33, on
17 page 124. This is showing the Board, with the benefit
18 of hindsight, whether the fixed rate offerings by
19 Centra have been financially advantageous or
20 financially disadvantageous to the customer. Would
21 that be correct?

22 MR. GREG BARNLUND: Yes, Mr. Peters.

23 MR. BOB PETERS: So let's start then,
24 Mr. Barnlund, on May 1st of 2009, at the top of the
25 page. There was an offering of twenty-six point seven

1 (26.7) cents a cubic metre. This is for a one (1)
2 year contract. Is that correct?

3 MR. GREG BARNLUND: Yes.

4 MR. BOB PETERS: And in addition to
5 that -- and we won't identify Mr. Kuczek's father
6 specifically, but then there was the quarterly -- the
7 quarterly price at the time was twenty (20) -- twenty-
8 four point five (24.5) cents?

9 MR. GREG BARNLUND: Yes.

10 MR. BOB PETERS: And if a customer
11 stayed on for the full year under the fixed-price
12 offering, they would have paid six hundred and thirty-
13 three dollars and eight-five cents (\$633.85) on their
14 annual gas bill for their primary gas, correct?

15 MR. GREG BARNLUND: That's correct.

16 MR. BOB PETERS: But had they remained
17 quarterly customers of Centra and suffered the
18 fluctuations, they would have paid five hundred and
19 thirty-one dollars (\$531) on an annual basis?

20 MR. GREG BARNLUND: Yes.

21 MR. BOB PETERS: So the customer would
22 have been better off by a hundred and two dollars
23 (\$102) if they would have stayed with Centra's
24 quarterly pricing?

25 MR. GREG BARNLUND: That's the

1 difference between the quarterly pricing for that
2 period of time and the fixed rate, yes.

3 MR. BOB PETERS: And these -- on this
4 page -- on 124, Mr. Barnlund, this represents various
5 one (1) year contracts that the Utility has put out
6 for offer, correct?

7 MR. GREG BARNLUND: Yes, sir.

8 MR. BOB PETERS: And would it be
9 correct that in every instance of the one (1) year
10 contracts it has always been more expensive under the
11 fixed-rate program than under the quarterly program?

12 MR. GREG BARNLUND: Yes, and that
13 corresponds to the general and continual decline in
14 wholesale gas prices through the period of time that
15 these contracts were offered.

16 MR. BOB PETERS: Mr. Barnlund, on page
17 125 also at Tab 33, there's three (3) year contracts
18 depicted and Centra's currently -- may still have some
19 three (3) year contracts that have not yet fully
20 expired, correct?

21 MR. GREG BARNLUND: Yes. I believe
22 these are just reporting the contracts that have
23 completed.

24 MR. BOB PETERS: Yes. And if we look
25 again at the May 1st, 2009, at the top of the page,

1 the first offering. If we look at the three (3) year
2 offering and compare it to what the customer would
3 have paid if they were on quarterly supply, the
4 customer ended up paying a thousand and fifty-eight
5 dollars and ninety-five cents (\$1,058.95) more under
6 fixed-rate offerings?

7 MR. GREG BARNLUND: Yes, that's
8 correct.

9 MR. BOB PETERS: And the same question
10 I posed before is that in every instance under the
11 three (3) year contracts that have settled, the
12 customers have been financially disadvantaged by going
13 to the fixed-rate primary gas service?

14 MR. GREG BARNLUND: Yes, it was more
15 expensive for them to take service under fixed-rate
16 primary gas service.

17 MR. BOB PETERS: And having said
18 "financially disadvantaged" in my question, Mr.
19 Barnlund, I don't want to overlook the fact that in
20 the -- the witness panel's direct evidence, and I'm
21 not sure it was yours, but one (1) of the factors that
22 Centra cited in wanting to continue to offer this
23 program was customer choice?

24 MR. GREG BARNLUND: Yes, that's
25 correct. I mean -- there are other motivations why

1 people will be choosing us, I think you had alluded to
2 those in terms of risk preference, risk aversion, and
3 so some customers may still be interested in this type
4 of offering.

5 MR. LLOYD KUCZEK: Let -- let me add
6 to that too. I -- I think the other driver for it --
7 and this was -- the Board at the time when we -- we
8 did the review in the marketplace we had a hearing
9 involved with that, but I think the other driver was
10 to provide more competition and price transparency or
11 comparisons for our customers.

12

13 (BRIEF PAUSE)

14

15

16 MR. BOB PETERS: I take from your
17 answer, Mr. Kuczek, that what you're suggesting is
18 that one (1) of the other attributes of the fixed-rate
19 program from Centra's perspective is that it serves as
20 a benchmark that customers compare to -- to private
21 gas retailers?

22 MR. LLOYD KUCZEK: Yes.

23 MR. BOB PETERS: Mr. Chairman, in
24 light of the hour this might be an appropriate time to
25 take the -- the noon recess. I can indicate that I

1 certainly expect to finish within the hour after lunch
2 and turn the microphone over to Mr. Meronek for the
3 afternoon or the portion that he requires.

4 THE CHAIRPERSON: Before you -- we
5 recess, I wonder if you could turn your -- turn to
6 page 120 under Tab 32, specifically looking at the
7 chart that -- that graphs the new customers contracts
8 by enrollment period.

9 If you were to overlay a graph that
10 describes the new customers' contracts by natural gas
11 brokers, licenced natural gas brokers in Manitoba,
12 what would that graph look like?

13 MS. LOIS MORRISON: You -- if you
14 actually turn to Tab 15 of the filing you can see
15 under the western transportation service line the
16 number of customers. If you look at line 18, as Mr.
17 Peters had previously referred to, if you track over
18 time there you can see that there has been a decline
19 in the number of customers participating in the
20 western transportation service, and that would be the
21 private marketers offering the -- a similar fixed-rate
22 service. So their new customer sign-ups would
23 probably reflect very similar to what we are seeing.

24 THE CHAIRPERSON: And is that true in
25 other jurisdictions as well?

1 MR. LLOYD KUCZEK: That's my
2 understanding. The market for these products is
3 dropping dramatically throughout North America.

4 THE CHAIRPERSON: I think no further
5 questions from the panel so we would -- we'll recess
6 immediately and be back in this room at one o'clock.
7 Thank you very much.

8

9 --- Upon recessing at 12:03 p.m.

10 --- Upon resuming at 1:01 p.m.

11

12 THE CHAIRPERSON: Good afternoon.
13 Back to you, Mr. Peters.

14 MR. BOB PETERS: Thank you. And good
15 afternoon.

16

17 CONTINUED BY MR. BOB PETERS:

18 MR. BOB PETERS: This morning, Ms.
19 Morrison, just before the lunch recess, the chairman
20 had a question of you that I just wanted to go back
21 and discuss in terms of customer numbers on the fixed-
22 rate primary gas service offering. And I'm going to
23 start on page 120, Tab 32, of the book of documents.

24 And are you on that page yet, Ms.
25 Morrison?

1 MS. LOIS MORRISON: Yes.

2 MR. BOB PETERS: Thank you. What the
3 Board will note in the bottom right-hand corner of the
4 chart and graph combined, is that on February 1 of
5 2013 there were fewer than twenty (20) customers that
6 had signed up for Centra's fixed-rate offering,
7 correct?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: And, in fact, if we
10 go to page 121 and look at the chart that was filed as
11 Appendix 13.3, and we look to the very bottom quadrant
12 on page 121, this represents the enrollment period and
13 the customer applications, as well as those who have -
14 - were activated as of February 1, 2013, Ms. Morrison?

15 MS. LOIS MORRISON: That is correct.

16 MR. BOB PETERS: And so on the bottom
17 of the page in that bottom quadrant, the third
18 quadrant from the left, it was contracts for
19 activation. It looks to me that for three (3) years
20 one (1) customer was activated for a five (5) year
21 contract. It was -- three (3) customers were
22 activated, for a grand total of four (4) customers?

23 MS. LOIS MORRISON: That is correct.

24 MR. BOB PETERS: And so that bar chart
25 on the previous page of 120 that was less than twenty

1 (20), it's -- it was actually four (4) people? Four
2 (4) customers?

3 MS. LOIS MORRISON: That is correct.

4 MR. BOB PETERS: And in terms of
5 customers, we can see also from the third quadrant to
6 the -- from the left on the bottom chart that the
7 customer composition of these four (4) who were flowed
8 gas on February 1st were all residential customers?

9 MS. LOIS MORRISON: That is correct.

10 MR. BOB PETERS: And the Chairman
11 asked you a question about, okay, if -- if that was
12 your experience -- that was February of 2013. I don't
13 think the materials have the May 1st customer numbers,
14 so can you just give us an estimate, or your best
15 information, as to how many customers?

16 And if we -- if we turn back to page
17 117, Mr. Chairman and Board members, we'll see on page
18 117, at Tab 32, the bottom of the chart shows that
19 there was a sign-up period between February 8th and
20 March 11th, 2013, not 2012 as we've corrected, and
21 customers were invited to sign up for gas at those
22 prices.

23 Correct, Ms. Morrison?

24 MS. LOIS MORRISON: That is correct.

25 MR. BOB PETERS: And do you have

1 customer numbers for the Board in terms of the actual
2 numbers of customers to whom Centra flowed gas on May
3 the 1st as fixed rate primary gas new customers?

4 MS. LOIS MORRISON: Yes, we do.

5 MR. BOB PETERS: And how many?

6 MS. LOIS MORRISON: We had a total of
7 seven (7) enroll (sic). All seven (7) were
8 residential. Six (6) signed up for a one (1) year
9 contract and one (1) signed up for a five (5) year
10 contract.

11 MR. BOB PETERS: And the Chairman
12 asked you as well if that's Centra's experience, what
13 is happening to the rest of the Manitoba retail
14 market? Specifically, I think this question was
15 directed toward the residential customers. And you
16 drew his attention back to Tab 15, and particularly
17 page 54 of book of documents counsel's book of
18 documents, correct?

19 MS. LOIS MORRISON: That is correct.

20 MR. BOB PETERS: Now, when you do
21 that, Ms. Morrison, and we go over to the 2013/'14
22 year, there's a number of Western Transportation SGS
23 residential customers shown as ten thousand seven
24 hundred and fifty-two (10,752), correct?

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: But the Board has no
2 way of knowing from this data how many of those
3 customers are new as opposed to how many of those may
4 have been -- may still be on the tail-end of a three
5 (3) year contract, or the tail-end of a five (5) year
6 contract, or the tail-end of a four (4) year contract?

7 MS. LOIS MORRISON: That is correct.

8 MR. BOB PETERS: Now, not by
9 individual retailer, but does -- Centra able to
10 aggregate the private retailers, and provide the Board
11 with an estimate as to how many new customers they're
12 signing up for flow-dates such as the -- the ones
13 you've shown here either in February of 2013, or May
14 of 2013?

15 MR. BRENT SANDERSON: Mr. Peters,
16 given that I'm the manager in charge of the direct
17 purchase group at the Utility, I think there would be
18 some concerns regarding the protection of commercially
19 sensitive information that we're privy to by virtue of
20 our role as an intermediary between marketers and end-
21 use customers. And I think the Utility would be
22 concerned about even aggregating data at the level
23 that you've described, at that level of specificity,
24 given that we have a standard of conduct which we're
25 bound to adhere to in the protection of that marketer

1 information.

2

3 (BRIEF PAUSE)

4

5 MR. BRENT SANDERSON: If -- I might as
6 well as the fact that, especially with respect to the
7 residential market, there are so few market
8 participants in -- active in the Manitoba market right
9 now for fixed-rate products, there could be the
10 ability to infer market share with that data, given
11 that it's easily -- well, easily uncovered as to who
12 is active in that market in Manitoba, and the number
13 of players is small.

14 MR. BOB PETERS: I'll leave it at that
15 and thank you, Mr. Sanderson. And if the -- if the
16 Board requires further information then we'll -- we'll
17 make a request, I suppose, for filing information
18 through confidence through your counsel, but not at
19 this time, sir.

20 Suffice it to say, and let me conclude
21 then, what -- the trend that was seen on page 54 that
22 Ms. Morrison brought to the Chair's attention before
23 the lunch recess, at Tab 15 of the book of documents,
24 tends to be the same trend Centra has seen with its
25 customer penetration rates for the fixed rate product.

1 MS. LOIS MORRISON: I -- I was simply
2 using it as a proxy, given that I am not privy to the
3 information that was discussed earlier, that -- to
4 demonstrate that the other marketers operating in
5 Manitoba are likely seeing similar trends, given that
6 their overall penetration, or their -- their overall
7 customer counts in the market is diminishing.

8 MR. BOB PETERS: Let's turn to the
9 dollars and cents of this, because we've heard from
10 Mr. Kuczek that Centra, for the reasons stated, wants
11 to continue with the fixed-rate primary gas service,
12 correct?

13 MR. LLOYD KUCZEK: I'm not sure it's
14 Centra's position that we want to. We're -- Centra is
15 complying with the order to continue to offer these
16 fixed price products, but we haven't assessed whether
17 we should continue to do it in the future, based on
18 our own opinions.

19 MR. BOB PETERS: If Centra determines
20 internally that it, for whatever reasons, it does not
21 want to continue in this area, would the Board expect
22 Centra to come to the Board to seek approval for that
23 decision?

24 MR. LLOYD KUCZEK: I -- I think we
25 were taking the position that the -- if the Board

1 thought that it was inappropriate for us to continue
2 to do this, they would -- they would order us to do
3 something different.

4 MR. BOB PETERS: All right. So the
5 Board has one (1) option to tell you not to do it, and
6 Centra has an option that if Centra doesn't want to do
7 it they'll -- they'll make that request to the Board?

8 MR. LLOYD KUCZEK: That -- that is an
9 option for us, yes.

10 MR. BOB PETERS: All right. Let's
11 turn to the dollars and cents of this matter and turn
12 to page 129, which is found in -- under Tab 34 of PUB
13 Exhibit 10. And to the panel, in looking at the --
14 the information on page 129 of Board counsel's book of
15 documents, can the Board conclude that up until the
16 end of fiscal 2012, the Corporation lost \$2.2 million
17 in respect of its fixed-rate primary gas service
18 offerings?

19 MR. GREG BARNLUND: That's correct.

20 MR. BOB PETERS: And, Mr. Barnlund, we
21 see broken down year-by-year in this column that in
22 one (1) year, I suppose it was 2010, lost almost a
23 million dollars. In other years, the start-up year,
24 it lost closer to a hundred and forty-three thousand
25 (143,000) and so on?

1 MR. GREG BARNLUND: Yes, sir.

2 MR. BOB PETERS: What I don't see on
3 this chart, Mr. Barnlund, is the 2013 number. Is that
4 a number you're in -- in a position to share with the
5 Board?

6 MR. GREG BARNLUND: I don't have that
7 number available at this point in time. We would be -
8 - typically, we'd be providing that information to the
9 Board in our annual report. Usually that would be
10 filed sometime later in the summer, I think. So I
11 don't have that information with me right now.

12 MR. BOB PETERS: The Board would
13 expect, whatever number it was, it would have brackets
14 around it?

15 MR. GREG BARNLUND: I'm not aware of
16 what the situation is right now. I'm sorry.

17 MR. BOB PETERS: All right.

18

19 (BRIEF PAUSE)

20

21 MR. BOB PETERS: What we do know from
22 the information, Mr. Barnlund, on page 129 -- and
23 there's a line item just above the \$2.2 million total
24 that talks mark-to-market of unsettled hedges.

25 You're familiar with that line?

1 MR. GREG BARNLUND: I see that, yes.

2 MR. BOB PETERS: And what you're
3 showing the Board is that since the inception of
4 Centra's fixed-rate primary gas offerings, in some
5 years Centra has been hedging the gas volumes,
6 correct?

7 MR. GREG BARNLUND: Yes, from the
8 outset of the program until a point in time in 2011, I
9 believe, we were replacing financial derivatives
10 associated with these offerings.

11 MR. BOB PETERS: And after
12 approximately August of 2011, no further hedging was
13 done on the volumes that Centra was selling in respect
14 of its fixed-rate offering?

15 MR. GREG BARNLUND: Yes, sir.

16 MR. BOB PETERS: And one (1) of the
17 reasons was the counterparties weren't prepared to
18 provide derivative instruments to the Utility because
19 the volumes were too small.

20 MR. GREG BARNLUND: That's our
21 understanding, yes.

22 MR. BOB PETERS: And Centra did hedge
23 some three (3) year and some five (5) year products,
24 and those still remain extant and they're out --
25 they're out there in the marketplace that are -- those

1 -- those transactions are still valid. But the way
2 they're tracking right now it looks like they're
3 running at a loss of eight hundred and ninety-seven
4 thousand dollars (\$879,000) based on the market to
5 date.

6 Would that be a fair interpretation of
7 the mark-to-market of unsettled hedges?

8 MR. GREG BARNLUND: Well, that would
9 have been the mark-to-market reported as of the end of
10 the fiscal year in 2012.

11 MR. BOB PETERS: You --

12 MR. GREG BARNLUND: Now I think
13 there's --

14 MR. BOB PETERS: I'm sorry. You can't
15 update us on anything more though, or can you?

16 MR. GREG BARNLUND: I believe there's
17 a -- an IR, that may be at page 131. I'm -- that
18 should be at page 131 of your book of documents, sir.

19 MR. BOB PETERS: And you're drawing
20 the Board's attention to a compilation of settled
21 results to -- to the last fiscal year end as well, as
22 the mark-to-market unsettled results as of last year
23 end, correct?

24 MR. GREG BARNLUND: These are settled
25 to March 31st of 2013, so that would be to the most

1 recent year end, sir.

2 MR. BOB PETERS: And as a result of
3 this information, the total mark-to-market projection
4 is now a three hundred and thirty-six thousand eighty-
5 nine dollar (\$336,089) loss or cost to Centra?

6 MR. GREG BARNLUND: Yes, sir.

7

8 (BRIEF PAUSE)

9

10 THE CHAIRPERSON: This may be an
11 obscure point, but I -- I do want to ask about
12 unsubscribed hedge impacts, bullet 3 -- footnote 3,
13 rather, which mentions that they -- you know, it
14 describes what that's all about. Perhaps, somebody
15 could explain to me what -- you wouldn't have costs
16 related to unhedged market price exposures ov -- over-
17 subscribed primary gas volumes.

18 I mean, you would have -- correct me if
19 I'm wrong. You would have taken a hedge out for
20 expected subscriptions that you thought customers
21 would undertake, right? You took a hedge position.
22 The subscriptions never showed up, so you had a hedge
23 position out there that had no counterparty; it
24 basically had no physical subscriber for. So you were
25 paying -- end up paying for that cost.

1 Is that correct? Is that -- have I got
2 that correct?

3 MR. BRENT SANDERSON: With respect to
4 under -- under-subscribed hedges that's an accurate
5 description. Those would have --

6 THE CHAIRPERSON: Okay.

7 MR. BRENT SANDERSON: -- hedges would
8 have been placed on the expectation there would have
9 been subscribers to underpin those volumes, and then
10 the sum of the subscribers that were forecast for the
11 hedges that were placed on their behalf did not
12 materialize.

13 THE CHAIRPERSON: Okay. Now, the --
14 the opposite side of that would be over-subscribed
15 primary gas volumes that have been subscribed but not
16 hedged. In other words, you were exposed, you didn't
17 have a hedge position.

18 Would that -- would you have had a lot
19 of that?

20 MS. LOIS MORRISON: There were very
21 few volumes that were over-subscribed.

22 THE CHAIRPERSON: Okay. Okay.

23

24 CONTINUED EXAMINATION BY MR. BOB PETERS:

25 MR. BOB PETERS: Ms. -- I'm sorry, go

1 ahead.

2 THE CHAIRPERSON: Again, just to
3 clarify. The last line, "the mark-to-market of
4 unsettled hedges," those would have been for sus --
5 subscribed to contracts, wouldn't they?

6 MR. BRENT SANDERSON: As depicted in
7 these financial statements, that would have been the
8 cumulative total of both subscribed and unsubscribed
9 forward hedges.

10

11 CONTINUED EXAMINATION BY MR. BOB PETERS:

12 MR. BOB PETERS: Ms. Morrison, in your
13 answer to the Chairman that in some cases there may
14 have been volumes that were over-subscribed on which
15 there was no hedge put in place, that did occur on
16 occasion?

17 MS. LOIS MORRISON: Only marginally,
18 and we -- we try to keep it within plus or minus 1 --
19 1 percent. We were trying to stay very close to what
20 we had. Just sometimes the customer is coming in, it
21 was close enough that we allowed it.

22 MR. BOB PETERS: Would it -- would it
23 have been influenced by the weather being colder than
24 what was anticipated?

25 MS. LOIS MORRISON: No, it was based

1 upon weather normalized volumes.

2 MR. LLOYD KUCZEK: Back - back when we
3 first launched these problems and when we placed the
4 hedges, that -- we put limits on how many customers
5 could subscribe, and so we actually turned some
6 customers down on a few occasions. So the extent that
7 there was an over-subscription, it was only to that
8 extent that we allowed it and it was a marginal amount
9 that was insignificant, so -- and -- and we didn't
10 allow the customers beyond that point to actually
11 subscribe.

12 MR. BOB PETERS: So in -- in trying to
13 understand why these losses have been to the level
14 they have been, the chairman hit on the first point.
15 And that was the hedges that occurred on volumes that
16 were unsubscribed has -- have ended up costing Centra
17 some money?

18 MR. BRENT SANDERSON: Yes, that's
19 correct, to the extent that gas prices continued to
20 fall significantly after the placement of those
21 hedges, resulting in a payable amount to the counter-
22 parties on those hedges. Had the converse occurred,
23 we would have been looking at an unsubscribed hedge
24 gain on those instruments.

25 MR. BOB PETERS: But as it was, there

1 were no customers for those volumes. But Centra had
2 already placed the hedge, so Centra had to write the
3 cheque on the day that those hedges matured or
4 crystalized to -- to the counter-party?

5 MR. BRENT SANDERSON: Yes, over the
6 term of the hedge there's monthly settlements on the
7 swap (phonetic) instruments that we place on behalf of
8 these offerings. And so there's a monthly settlement
9 amount based on the market index price versus the swap
10 price embedded in the hedge.

11 MR. BOB PETERS: Mr. Sanderson, did
12 Centra try to unwind those hedges early?

13 MR. BRENT SANDERSON: No, we did not.
14 At the -- at the -- after the conclusion of the
15 marketing period, when it became clear that there was
16 a certain amount of excess hedges, the issue that we
17 faced was we were already paying an onerous embedded
18 dealer margin for the initial placement of those
19 instruments, in some cases, thirty (30) times what you
20 would consider an economic embedded dealer margin
21 because of the small volumes that were involved.

22 And so to unwind those hedges, number
23 1, we would have been in a vulnerable position as an
24 unwinder given that the dealer community knew that we
25 were hedging -- holding hedges that we didn't need.

1 And to unwind them would probably result in us paying
2 again an even more onerous dealer margin to unwind
3 those instruments. And it couldn't have been foreseen
4 at the time, the future direction of prices after the
5 conclusion of those marketing periods.

6 And so that would have been, in a way,
7 speculative to have unwound them. And if prices
8 hadn't have fallen, we would have been left incurring
9 a loss just by virtue of the compounded dealer margins
10 that we would have been paying on the initial
11 placement and the unwinding of those hedges.

12 So the decision was made for the
13 initial periods, at least, not to unwind those hedges.
14 But after a number of periods of under-subscription of
15 the hedges we began to look at alternatives to the
16 placement of hedges in support of these offerings even
17 prior to the dealer community refusing to participate
18 in our hedge transaction sessions.

19 MR. BOB PETERS: And that's led to
20 Centra self-hedging it, if I can use that terminology?

21 MR. BRENT SANDERSON: Self-insurance.
22 Self-hedging, if you will. Yes, that's -- either --
23 either of those terms are workable.

24 MR. BOB PETERS: It's Centra's
25 chequebook either way?

1 MR. BRENT SANDERSON: It's our
2 objective to charge a premium at the outset to the
3 customers electing these products that are
4 commensurate with the risks that we are assuming on
5 their behalf and that, over time, will compensate
6 Centra for the risk that it is assuming on behalf of
7 customers.

8 MR. BOB PETERS: So the long-term goal
9 is to break even?

10 MR. BRENT SANDERSON: If we had
11 perfect foresight and were able to drive a premium
12 that would make us even, dollar for dollar, no gain,
13 no loss, that would be the premium we would employ at
14 the outset. On certain markets being what they are,
15 that's not possible.

16 MR. BOB PETERS: Mr. Sanderson, in
17 addition to the unsubscribed hedging impacts, the
18 program operating expense has also contributed to the
19 -- to the negative results financially for the fixed-
20 rate program?

21 MR. GREG BARNLUND: Indeed, there are
22 operating expenses to administering the fixed-rate
23 program, and those are reflected in these financial
24 statements.

25 MR. BOB PETERS: And again, what I see

1 on -- on page 129, Mr. Barnlund, is that the
2 cumulative total as of the end of March 31, 2012, is
3 that the program operating expenses were still in a
4 deficit position of seven hundred and forty-eight
5 thousand dollars (\$748,000)?

6 MR. GREG BARNLUND: Well, those are
7 the expenses certainly for the period -- that period
8 of time. I also note too that with each subsequent
9 year of the program, that the operating expense tended
10 to track downward over time.

11 MR. BOB PETERS: Does that reflect a
12 reduction in the staff EFT (phonetic) numbers in
13 respect of this program?

14 MR. GREG BARNLUND: Well, I'm not so
15 sure in terms of the EFT numbers, but it reflects a
16 general -- I guess, some increased deficiencies that
17 we've been able to obtain in terms of how we've
18 learned more and how we operate the program and -- and
19 some -- obviously some cost restraint measures in
20 terms of minimization of advertising expense and those
21 types of things.

22 MR. LLOYD KUCZEK: Yeah, we -- we
23 intentionally cut back on our marketing costs when the
24 price differential was so substantial, given that
25 there was very few customers interested. And that --

1 that kept us in the market, but -- in terms of
2 offering these prices and providing customers with a
3 benchmark price, and we tried to minimize our cost
4 while doing so.

5 MR. BOB PETERS: So how many staff or
6 EFT positions are -- are dedicated to this program,
7 Mr. Kuczek?

8 MR. LLOYD KUCZEK: There's nobody
9 working full-time on this. It's just a -- a part-time
10 job for a few individuals.

11 MR. BOB PETERS: And initially,
12 correct me if I'm wrong, Mr. Barnlund, but the theory
13 was these program costs were going to be recovered
14 over the volumes charged to the customers who
15 subscribed?

16 MR. GREG BARNLUND: That's our
17 intention.

18 MR. BOB PETERS: And that was the
19 intention since the inception, correct?

20 MR. GREG BARNLUND: That's correct.

21 MR. BOB PETERS: And what's happened
22 here to 4 is that there weren't as many volumes
23 subscribed and therefore the program costs have still
24 accumulated and haven't been fully -- fully amortized
25 or paid for?

1 MR. GREG BARNLUND: Well, I wouldn't
2 say that. The program costs that are occurring every
3 year, or operating expenses we occur -- that we incur,
4 unfortunately, as you noted the -- the customer uptake
5 and the amount of volume consumption has been lower
6 than what we would have expected. And so we have
7 lower revenues.

8 The only unrecovered costs we have are
9 really the initial startup costs that were to be
10 amortized over a five (5) year period. All the other
11 costs are, as any other operating expenses of the
12 Corporation, we -- we experience those every year and
13 we have revenues that we would be looking to offset
14 those expenses. But in the case of this program the
15 revenues were insufficient.

16 MR. LLOYD KUCZEK: Yeah, and to be
17 clear so that the Board understands, the -- the cost
18 that we determined for charging these -- charging for
19 these fixed price products involve two (2) components.
20 One (1) was that risk premium and the other was
21 program costs, so. We -- we knew we were going to
22 incur those costs as Mr. Barnlund suggested. They
23 were -- they would be recovered if you had the volumes
24 in place that were forecasted.

25 MR. BOB PETERS: All right. And we'll

1 come to some specifics of that in the next few
2 minutes, but just to bring this to the Board's greater
3 attention, in terms of Centra's application at Tab 40
4 in the second volume of the book of documents, on page
5 146, one (1) of the express requests for which you're
6 asking approval of this Board is to approve the change
7 to the rate-setting formula for the fixed-rate primary
8 gas service to self-insure the volumetric and market
9 price risk for each subsequent offering, correct?

10 MR. GREG BARNLUND: Yes, sir.

11 MR. BOB PETERS: So let's now turn to
12 that then, Mr. Barnlund. Does this new methodology
13 incorporate a more accurate forecast of Centra's gas
14 costs at Empress?

15 MR. GREG BARNLUND: Are you -- are you
16 talking about the self-insurance approval we're
17 seeking?

18 MR. BOB PETERS: Yes, specifically the
19 -- I just wanted to make sure the Board was aware of
20 the request and the application which does include the
21 self-insurance.

22 MR. GREG BARNLUND: Okay. I'm not
23 sure which -- sorry, you had a tab? Your reference,
24 sir, that I was just kind of wrestling with?

25 MR. BOB PETERS: I had drawn the

1 Board's attention back to Tab 40, 4-0, in the second
2 volume, but that was your application, Mr. Barnlund,
3 which -- which I'm sure you're very familiar.

4 MR. GREG BARNLUND: Yes, sorry.

5 MR. BOB PETERS: Just to indicate that
6 now we're going to talk about the specific approvals
7 that Centra is seeking to change the rate-setting
8 formula for this fixed-rate offering so that it can
9 self-insure the volumetric as well as the market price
10 risk for each subsequent offering that is made?

11 MR. GREG BARNLUND: Yes.

12 MR. BOB PETERS: Okay. And in terms
13 of the new methodology, do you want to describe
14 generally the methodology then?

15 MR. BRENT SANDERSON: With respect to
16 the underlying forecast of the weighted average cost
17 of gas associated with these offerings there -- the
18 proposed methodology involved some refinement relative
19 to the original methodology, because of the original
20 products involving a swap executed at the AECO
21 delivery hub.

22 For the sake of simplicity the
23 underlying weighted average cost of gas was assumed to
24 have been the swap price with the volumetric risk
25 premium added, because that was the price metric or

1 benchmark -- or basis of the rate.

2 Given that we are proposing to do away
3 with the use of hedge instruments we propose to add
4 the additional refinement of engaging in a detailed
5 forecast of the weighted average cost of gas
6 underlying each of the one (1) through five (5) year
7 product offering in the process of calculating the
8 requisite rates for each of those product offerings;
9 which involves not only taking the futures' price for
10 the requisite terms at the AECO delivery hub, but also
11 incorporating, to the best of our knowledge, at any
12 given point in time, the pricing formulas embedded in
13 our supply contracts from Western Canada, the
14 calculation of compressor fuel in the TransCanada
15 mainline from the Empress receipt point to the MDA,
16 which is a component of our default primary gas rate,
17 and the forecast effects of storage on our weighted
18 average cost of gas in each of the forward periods.

19 And that resulting weighted average
20 cost of gas for each term of offering is the rate --
21 the cost base to which we propose to apply the self-
22 insurance risk premium in arriving at the base rate to
23 which the program cost rate as it exists from time to
24 time will be added in arriving at the billed rates to
25 be offered to customers.

1 MR. BOB PETERS: Thank you, Mr.
2 Barnlund, for the detail. The -- I'm sorry, Mr.
3 Sanderson.

4 The -- what you've told the Board is
5 you've taken the way you used to determine what the
6 rate was going to be, based on your hedging products,
7 and now you've refined it to become more accurate to
8 include things like the AECO to Empress transportation
9 at or as well as the TCPL fuel charges and the -- the
10 related components?

11 MR. BRENT SANDERSON: As well as the
12 representative proportions of our purchases under a
13 base-load and swing component of our supply contract
14 as well.

15 MR. BOB PETERS: And you say you did
16 all of that then; you've added a risk premium on top
17 of that, correct?

18 MR. BRENT SANDERSON: That's correct.

19 MR. BOB PETERS: The old risk premium
20 was in the range of 5 percent and the new risk premium
21 that you're asking the Board to approve is in the
22 range of 8 percent, correct?

23 MR. BRENT SANDERSON: That's what
24 we've recommended, yes.

25 MR. BOB PETERS: And in Centra

1 determining that the 8 percent -- the 8 percent
2 premium was the one to go with, was Centra using
3 market prices and actual weather from the past eleven
4 (11) years?

5 MR. BRENT SANDERSON: Yes. Our market
6 simulation studies involved going back through each
7 offering period throughout that eleven (11) year
8 period, and structuring offerings based only on the
9 information that would have been available to us at
10 any of the given points in time, and the -- letting
11 the financial results of each subsequent offering in
12 each market trial to calculate and unfold on the basis
13 of actual market price conditions, actual weather,
14 actual consumption.

15 So incorporated all of the actual
16 conditions, both volumetric and market price-wise that
17 existed over that period.

18 MR. BOB PETERS: Mr. Sanderson, maybe
19 to -- to put a point on it, way back in Tab 7 on page
20 14 of the book of documents was a chart that showed
21 the Alberta monthly reference price as well as
22 Centra's primary-gas billed rate.

23 Do you --

24 MR. BRENT SANDERSON: Yes.

25 MR. BOB PETERS: -- recall that on

1 page 14 of Board counsel's book of documents?

2 My question precisely then to you, sir,
3 is: Were you using the red line information or the
4 blue line information when you were doing your -- your
5 analysis and your modelling to determine whether an 8
6 percent risk premium was the right number?

7 MR. BRENT SANDERSON: We were using
8 the red line, the Monthly Alberta Firm Market Index
9 price at AECO sev -- well, actually I should be -- I
10 should add this additional measure of clarification.
11 The financial results -- this is the foundation --
12 that was the foundation of the financial results, but
13 the financial results in our market trials under each
14 simulation were Centra's actual incurred weighted
15 average cost of gas. So, again, incorporating all of
16 our contract pricing terms and mechanisms and purchase
17 profiles that occurred throughout that entire period.

18 MR. BOB PETERS: But what you're
19 telling the Board now then is that you included
20 hedging in -- in your modelling to determine what the
21 -- those -- those prices were?

22

23 (BRIEF PAUSE)

24

25 MR. BRENT SANDERSON: Just had to

1 think about that for a second. No, we stripped out
2 the effect of our primary gas hedging program in
3 support of our default quarterly primary gas rate from
4 that weighted average cost of gas figures, to ensure
5 that that didn't contaminate our analysis, so that we
6 fully reflected the market volatility to which these
7 products would have been exposed in the absence of any
8 hedging activities.

9 MR. BOB PETERS: Okay. Thank you for
10 that clarification.

11 Now, on page 137, which is at Tab 37 of
12 Board counsel's book of documents marked as PUB
13 Exhibit 10, Centra has provided some graphs which show
14 the hypothetical outcomes from those historical
15 modellings, Mr. Sanderson?

16 MR. BRENT SANDERSON: Yes, the range
17 of the distribution of outcomes amongst the -- across
18 the various trials we ran for the full market
19 simulation of this scenario.

20 MR. BOB PETERS: Can you explain
21 briefly the -- the three (3) coloured lines?

22 MR. BRENT SANDERSON: The black line
23 in the middle was the mean, or average result, of all
24 of the simula -- all of the trials comprising the
25 simulation. And the upper-bound is the best case, if

1 you will. And the red line at the bottom is the worst
2 case of the entire time series.

3 MR. BOB PETERS: So if the Board
4 follows this result on page 137 of the book of
5 documents, and we'll -- we'll stay with the black
6 line, as you say that's the mean, the result of using
7 that would be less than a \$2 million loss in the early
8 years of the program?

9 MR. BRENT SANDERSON: Yes, the worst
10 case loss exper -- experience would have been reached
11 in late 2005, early 2006.

12 MR. BOB PETERS: And this modelling
13 that's done, and the outputs which are shown on page
14 137, it reflects a falling market for natural gas?

15 MR. BRENT SANDERSON: I'm sorry, could
16 you repeat the question?

17 MR. BOB PETERS: Well, the -- the
18 modelling that was done, and the information that you
19 used and we saw previously in terms of what the
20 Alberta monthly price was, there's generally been a
21 declining market since -- since you started doing the
22 analysis?

23 MR. BRENT SANDERSON: Well, I -- I
24 wouldn't --

25 MR. BOB PETERS: Well, since 2008?

1 MR. BRENT SANDERSON: Since -- since 2
2 -- since 2 -- prices began to fall, generally, in
3 2005, followed by -- there was a dramatic market event
4 in 2008 that was part of the general commodity price
5 bubble, if you will, that occurred globally in most
6 energy and materials commodities. But the decline in
7 price really accelerated after the summer of 2008.

8 But of the period that we modelled, the
9 May, 2000 through late 2005, early 2006 period, prices
10 were highly volatile and almost exclusively in an
11 upward direction over that period.

12 MR. BOB PETERS: Well, is the new
13 methodology robust enough to protect Centra's
14 ratepayers from adverse price movements -- movements
15 now, such as increases in prices?

16 MR. BRENT SANDERSON: Well, what I
17 would say is, is given the level of pricing today,
18 prices have further to rise than they do to fall. We
19 would -- I would say go -- in general terms we're in a
20 market today more akin to the one (1) in May, 2000, or
21 the period at which we started this modelling.

22 And while I don't believe that there's
23 any methodology or economic premium that we could
24 employ that would entirely insulate Centra from the
25 risk of loss, we feel that the way that this

1 methodology and an 8 percent premium performed during
2 that five (5) year period, from 2000 to 2005, of that
3 pronounced, sustained upward price volatility,
4 demonstrates that it is quite robust in terms of -- or
5 would have been quite robust in protecting the Utility
6 from massive adverse exposure, if you will, to losses
7 under a program like this.

8 And that we believe that the 8 percent
9 premium combined with the other supplemental measures
10 that we've identified in our application to act as
11 riverbanks, if you will, around the program to -- to
12 help to limit the runaway growth in losses. We feel
13 that we've struck a balance between reasonable level
14 of protection for the Utility against the short-term
15 risk of loss, while still making the products
16 available to customers at reasonable prices. And
17 those two (2) considerations have to be balanced.

18 MR. BOB PETERS: All right. But still
19 looking on the chart on page 137 at Tab 37, in -- in
20 the graphing of the risk margin distribution from '06
21 to '10, in the case of a rising market, Mr. Sanderson,
22 in that environment would the market -- would the
23 margin gains instead be margin losses?

24 MR. BRENT SANDERSON: I guess that was
25 the point I was trying to make in my earlier

1 statement, is that the period from May 2000 through
2 late 2005/2006 looks largely like a mirror image of
3 what occurred from 2005 through to the end of the
4 period that we studied. So it shows the -- this --
5 this distribution demonstrates the fact that it
6 provides a significant level of protection from, in a
7 rising market price environment, that is greater than
8 the participation that we would enjoy in a sustained
9 falling market price environment, which would be our
10 major concern.

11 MR. BOB PETERS: I'm interpreting your
12 answer, I'm not sure if the Board is likewise, Mr.
13 Sanderson, but if we look at page 137 in the chart we
14 see a point in time in '06 where it starts to -- the -
15 - it starts to rise, your -- your graph?

16 MR. BRENT SANDERSON: It does,
17 representing mar -- representing theoretical margin
18 gains we would have enjoyed on the program.

19 MR. BOB PETERS: And you're telling
20 the Board that we may consi -- or you may consider
21 yourself at the same point as you were in 2000 at this
22 point in time, so there's -- it's possible that the --
23 you'd see a repeat of the first half of the graph on
24 the second half of the graph if the -- if the prices
25 started to go up?

1 MR. BRENT SANDERSON: I'm sorry. If
2 you could just bear with me and repeat that statement.

3 MR. BOB PETERS: Well, I was just
4 trying to, and not -- obviously not very well, but in
5 terms of looking forward as to what -- what could
6 happen in terms of the market simulations you've done
7 is that instead of an upward trend in terms of the
8 margins, it would -- may be flatter if the -- if the
9 mar -- if the market turned against the consumers and
10 started increasing?

11 MR. BRENT SANDERSON: We would
12 conclude from the results of our studies that if we
13 were to experience a repeat of the five (5) years that
14 we experienced in the 2000 through 2005 period we
15 would see results starting from a point of zero, more
16 akin to what you see in the first or left-hand side of
17 that chart, than a downward sloping series of negative
18 results of the magnitude you see of the positive
19 results in the right-hand side of the chart.

20 So I think we agree.

21 MR. BOB PETERS: I've got your point.
22 Thank you. So -- so now what has to be determined,
23 and maybe only the market will determine it, Mr.
24 Sanderson, is whether or not the rates that are set
25 with this 8 percent risk premium are going to be

1 competitive enough to attract customers, correct?

2 MR. BRENT SANDERSON: And I guess
3 that'll have to be left to customers to decide.

4 MR. BOB PETERS: And -- and what are
5 going to -- what -- what are -- well, now the rate is
6 going to include a ri -- an increased risk premium,
7 correct?

8 MR. BRENT SANDERSON: Correct.

9 MR. BOB PETERS: There'll be new
10 transportation costs that will be added?

11 MR. BRENT SANDERSON: Well, I -- I
12 wouldn't exactly characterize them as increased
13 transportation costs in all cases, given the fact that
14 the AECO to Empress market basis differential is
15 currently trading negative, in the particular market
16 circumstance relative to our prior methodology of just
17 using our embedded swap price there would be a lower
18 embedded weighted average cost of gas. So
19 incorporating the pricing differentials from AECO to
20 the Alberta-Saskatchewan border actually brings the
21 underlying cost down relative to the AECO index today.

22 MR. BOB PETERS: Isn't that -- is it an
23 anomaly?

24 MR. BRENT SANDERSON: At one time, we
25 wouldn't have expected to see a sustained relationship

1 like that, but that has been a market circumstance
2 that's prevailed for some time now and has to do with
3 the value of liquids that are embedded in the natural
4 gas stream from production in Alberta.

5 And shippers are effectively paid to
6 move gas from AECO to the Alberta-Saskatchewan border
7 because of the high value of those liquids, which are
8 stripped off from the industry straddle plants at the
9 Alberta-Saskatchewan border before that gas leaves on
10 the transportat -- pipeline transportation system for
11 points east and south.

12 MR. BOB PETERS: Okay. And then, in
13 addition to the transportation costs, which you've now
14 indicated may end up actually lowering the WACoG,
15 there's -- new program costs are now higher that'll be
16 added to this -- to the offerings?

17 MR. BRENT SANDERSON: I wouldn't say
18 new program costs. There will be a program cost rate
19 applied over and above the self-insurance risk premium
20 as that rate is approved by this Board from time to
21 time. So we would only be looking to apply the
22 program cost rate based on the results of our cost
23 allocation study.

24 And I do believe that the rate that is
25 being proposed in this application is slightly higher

1 than the one that is currently being applied to these
2 products, but that is not a function of the proposal
3 regarding the self-insurance mechanism as such.

4 MR. BOB PETERS: Mr. Sanderson, back
5 on page 129, at Tab 34, I have a final area of
6 questions on this topic. You made a point previously
7 in one (1) of your answers to indicate that the
8 program operating expense was trending downwards. And
9 in fiscal -- as of March 31, 2012, we see the program
10 operating expense of a hundred and nine thousand
11 dollars (\$109,000) for that year.

12 Have I got that right?

13 MR. BRENT SANDERSON: That's correct.

14 MR. BOB PETERS: And, Mr. Barnlund,
15 let's just suppose this program is approved by the
16 Board and with the changes you're now suggesting, can
17 the Board conclude that if no customers subscribe for
18 any more volumes under the program, the maximum annual
19 loss will be tied to the approximate hundred and nine
20 thousand dollars (\$109,000) of program operating
21 expense in the year?

22 MR. GREG BARNLUND: No, I mean,
23 there's still some outstanding derivatives that would
24 have to be dealt with in terms of -- in those terms.
25 But the program costs themselves and the program cost

1 rate, I think probably there's more information that
2 Ms. Derksen would speak to because that is dealt with
3 in the cost allocation model and the rate design
4 process.

5 MR. LLOYD KUCZEK: But, Mr. Peters,
6 your point is valid and those costs will be
7 incremental and it'll be dependent on how aggressive
8 we are in terms of marketing the products. So aside
9 from the existing hedges in place and what might
10 happen there, the hundred thousand dollar range is not
11 necessarily a cap but it's what would be expected if
12 we're not expecting a significant uptake in the -- the
13 market.

14 MR. BOB PETERS: Thank you, Mr.
15 Kuczek. And I -- I think it's a good point Mr.
16 Barnlund made, and that is I was ignoring the
17 unsettled hedges which, of course, are -- are coming
18 due. But if we -- there is no more hedging going on
19 so these are -- these are legacy hedges, if that's a
20 word to describe them. And so the ongoing expense
21 will simply be the operating costs, is what -- is what
22 I was trying to get at.

23 MR. LLOYD KUCZEK: correct.

24 MR. BOB PETERS: All right.

25 MR. GREG BARNLUND: Maybe one (1)

1 correction or addition to that is that there would be
2 still an additional year's worth of amortization
3 expensed to the startup costs.

4 MR. BOB PETERS: Thank -- Thank you.

5 MS. MARILYN KAPITANY: Could I just
6 ask one (1) question of clarification?

7 In the forecast on page 54 where you
8 said the forecast number of customers for this
9 program, so the 486 in the SGS residential, the
10 thirty-five (35) in commercial, and the ninety-six
11 (96) in the large general service, were those
12 forecasts done using the assumption that the 8 percent
13 risk premium would be approved?

14 MS. LOIS MORRISON: No, those
15 forecasts are based on our 2012 volume forecast. Our
16 forecast is being updated and will be -- it's actually
17 being updated right now for the volume forecast for
18 2013 and it will show a substantial decline in our
19 forecast for participation under the fixed-rate
20 offering, reflecting the current pricing we're seeing
21 in the market today.

22 MS. MARILYN KAPITANY: Because I think
23 it would be interesting to see the table on page 129
24 with the forecast primary gas revenue that you would
25 see in there, based on the -- the forecast customers

1 that -- that you think will have uptake if the 8
2 percent was to be approved.

3

4 (BRIEF PAUSE)

5

6 MS. MARILYN KAPITANY: What I'm really
7 wondering is what is the projected bottom line for --
8 for this program if the 8 percent was to be approved?
9 Maybe -- I think that's probably what I should have
10 asked.

11 MR. BRENT SANDERSON: I'd just like to
12 make clear that the self-insurance proposal is in no
13 way considered by Centra to be a foolproof means of
14 protecting the Corporation from the risk of loss under
15 this program.

16 We feel that it strikes a sound balance
17 between the -- the risk that the Corporation is taking
18 on on behalf of customers, but there is still the risk
19 of loss associated with this if market prices go --
20 continually rise after the making of subsequent
21 offerings under this program. There is a risk of loss
22 and there's no way to avoid that engaging in the sale
23 of these products.

24 We did extensive work in the
25 development of the original program proposal and --

1 and literally we -- we left no stone unturned. And it
2 is just not possible to structure some theoretical
3 type of derivative instrument that completely
4 insulates the Corporation from the risk of loss under
5 these activities. It is just not possible.

6 So we feel it strikes a balance between
7 all of the competing considerations, but this program
8 may incur losses. We think that over time, with a
9 long-term presence in this market and its continuation
10 throughout up and down market cycles, it will be
11 fairly robust and self -- self-supporting. But in
12 interim periods there may be losses.

13 THE CHAIRPERSON: If you don't mind,
14 I'll have a few questions to ask about the hedging
15 program. That program ceased -- you ceased using that
16 program when?

17 MR. BRENT SANDERSON: You're talking
18 with respect to the fixed rate primary gas service
19 exclusively? In August, 2011, we approached the
20 market to place instruments in support of a November
21 1, 2011th -- '11 offering that we were preparing to
22 offer to customers.

23 We had give -- been given significant
24 indication leading up to that by our derivatives
25 counter-parties that they were not in the business of

1 entertaining such small volumes in derivative
2 transactions and that the day was rapidly approaching
3 where they would just cease to respond to our phone
4 calls. And in August 11 -- 2011, when we sought to
5 engage counterparties to quote us on instruments, only
6 one (1) counterparty was even prepared to take part.

7 And with all of the concerns over price
8 discovery and the size of the margins that we might
9 have been forced to pay dealing with one (1) counter-
10 party, and the fact that our derivatives hedging
11 policy for the program requires us to have a minimum
12 of three (3) live transactable quotes in order to
13 engage in transactions, from that point on we were no
14 longer able to entertain the idea of placing
15 derivatives for this program.

16 And our counterparties informed us, by
17 and large, that they would need to see a transaction
18 volume for each offering that would be equivalent to
19 the annual consumption of about two thousand (2,000)
20 residential homes to even want to engage in these
21 transactions in the future.

22 THE CHAIRPERSON: In terms of losses,
23 I'm assuming if gas prices go up even modestly, then
24 the size of the mark-to-market loss for unsettled
25 hedges will decline.

1 MR. BRENT SANDERSON: That is correct.
2 The -- the functional effect of the unsubscribed
3 hedges is -- has been that rather than insulating us
4 from market price movements it, for all intents and
5 purposes, leverages our exposure to those movements.
6 So when gas prices go down we incur bigger and bigger
7 losses on these unsubscribed hedges. If gas prices
8 rise, that loss becomes smaller and smaller and could
9 ultimately turn into a net gain over the remaining
10 life of these outstanding instruments.

11 THE CHAIRPERSON: So, make sure I
12 understand, so in anticipation of the contracts you
13 expected to sell to buyers, to residential customers
14 and others, you bought the futures positions?

15 MR. BRENT SANDERSON: I guess in
16 simple terms that's a good way to -- to conceptualize
17 it. But, no, we did not engage in futures market
18 transactions. What we purchased were average priced
19 fixed for floating swap instruments in the over the
20 counter market. So a custom-tailored swap instrument
21 structured to our needs by counterparties over the
22 phone. There is no standardized derivative instrument
23 on the market that we could have used to hedge these -
24 - these products.

25 THE CHAIRPERSON: But the effect of

1 that was to buy -- in effect, buy the futures. If
2 there was a swap it was based on the futures price?

3 MR. BRENT SANDERSON: Based on the
4 futures, and -- and as I said, plus an implicit margin
5 for the dealer structuring the instrument. And, as I
6 said, there's means by which after the execution of a
7 transaction we can reverse-engineer the futures price
8 out of our swap price at the time of the transaction
9 and get some fairly good intelligence on the margin
10 that the dealers were embedded -- embedding in these
11 products. And they were oftentimes quite significant.

12 THE CHAIRPERSON: So I -- my question
13 is, I'm intrigued as to why you would take a futures,
14 or the equivalent of a futures position, without
15 having sold the -- the physical contract to a
16 customer? You know, why did you anticipate the buying
17 of a -- or the entering into of a contract by a
18 residential customer, for example, and -- and buy the
19 futures, or take a -- a futures position? Why not do
20 it after the fact, in other words, wait for the
21 contract to be signed and then -- and then enter into
22 the futures positions?

23 MR. BRENT SANDERSON: Well, in the
24 market simulation studies that we had done with the
25 historical period available to us in developing the

1 original proposal, during those periods of often
2 astonishing market volatility there were periods
3 where, between the time we made the offering and then
4 had full discovery or transparency in terms of what
5 our exposure was in terms of sign-ups, there were
6 periods where the market had moved against us as much
7 as one (1), two dollars (\$2).

8 So to hedge after the fact would have
9 meant oftentimes going out to the market and locking
10 in a -- a two dollar (\$2) gigajoule loss or a three
11 dollar (\$3) gigajoule loss on a product, so it wa --
12 didn't work from that perspective.

13 THE CHAIRPERSON: A residential
14 customer that entered into a contract with Centra and
15 decided to cancel the contract left you exposed with
16 the future's market, right?

17 MR. BRENT SANDERSON: No, sir. For
18 customers who entered into contract with us for which
19 we placed underlying hedges in support of that
20 offering, to terminate that contract early involves a
21 calculation of the market-to-mark (sic) position of
22 the hedge associated with their particular offering
23 that is unsettled at the time they wish to unwind that
24 contract. Then they have to pay out the mark-to-
25 market position of that portion of the hedge

1 instrument placed in support of their particular
2 offering.

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: Mr. Sanderson, Board
6 member Kapitany, as well as the Chairman, had a
7 question related to the -- the losses in the current
8 program. And your -- your answer certainly, with
9 respect, had some qualifications in it that -- that
10 there can be -- there can be significant losses that
11 could result, ostensibly, if the market is more
12 volatile than your modelling presupposes, correct?

13 MR. BRENT SANDERSON: Volatility per
14 se is not necessarily bad. Sustained, continued,
15 unrelenting upward price volatility would be mu --
16 would be -- would be what would be of most concern to
17 us.

18 MR. BOB PETERS: Included in your
19 proposal before this Board you called them
20 "riverbanks". I think the evidence calls them
21 "triggers", or I do. The -- there are triggers that
22 are -- are thresholds at which point in time Centra
23 would come back before this Board to review the fixed
24 rate program.

25 Have I got that right?

1 MR. BRENT SANDERSON: Yes, not only
2 would we -- well, I should back up. The first order
3 of business would be to review the program, and if
4 remedial action is required we would address that
5 internally at the Corporation. And if it's deemed
6 desirable to take some remedial action, we would then
7 approach the Board to share those plans with the Board
8 and hopefully seek their approval to do so.

9 MR. BOB PETERS: All right. But what
10 would cause Centra to -- what would precipitate Centra
11 in doing those reviews if this program is approved and
12 -- by the Board, is that there are some threshold
13 points that Centra has built in to its internal
14 program to make sure that this program, I think you
15 said, doesn't run away on you?

16 MR. BRENT SANDERSON: That would be a
17 good way to describe it.

18 MR. BOB PETERS: And -- so let's go
19 through those threshold or those four (4) trigger
20 points that I've called them. And the first of which
21 is -- it's a based on annual sales in a particular gas
22 quarter.

23 MR. BRENT SANDERSON: Do you have a
24 reference that we could refer to, in terms of the
25 evidence?

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Mr. Sanderson, I did
4 not put that in my book of documents, but let me help
5 you with it this way. As I understood your evidence,
6 and you'll correct me if I'm wrong, is that if half of
7 1 percent of annual sales migrate to the fixed-rate
8 program in any one (1) gas quarter, that will cause
9 Centra to snap to attention to review this program?

10 MR. BRENT SANDERSON: Yes, sir.

11 MR. BOB PETERS: And -- and why do you
12 -- why does Centra pick a half of 1 percent as a
13 trigger, a threshold?

14 MR. BRENT SANDERSON: In terms of
15 quarterly migration to the program, the results of a
16 program like this are very much driven -- or can tend
17 to be driven by the extent to which the customers
18 who've subscribed to the offerings cluster on any
19 given one (1) set of offerings.

20 If you end up with, for example, 80
21 percent of your total market-share on the one (1)
22 offering that ultimately turns out to lose money,
23 that's not something that we would want to encourage,
24 because that exacerbates our exposure to market events
25 following one (1) period in time.

1 So it would be our desire to see, if --
2 if at all possible, to spread our customers temporally
3 throughout time so that they're more evenly
4 distributed, so that we can enjoy the diversification
5 benefits of all the various offsets throughout rising
6 and falling market prices and offering prices set at
7 different levels in different market conditions.

8 MR. BOB PETERS: Well, it -- it says a
9 half of 1 percent of annual sales would migrate to
10 this program. Compared to where you are now that's an
11 explosion. That's a -- that's a lot more customers
12 running up for this program, correct?

13 MR. BRENT SANDERSON: I think when we
14 introduced this program, I think we would have
15 originally thought that that's probably not something
16 outside the realm of possibility. But relative to
17 what we've experienced thus far, it's significantly
18 more than we've experienced in any one (1) gas
19 quarter. But we wanted to set that threshold at a lev
20 -- level sufficiently low, that if demand does
21 increase markedly in the future, that we're not caught
22 flatfooted, if you will, in that period of rapidly
23 rising customer demand without some limits on that
24 migration.

25 MR. BOB PETERS: Thank you. I think

1 your terminology's a bit softer than mine. The two
2 (2) and -- the second threshold that Centra is going
3 to embed in its program is that if 2 1/2 percent of
4 annual sales become enrolled in this fixed-rate
5 primary gas service that may have a cap of 5 percent,
6 that will also trigger a review?

7 MR. BRENT SANDERSON: We feel it would
8 be prudent to conduct an interim review of the program
9 and all other related exposures when we reach of a
10 level of par -- participation of that level. Even
11 though we envision accommodating customer demand up to
12 5 percent, we just feel it would represent sound
13 discipline to have a benchmark that would cause us to
14 do a comprehensive review of all aspects of the
15 program well before we're approaching that -- that
16 anticipated upper limit on participation.

17 MR. BOB PETERS: And then, in terms of
18 quantifying a threshold, if there's a million dollars
19 of -- of settled program losses, that will also
20 trigger the review by Centra?

21 MR. BRENT SANDERSON: Yes. And just
22 if I might add the clarification, that it's our
23 intention to calculate that million dollars only
24 including the offerings that were not placed with
25 hedges underlying them in support, to effectively

1 isolate the self-insurance approach to these
2 offerings.

3 MR. BOB PETERS: All right. So if I
4 turn back to page 129 of the book of documents -- I
5 was looking at the fiscal years -- and I -- I wa -- I
6 was -- I want you to explain to the Board, where does
7 this million dollars start getting added up from?
8 What's -- what's the start date?

9 And I'm hearing you say that it'll be
10 presumably after August 11th -- after August 2011 flow
11 dates?

12 MR. BRENT SANDERSON: For all
13 offerings, including and after November 1st, 2011/'12.

14 MR. BOB PETERS: And if cumulatively
15 those offerings result in a million dollars of program
16 losses, that will again trigger a review?

17 MR. BRENT SANDERSON: Yes, sir.

18 MR. BOB PETERS: And then there was
19 also a trigger for a million dollars related to
20 unsettled program losses, correct?

21 MR. BRENT SANDERSON: Yes.

22 MR. BOB PETERS: How do -- how do they
23 differ from settled losses to unsettled losses?

24 MR. BRENT SANDERSON: Well, the first
25 threshold that you described, these settled, is a

1 backward-looking measure, so it's money in the bank,
2 or otherwise -- or the converse as money bad, if you
3 will. And the unsettled mark-to-market is the
4 forward-looking measure, looking at our -- our
5 unsettled or forward-looking exposure based on our
6 book of products and the volumes that have yet to flow
7 under those offerings and market prices at the time.

8 MR. BOB PETERS: In the event, Mr.
9 Sanderson, of large settled or unsettled losses, what
10 can Centra do about that?

11 MR. BRENT SANDERSON: It will depend
12 on the circumstances at the time. When considering
13 all of the relevant factors associated with it, it is
14 hard to conclusively say what we -- what we would do.
15 But given that the self-insurance concept implies that
16 over time you would hope to accumulate some degree of
17 risk capital to cover off future potential losses,
18 just as a -- as just an example, if you were looking
19 at a \$1 million unsettled forward mark-to-market loss,
20 if you were fortunate enough to be sitting on a \$2
21 million accumulated gain from past settled results,
22 that -- when those two (2) factors are combined, a \$1
23 million forward unsettled mark-to-market loss may not
24 be as troublesome as it would be in another market
25 circumstance given that it's our goal to just cover

1 our costs over the long-term with these products.

2 Other action that we could take
3 depending on market circumstances, if I were to look
4 at the converse of the situation, if we were to be
5 reaching that \$1 million backward-looking settled
6 threshold limit, yet our forward-looking exposure was
7 in a net gain position, if the volumes were sufficient
8 in terms of that upcoming business that would allow us
9 to place an economic hedge, it may be an option for us
10 to go out now and with -- knowing with certainty what
11 our future business is under the program and the
12 descriptions (phonetic) thereunder, we may be able to
13 approach the market and place an economic hedge and
14 lock in that game. And -- which may be function
15 conceptually like resetting the program to zero.

16 There may be other options available to
17 us but I can't -- I can't foresee all of the possible
18 combinations of market circumstances that we might
19 encounter at the time that we reach one (1) of those
20 thresholds, which is why we intend to conduct a
21 comprehensive review and weigh all factors.

22 MR. BOB PETERS: I just want the Board
23 to be clear on: If any of these triggers are met,
24 they can be met to -- one (1) of them or in
25 combination a number of them, correct, that would be

1 cause the review?

2 MR. BRENT SANDERSON: That's possible.
3 It's always a possibility they could all converge
4 simultaneously. We may never hit any of them. We may
5 reach one (1) or another of them infrequently. It's
6 hard to say.

7 MR. BOB PETERS: And in that instance
8 is the Board going to be notified that the Utility is
9 having an internal review, or is it going to prompt
10 the Utility to come back before the Board to discuss
11 the future of that program?

12 MR. GREG BARNLUND: We would do some
13 initial, I guess, examination within the Corporation,
14 try and understand exactly what the situation is and
15 what our position was and then we would inform the
16 Public Utilities Board in due course.

17 MR. BOB PETERS: The last line of
18 questioning before I turn the microphone back to the
19 Chair and perhaps over to CAC --

20 THE CHAIRPERSON: Could I -- Mr.
21 Peters, before you move on to another topic, and I
22 assume you are -- are you moving on to -- or are you
23 staying with the fixed-price offering?

24 MR. BOB PETERS: I'm going to stay
25 with the fixed-price offering but a different issue.

1 Shall I continue?

2 THE CHAIRPERSON: I have some
3 questions --

4 MR. BOB PETERS: Okay.

5 THE CHAIRPERSON: -- I'd like to ask,
6 please.

7 The -- I suppose the question that --
8 that I'm asking is in terms of, you know, having
9 adequate protection for Centra in relation to the
10 contracts it enters into. I'm wondering -- you know,
11 I know the AECO futures prices don't go that far out,
12 and I -- you indicated, you know, five (5) year
13 contracts.

14 How do you establish the pricing in
15 respect of the longer term contracts? Are you using
16 the nearby prices as the basis for -- could you
17 explain that to me, please?

18 MR. BRENT SANDERSON: On the Natural
19 Gas Exchange, the AECO futures contract trades at
20 seventy-two (72) discrete months. So we have a
21 forward period that will allow us to incorporate a
22 discrete futures price monthly as far out as we intend
23 to offer these products.

24 THE CHAIRPERSON: And I suppose the
25 question is that -- you know, one (1) option that's

1 available to -- to Centra and this Board would be that
2 -- asking for more -- or thinking about more of a
3 protection to prevent losses on contracts entered in -
4 - into with -- with customers -- with residential
5 customers and so on.

6 MR. BRENT SANDERSON: I would not
7 purport that this is necessarily the optimal level to
8 set this -- this variable at, the self-insurance risk
9 premium. It, as I said, for Centra it balanced all
10 the competing considerations in an acceptable manner
11 to Centra. There -- there could be a differ -- there
12 could be a differing opinion as to what the right
13 level is for the Utility. We feel that it balances
14 these considerations to our satisfaction.

15 Directionally, I can tell you that the
16 higher the premium the more protection Centra enjoys
17 in offering these products. The lower the premium the
18 more risk we will be exposed to. So that -- that
19 directional relationship will hold.

20 THE CHAIRPERSON: Some -- some comment
21 made or at least some evidence provided that, you
22 know, the contracts price -- the contract price
23 offered by Centra are mirrored by independent brokers
24 that are going door-to-door. Fundamentally, there's
25 really no difference between your price offering verse

1 -- versus competing price offerings.

2 Did I get -- understand that correctly?

3 MR. BRENT SANDERSON: I would want to
4 be careful about implying that I have knowledge of why
5 marketer -- independent marketers charge what they do.
6 What I can say is -- observationally, is when Centra
7 entered this market it was clear that there was a
8 competitive response in that marketers' prices
9 converged very close to Centra's benchmark price, and
10 typically are just slightly less than Centra's
11 offering prices. So that's something that we did
12 observe in the marketplace. I -- you know, it -- it
13 may just be a curious coincidence, I really can't tell
14 you what brokers' motivation or marketers' motivation
15 was in doing so.

16 THE CHAIRPERSON: Now, looking to
17 other jurisdictions where such price-offerings are
18 available, I'm wondering how does your -- how do hun -
19 - Centra's contracts -- contract prices compare to
20 those? In other words, looking at Saskatchewan or
21 Ontario, competing jurisdictions, or nearby
22 jurisdictions, fixed-price contract offerings by
23 entities in those markets, how do they compare --
24 compared to Centra's? I -- I realize there are
25 differences, but I'm just wondering how -- how close

1 are we, or -- or can you look to those jurisdictions
2 as the models for what people are offering?

3 MR. BRENT SANDERSON: Are you
4 referring to third-party marketers offerings or
5 utility offerings?

6 THE CHAIRPERSON: Utility offerings.

7 MR. BRENT SANDERSON: It's very
8 unusual for a utility to be engaged in this line of
9 business, I can tell you that. I've had conversations
10 with a number of my colleagues across North America
11 and they are watching Manitoba intently as a model,
12 because typically it's outside the normal risk profile
13 of a regulated utility to engage in these product
14 offerings. So its -- to my knowledge, there is no
15 other regulated utilities, to my knowledge currently,
16 that are offering fixed-rate products to customers.

17 THE CHAIRPERSON: So let's go back to
18 the original question, in terms of how do your prices
19 compare to, say, the prices being offered to a -- a
20 customer in Saskatchewan by -- by a private entity on
21 the fixed-price offerings? And I'm just -- just
22 general terms.

23 MR. BRENT SANDERSON: I -- I would
24 have to take that as an undertaking. I don't have
25 that information at hand. If it helps, one (1) thing

1 I can tell you is we've studied the market for these
2 products in Manitoba quite intensely over time. And
3 with the knowledge of the underlying market, we are
4 able to discern the margin that these products would
5 have embedded into their prices before Centra's entry
6 into this market.

7 And, again, not purporting to know the
8 reasons why, but the margins that were charged on
9 these products in Manitoba prior to Centra's entering
10 the market, as a premium over the futures price at
11 each point in time, were much higher than they have
12 been since Centra's entry into the market.

13 Again, it -- it -- the timing is
14 consistent with our entry into the market. But if
15 we're looking for competitive offering prices in other
16 jurisdictions, I would have to take that as an
17 undertaking to gather that data.

18

19 (BRIEF PAUSE)

20

21 MR. BRENT SANDERSON: And -- and I
22 might also add an additional level of qualification.
23 Their products will differ amongst markets. It's --
24 it may be very difficult to find a directly comparable
25 product due to transportation differences, distances

1 from basins to markets, how the given commodity
2 product is structured in the market, what -- what is
3 included in that product; is it just commodities, is
4 it commodity in upstream transportation?

5 You tend to get these differences in
6 the rate mechanisms amongst jurisdictions, so just
7 price may not tell the entire story. Another
8 jurisdiction may feature higher prices, but they may
9 include other features that aren't inherent in our
10 products.

11 So it requires a lot of examination to
12 make sure that it's an apples-to-apples comparison,
13 because just something as simple as our quarterly rate
14 offering is not an easy metric to compare across
15 jurisdictions, because there's differences in most
16 jurisdictions' rate offerings in terms of what they
17 comprise.

18 MR. BOB PETERS: Mr. Sanderson, I
19 think through your counsel and Mr. Czarnecki, the
20 Board will accept that undertaking and -- and with --
21 and I recognize you have made some qualifications to
22 explain it better, but you can also repeat those in
23 the undertaking, if you would, through your counsel.

24 MR. BRENT CZARNECKI: Certainly, we'll
25 endeavour our best.

1 MR. BOB PETERS: Thank you for that.

2

3 --- UNDERTAKING NO. 4: Centra to indicate, in
4 general terms, how its
5 prices compare to the
6 prices being offered to a
7 customer in Saskatchewan
8 by a private entity on the
9 fixed-price offerings

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: The last issue that I
13 have for this panel, Mr. Chairman and Board members,
14 is to perhaps turn to the very last page of the book
15 of documents, which is a -- a good sign. And on the
16 very last page, 144, under Tab 39 of the book of the
17 documents, there's an extract from Board Order 156 of
18 '08 which was authored when, I believe, Mr. Mayer was
19 the Vice Chair of the Board, although he wasn't on
20 this panel. There's a paragraph, just second from the
21 bottom, and I'll read it. It says:

22 "Therefore, the Board requires
23 Centra to include its regulatory
24 costs, both the costs incurred to
25 date and anticipated future

1 regulatory costs, in its cost
2 allocation model. This will yield a
3 new PCR
4 rate], which Centra must submit to
5 the Board for approval."

6 I read that fairly accurately, Mr.
7 Kuczek?

8 MR. LLOYD KUCZEK: Yes, you did.

9 MR. BOB PETERS: And thank you, Mr.
10 Barnlund. Back on page 133 of the book of documents
11 under Tab 36, can you tell the Board, Mr. Barnlund, if
12 any regulatory costs are included in the program cost
13 rate that Centra is proposing for its fixed rate
14 primary gas service?

15 MR. GREG BARNLUND: It would be found
16 in two (2) places. One (1) would be in this -- I
17 think we could look to the schedule here on page 133.
18 When we look at our actual costs in the rate
19 department area, that would be regulatory costs that
20 are charged against those orders.

21 I'd have to check with Ms. Derksen in
22 terms of what's contained in the cost allocation model
23 for this year's budget. And that's maybe something we
24 could address next week

25 The other item is, of course, the

1 startup costs that are amortized into the program cost
2 rate. And those represent the regulatory costs that
3 were incurred upon startup of the program.

4 I'd have to say though that, generally
5 speaking, the regulatory costs associated with the
6 ongoing administration of the program are minimal.
7 The rate setting mechanism is quite efficient.
8 There's very, very little labour or -- or employee
9 time involved in the development of the various rates
10 for the price offerings and the submissions of those
11 to the PUB.

12 MR. BOB PETERS: Mr. Barnlund, I
13 gathered from your answer that under "rate
14 department," that's one (1) of the line items where
15 the regulatory cost would be captured in the normal
16 course?

17 MR. GREG BARNLUND: Yes, sir.

18 MR. BOB PETERS: And we -- we see that
19 for the '12/'13 budget it's budgeted at zero dollars?

20 MR. GREG BARNLUND: Yes, I see that.

21 MR. BOB PETERS: Recognizing it's a
22 budget, not actual, we also don't know what the
23 forecast or budget will be for the test year, do we?

24 MR. GREG BARNLUND: We don't. But
25 generally speaking, when we're budgeting overall for -

1 - for budgeting purposes for the Corporation, these
2 numbers are extremely small. And so, you know, I'm
3 not sure in terms of what would be contained in the
4 test year budget with respect to this.

5 MR. BOB PETERS: Ms. Derksen would be
6 the person to perhaps provide clarity to that?

7 MR. GREG BARNLUND: We should explore
8 that with her, yes.

9 MR. BOB PETERS: All right. And was
10 there another line item that I missed, Mr. Barnlund,
11 on this table that demonstrated that Centra was
12 seeking the recovery of its regulatory costs in its
13 program cost rate?

14 MR. GREG BARNLUND: Well, I was
15 referring to the amortization of the startup costs.
16 And that -- again, we could see more -- probably more
17 -- more explicitly when we deal with that matter with
18 Ms. Derksen.

19 MR. BOB PETERS: Well, on page 135 we
20 can see it expressly then if -- if I have your point,
21 that in the middle of the page there's a chart talking
22 about amortization of startup costs. It only goes up
23 until fiscal '12, but it looks like they're being
24 amortized at approximately a hundred thousand dollars
25 a year?

1 MR. GREG BARNLUND: Yes, that's
2 correct.

3 MR. BOB PETERS: All right. Thank
4 you.

5
6 (BRIEF PAUSE)

7
8 MR. BOB PETERS: Mr. Chairman, members
9 of the Board, I think I'll leave any further questions
10 I have with respect to whether regulatory costs, and
11 to what extent, are included in the fixed rate primary
12 gas program.

13 So with that I'd like to thank Mr.
14 Czarnecki, and specifically to his witnesses, Mr.
15 Barnlund, Ms. Stewart, Mr. Sanderson, Ms. Morrison,
16 and Mr. Kuczek. Those are my questions. And I thank
17 them for their answers.

18 THE CHAIRPERSON: I believe that --
19 are we going to be having another set of witnesses or
20 are we --

21 MR. BOB PETERS: We'll -- I suggest
22 that maybe we could take a short recess. And then Mr.
23 Meronek will have questions of this panel, Mr.
24 Chairman, in a restricted area, recognizing that his
25 questions related to DSM will come on Monday. So he

1 will have questions this afternoon with this panel
2 related to a couple of other areas.

3 So if we could take a ten (10) minute
4 recess, we could then turn it over to Mr. Meronek.

5 THE CHAIRPERSON: Let's take ten (10)
6 minutes. And we'll resume proceedings at 2:30.

7

8 --- Upon recessing at 2:18 p.m.

9 --- Upon resuming at 2:33 p.m.

10

11 MR. BOB PETERS: In discussing his
12 intentions -- or his intentions in terms of cross-
13 examination, it appeared that Ms. Morrison wouldn't be
14 a required witness this afternoon. And to that
15 extent, I indicated to Mr. Czarnecki that she could be
16 excused for this afternoon, although she will be back
17 front and centre on Monday when Mr. Meronek, on behalf
18 of CAC, deals with the DSM questions of his client.

19 THE CHAIRPERSON: Mr. Meronek...?

20

21 CROSS-EXAMINATION BY MR. BRIAN MERONEK:

22 MR. BRIAN MERONEK: Thank you, Mr.
23 Chairman, members of the Board. I'm going to restrict
24 my questions, except for a couple of short snappers,
25 to probably Mr. Sanderson and Ms. Stewart with respect

1 to the TCPL matter.

2 Although Mr. Peters in his usual
3 erudite and thorough fashion canvassed the topic. My
4 thrust is -- is to get as much advice from Centra as I
5 can with respect to what -- what is going to happen in
6 the future.

7 And so I want to pose my questions with
8 that in mind, bearing in mind that we're on the same
9 side in this, primarily because whatever Centra does
10 vis-a-vis TCPL is to our benefit.

11 So with that, just with respect to the
12 short snappers, Mr. Sanderson, dealing with the last
13 topic on the fixed price supply, if you could turn to
14 Mr. Peters' book at Tab 15, page 54.

15

16 (BRIEF PAUSE)

17

18 MR. BRIAN MERONEK: As -- as a
19 consumer advocate lawyer, you know, it's very much in
20 my client's interest to have competition. But as I
21 look at this schedule, they're pretty dismal figures,
22 aren't they, with respect to this whole fixed-price
23 offering?

24 Or do you have a comment on that?

25 MR. BRENT SANDERSON: Customers are

1 making their choice and to choose not to choose a
2 particular product is the customer's choice and I
3 won't take issue with the customer's choice.

4 MR. BRIAN MERONEK: But -- but in
5 terms of looking at the effectiveness of the program,
6 and -- and I'm not -- I -- I'm -- the jury is still
7 out on it, it's -- it's clear that from the halcyon
8 days in the mid-2000s, really the statistics bear out
9 a -- a real decline?

10 MR. BRENT SANDERSON: I'm not sure of
11 your intended meaning when you use the word 'halcyon'.
12

13 MR. BRIAN MERONEK: By comparison to
14 today.

15 MR. BRENT SANDERSON: I guess it
16 imparts a -- a judgment as to the desirability of a
17 large degree of customer participation on fixed-rate
18 products and I'm not prepared to agree or disagree
19 with you as to whether that's a good thing or a bad
20 thing in and of itself.

21 MR. LLOYD KUCZEK: Maybe I can add
22 some comments to that because to really understand
23 this and -- and whether it's successful or not, one
24 (1) has to go back to the hearing that we -- we had
25 where we discussed the landscape in the natural gas

1 market and the issue of having retail brokers there
2 and what was the rationale for the Board ordering us
3 to offer fixed-price products.

4 And so from that respect I think the
5 program was successful in terms of providing customers
6 with a -- an option from Centra Gas, another option.
7 Having said that, one (1) of the brokers did leave the
8 province, so the comp -- the level of competition went
9 down from that respect.

10 But there -- there was -- there was
11 some concern about how the market was operating back
12 at that time. And I think where we are today is
13 customers are probably better off, but part of that --
14 part of the issue back then and -- and it was the --
15 you know, when we did the customer survey -- I don't
16 recall the exact numbers, but I think it was around 50
17 percent of the customers didn't even know they were
18 signed up with a broker.

19 So there was an issue of education and
20 customers knowing what they were doing and the
21 marketing practices that were going on. So since that
22 time to where we are today I think the market has
23 improved.

24 And then there's the question of where
25 do we go in the future given the current situation, I

1 guess.

2 MR. BRIAN MERONEK: I wasn't trying to
3 fix you with a position, but I just thought you might
4 have some observations and comments. You just hear in
5 other markets whereby the business of marketers in
6 these offerings is going down and I just wanted to
7 know whether you had any observations as to whether
8 that seemed to be consistent in Manitoba, and it
9 appears to be?

10 MR. LLOYD KUCZEK: Yeah, I -- I think
11 it's consistent. I think what was happening in 2000 -
12 - 2010 or 2008, the -- the market for natural gas was
13 very volatile, so there was -- there was certainly
14 more interest, from the customer's perspective, to
15 lock in their -- the prices.

16 But there was also the overlaying
17 factor of the market practices that were taking place
18 at that time.

19 MR. BRIAN MERONEK: The other short
20 snapper is with respect to the ConocoPhillips
21 contract. And, Mr. Sanderson, you shared with the
22 Board earlier today that there was -- there were -- a
23 negative transportation cost from AECO to Empress?

24 MR. BRENT SANDERSON: Yes, the market
25 price at Empress is lower than the market price at

1 AECO.

2 MR. BRIAN MERONEK: And -- and without
3 sharing any market confidential sensitive mater --
4 confidential material, is that reflected in the
5 ConocoPhillips contract?

6 MR. BRENT SANDERSON: I don't believe
7 I'm at liberty to reveal the specific pricing terms of
8 our Conoco agreement.

9 MR. BRIAN MERONEK: No, I'm not asking
10 for the specific terms but, directionally, is that --
11 I -- has that been captured? You know that it was a
12 concern that CAC had in the last contract. Has that
13 been dealt with in some way, shape, or form in the new
14 contract?

15

16 (BRIEF PAUSE)

17

18 MR. BRENT SANDERSON: If you'll just
19 give us a moment, please, Mr. Meronek.

20

21 (BRIEF PAUSE)

22

23 MR. BRENT SANDERSON: Our current
24 ConocoPhillips agreement does give us the benefit of
25 that negative transporta -- or basis differential.

1 MR. BRIAN MERONEK: Great. I just
2 didn't want to have to sign a confidentiality
3 agreement. Just, okay, into the main topic --

4 THE CHAIRPERSON: Would you mind --
5 Mr. Mero -- Mr. Meronek, could I just dip in here
6 because I would like to understand what you just
7 described simply because I'm trying to understand.

8 So you said with -- lower at Empress
9 than at AECO, when logic would normally come to the
10 conclusion it should be higher, right. I mean -- and
11 what is going on? Like what -- from your perspective,
12 what's going on?

13 MR. BRENT SANDERSON: All things being
14 equal, you should assume that the further you move gas
15 away from a production basin the more expensive it
16 should get. But the fact is, is that intra-Alberta
17 gas that's coming off the production fields is not
18 transportation pipeline spec. It can't go -- that
19 gas, at the quality it's at with the relative level of
20 liquids it's at, cannot be moved on the TransCanada
21 Pipeline, that heat content.

22 There's certain tariff parameters on
23 that pipeline that require the heating content of the
24 gas to be within certain parameters. The heating
25 value of that gas is much higher because there's

1 ethane, butane, propane, isobutane in varying amounts
2 in that natural gas stream other than just the methane
3 or natural gas.

4 There are industrial facilities very
5 near to the Alberta-Saskatchewan border that strip
6 those heavier ends, or what are known as 'natural gas
7 liquids', off of the stream of gas coming from the
8 Alberta production basin to -- number 1, to get that
9 gas down to pipeline specs so that it can move out of
10 the province on the various transportation pipeline
11 systems.

12 And in addition, those liquids have
13 much higher market value than the natural gas itself
14 because they're used to make va -- high value
15 products, like plastics and polymers and so forth in
16 the chemicals and plastics industry. And so that's
17 why those are stripped off.

18 So given the fact that they're more
19 valuable than the natural gas itself, anyone who holds
20 gas or is moving gas between AECO and that
21 transportation pipeline system, they effectively get a
22 piece of the value of the liquids in that gas stream
23 in return for moving that gas through those straddle
24 plants.

25 So there's some value to be shared

1 there between shippers and those industrial
2 facilities. And that is why the market price is lower
3 at Empress than it is at AECO, because whoever is
4 shipping gas or buying and selling at market price,
5 the buyers and sellers, in all of their transaction
6 activity give rise to a portion of that value being
7 given to the buyers at Empress.

8 THE CHAIRPERSON: Thank you.

9

10 CONTINUED BY MR. BRIAN MERONEK:

11 MR. BRIAN MERONEK: So, directionally,
12 that -- that's another positive component to this new
13 contract that didn't exist in the old contract?

14 MS. LORI STEWART: The other factor
15 that's giving --

16 MR. BRIAN MERONEK: Can I get an
17 answer to like the question? I -- I -- it's a
18 positive factor that -- for the -- for Centra and the
19 ratepayers for the new contract vis-a-vis the old
20 contract, by virtue of being able to take advantage of
21 -- of this value?

22 MS. LORI STEWART: Comparing the two
23 (2) contracts in isolation, yes. Yes. I -- I want to
24 go back to answer Mr. Gosselin's question with regard
25 to the value of liquids.

1 The other factor that's at play is the
2 declining throughput on the main line. So you have
3 fixed stripping capacity at the Alberta-Saskatchewan
4 border, yet the amount of gas flowing on the main line
5 through those stripping plants is declining
6 dramatically.

7 Long-haul flows have declined on the --
8 on the Canadian main line by 70 percent. So now
9 you're stripping plant and the amount of gas coming
10 through is not always adequate to make use of your
11 industrial facility, so you're incented to share of
12 more your margins with shippers who are prepared to
13 move gas through that plant.

14 So it's multi-faceted. It's the oil
15 price differentials giving rise to increased liquids
16 value, at the same time, compounded by declining
17 throughput of gas. So the stripping plants are
18 competing for every molecule to move through their
19 facility versus their neighbour facility. If that
20 makes sense?

21 THE CHAIRPERSON: So to follow up on
22 Mr. Meronek's line of questioning, you know, the --
23 the contract is structured in such a way to capture
24 that increased premium going forward?

25 MS. LORI STEWART: That's correct.

1 And it -- it's positive for Centra in that we are
2 capturing that value. It's negative for Centra from
3 the perspective of the main line being -- having major
4 challenges ahead of it as a result of declining
5 throughput.

6

7 CONTINUED BY MR. BRIAN MERONEK:

8 MR. BRIAN MERONEK: That's a good
9 segue into -- excuse me, the TCPL decision of the
10 National Energy Board RH-003 of 2011. At -- at 30,000
11 feet, I take it from your evidence and certainly the
12 Information Request responses, that there were some
13 positives and there were some negatives to the recent
14 decision?

15 MS. LORI STEWART: Yes, that's
16 correct.

17 MR. BRIAN MERONEK: And on the -- the
18 positive side was the fact that the fixed
19 transportation tolls have decreased in the MDA by
20 about fourteen (14) cents?

21 MS. LORI STEWART: That's correct.

22 MR. BRIAN MERONEK: And the other
23 positive is that there's certainty in those tolls for
24 -- until 2017?

25 MS. LORI STEWART: In the event that

1 TransCanada's throughput forecast is realized. So
2 recognizing that there are -- are off-ramps defined in
3 the decision in the event that throughput does not
4 materialize as per forecast.

5 MR. BRIAN MERONEK: And to the extent
6 that there are positive cost consequences to Centra,
7 and therefore the ratepayers, that net cost impact is
8 uncertain at this point in time because there are
9 several components to the decision, correct?

10 MS. LORI STEWART: Yes. So the toll
11 is going down, yet Centra will likely need to hold
12 more annual firm transportation and the question is
13 the extent to which it's able to mitigate its
14 unutilized demand charges associated with that firm
15 annual capacity.

16 MR. BRIAN MERONEK: Right. And that's
17 one (1) of the reasons why Centra is hedging its bets
18 at this point in time in terms of whether to -- well,
19 they're not hedging -- you're not hedging your bets.
20 You don't want to make any changes to this application
21 because you just -- it's just uncertain?

22 MS. LORI STEWART: That's correct.

23 MR. BRIAN MERONEK: Now, on the
24 negative side, the pricing of interruptible service
25 and short-term firm transportation is not favourable

1 to Centra.

2 MS. LORI STEWART: TransCanada's
3 discretion and the manner in which it intends, or we
4 understand it intends, to use that discretion, will
5 not be favourable for Centra.

6 MR. BRIAN MERONEK: And, as a matter
7 of fact, Centra argued that what TCPL was trying to do
8 was discriminatory and also not just and reasonable in
9 terms of rates?

10 MS. LORI STEWART: That's correct.

11 MR. BRIAN MERONEK: And what that'll
12 do, in combination with other things that we'll talk
13 about is -- and you've -- you've already admitted that
14 it -- it'll drive Centra back to securing more firm
15 transportation?

16 MS. LORI STEWART: That -- that's my
17 expectation at this point, yes.

18 MR. BRIAN MERONEK: Whereas previously
19 the -- the initiative of Centra was to reduce the firm
20 transportation and use other -- other weapons in your
21 arsenal to -- to secure supply?

22 MS. LORI STEWART: Yes, recognizing
23 that one (1) of the major drivers for us looking to
24 really carve back our firm capacity was, of course,
25 the absolute price for that capacity, which had

1 increased materially.

2 MR. BRIAN MERONEK: Right. And --
3 and, as I understand it, really TCPL's got unfettered
4 discretion now, full discretion to charge whatever it
5 wants for interruptable transportation STFT, save and
6 except for the fact that they -- they can't go below
7 FT tolls for STFT?

8 MS. LORI STEWART: That's correct.

9 MR. BRIAN MERONEK: But there's just -
10 - there's no upward limit. I mean, in a -- in a
11 ludicrous situation, they could charge four hundred
12 dollars (\$400) a GJ if they wanted to?

13 MS. LORI STEWART: That's correct.

14 MR. BRIAN MERONEK: And TCPL would
15 have incentive to charge a higher amount in order to
16 force shippers to get back into more FT service?

17 MS. LORI STEWART: That's correct.
18 The decision is fairly clear that the National Energy
19 Board views that shippers have access to another
20 option. And that option is firm transportation or the
21 recourse rate.

22 MR. BRIAN MERONEK: And one (1) of the
23 other problems is with respect to IT service, with
24 respect to Centra, is that because it can be -- it --
25 because it's priced a day or two (2) in advance, there

1 could be radical price changes in a short time period
2 with respect to IT service, correct?

3 MS. LORI STEWART: The IT bid floor
4 will be set four (4) times for each gas day. So at
5 each of the nomination windows the price may change on
6 the IT bid floors.

7 MR. BRIAN MERONEK: And -- and,
8 hypothetically, radically change?

9 MS. LORI STEWART: That could be the
10 case.

11 MR. BRIAN MERONEK: And with the STFT
12 service, does TCPL have the ability to withhold that
13 service for any particular period of time, a week, or
14 a month, or a season?

15 MS. LORI STEWART: I expect that will
16 be a discussion at the upcoming hearing. I believe
17 TransCanada -- it's TransCanada's belief that it can
18 and it intends to withhold STFT blocks on certain
19 paths. However, I believe that will be disputed, or
20 at -- at minimum, discussed.

21 MR. BRIAN MERONEK: And -- and I would
22 assume that Centra would oppose that kind of position
23 if it's advanced by TCPL? Philosophically, I mean.
24 I'm not trying to fix you to a position but it -- it
25 seems intuitive that withholding that service for

1 periods of time wouldn't be to the benefit of a
2 shipper.

3 MS. LORI STEWART: I'll agree with you
4 philosophically, yes.

5 MR. BRIAN MERONEK: The -- the other
6 thing is the -- one (1) of the other problems,
7 negative sides that were discussed, was the
8 elimination of FT-RAM service that Centra used
9 extensively, correct?

10 MS. LORI STEWART: That's correct.

11 MR. BRIAN MERONEK: And I think the
12 evidence shows that in terms of the capacity
13 management recovery for unutilized demand capacity, in
14 2011/2012 that was about \$5 million?

15 MS. LORI STEWART: 4.9 million, yes.

16 MR. BRIAN MERONEK: So again, that's a
17 severe handicap in Centra's flexibility plans?

18 MS. LORI STEWART: In our plans to
19 attempt to recover fixed costs, yes.

20 MR. BRIAN MERONEK: Now, on the
21 positive side, with respect to tolls, I just want to
22 get an order of magnitude. And none of these numbers
23 are absolute but I just want to get an idea as to the
24 -- what we're talking about and put some shape to
25 this.

1 In terms of the fixed transportation
2 presently forecast, it's -- from Empress to MDA it's
3 approximately 91,000 GJs per day?

4 MS. LORI STEWART: Yes, 90,000 GJs per
5 day to the MDA, and 1,200 GJs a day to the SSDA.

6 MR. BRIAN MERONEK: Right. And on an
7 annual basis if you took the fourteen (14) cent
8 differential on an annual basis that would be roughly
9 \$4 million? Subject to --

10 MS. LORI STEWART: Subject to --

11 MR. BRIAN MERONEK: -- arithmetic.

12 MS. LORI STEWART: -- check.

13 MR. BRIAN MERONEK: But as Mr.
14 Sanderson has pointed out, the Emerson MDA tolls have
15 gone up somewhat?

16 MS. LORI STEWART: To a small degree,
17 yes.

18 MR. BRIAN MERONEK: What about the
19 storage transportation tolls, are they affected?

20 MS. LORI STEWART: They are. The STS
21 toll is also increasing marginally.

22 MR. BRIAN MERONEK: So that would be a
23 -- that would have to be reduced from the 4 mil -- \$4
24 million?

25 MS. LORI STEWART: That's correct.

1 MR. BRIAN MERONEK: Now the tolls are
2 in effect commencing July 1, 2013, correct?

3 MS. LORI STEWART: Yes.

4 MR. BRIAN MERONEK: Is there any back-
5 dating to that? In other words, is there going to be
6 a reflection of the full year or are the rates
7 effective as of that date?

8 MS. LORI STEWART: The rates are
9 effective as of that date.

10 MR. BRIAN MERONEK: The -- there were
11 interim rates in place for a couple of years, correct?

12 MS. LORI STEWART: That's correct.

13 MR. BRIAN MERONEK: So do those
14 interim rates become finalized at -- at the then-
15 existing toll?

16 MS. LORI STEWART: That's my
17 understanding, yes.

18 THE CHAIRPERSON: Ms. Stewart, could
19 you enlighten me about the Emerson MD or out -- in
20 other words, is it open to -- to Centra to use that as
21 an alternative source for gas? Say, for example, the
22 -- the IT, SF -- T tolls increased dramatically, is it
23 open to Centra to -- to pull gas from via the Emerson
24 route?

25 MS. LORI STEWART: In the event that

1 we have firm capacity and you -- you may or may not
2 recall that we currently hold 21,000 GJs per day of
3 annual firm capacity from Emerson to the Manitoba
4 delivery area. However, if we were going to use it as
5 an alternative, and as you suggested, if there is high
6 prices for IT or STFT services on any portion of the
7 main line, including from Emerson to the MDA, then
8 that would necessitate us putting additional firm
9 capacity in place between Emerson and the MDA.

10 The other question is what -- at what
11 hub are you buying the actual commodity to move on
12 that transportation path. And it is an option today
13 to purchase gas at Emerson. However, we'll want to
14 keep an eye on liquidity at that point. And that will
15 be a function of all of these changes that are coming
16 into the marketplace effective July the 1st, as well
17 as observing how TransCanada will deploy its -- its
18 discretion in pricing. So there are a lot of things
19 to keep an eye on in the market and, in particular, at
20 the point of Emerson in the short-term, to help inform
21 our decision about what volatility of commodity
22 pricing might we see at that point.

23 THE CHAIRPERSON: Now, the toll south
24 of the border are already regulated by this -- at the
25 state level, aren't they -- on that line up to the --

1 up to Emerson point is regulated by the US state,
2 isn't it?

3 MS. LORI STEWART: It's actually a
4 federal entity. The Federal Energy Regulatory
5 Commission, or the FERC, regulates pipeline tolls --
6 or interstate pipeline tolls within the United States.
7 So up until Emerson, yes, our -- our pipeline --
8 pipeline tolls are -- are regulated by the FERC. And
9 then, of course, once we get into our -- our
10 transition to the Canadian side of the border, then
11 the National Energy Board has jurisdiction.

12 THE CHAIRPERSON: And what's happening
13 to those tolls in relation to the TCPL mainline tolls?

14 MS. LORI STEWART: Our US
15 transportation tolls are fixed up until 2020. That
16 was -- we -- we negotiated discounted rates in that
17 suite of -- of US transportation and storage assets.
18 And those pipeline tolls are fixed as a result of the
19 discounts that we entered into.

20 I would comment, however, that,
21 generally speaking, there is upward pressure in
22 particular on tolls on the Great Lakes Gas
23 transmission pipeline. We won't -- won't be subject
24 to any toll increases on that pipeline as a result of
25 our contracts that take us to 2020. However, maximum

1 tariff ratepayers on that pipe, there is more risk
2 that tolls will increase on it at present than that
3 they would decline.

4 THE CHAIRPERSON: I was wondering
5 about the toll between Emerson and Winnipeg.

6 MS. LORI STEWART: The toll between
7 Emerson and the Manitoba delivery area is -- is --
8 that's a part of the Canadian mainline system, and it
9 is regulated by the NEB. And it -- you know, it is
10 subject to this NEB decision.

11

12 CONTINUED BY MR. BRIAN MERONEK:

13 MR. BRIAN MERONEK: That's the four
14 (4) -- four (4) -- four dollars and forty-two (\$4.42)
15 cents to four dollars and eighty-four (\$4.84) cents
16 that you talked about, Mr. Sanderson?

17 MS. LORI STEWART: You've almost got
18 it right.

19 MR. BRIAN MERONEK: I'll take that.

20 MS. LORI STEWART: So the current
21 Emerson to MDA toll is four dollars and forty-eight
22 (\$4.48) cents per month, and it's increasing to --
23 effective July the 1st, 2013, to four dollars and
24 eighty-two (\$4.82) cents per month.

25 MR. BRIAN MERONEK: All right. I was

1 a bit dyslexic there, but that's okay.

2 So, just to follow the chair's
3 comments, there -- there isn't really much room for
4 amelioration in terms of firm transportation coming
5 from the States to offset the firm transportation
6 issue coming from TCPL unless -- unless there was
7 another source of supply?

8 MS. LORI STEWART: It depends on one's
9 risk appetite for purchasing gas at Emerson. And
10 that's a question mark right now.

11 MR. BRIAN MERONEK: And it's a
12 question mark now because you really don't know how
13 the market's going to be able to react as a result of
14 all of the implications of this decision?

15 MS. LORI STEWART: That's correct.

16 MR. BRIAN MERONEK: Just in terms of
17 the worst-case scenario, the peak day requirements of
18 -- of Centra are forecast at 466,400 GJs per day?

19 MS. LORI STEWART: That's correct.

20 MR. BRIAN MERONEK: And as we've
21 discussed, the -- the firm deliverability from Emerson
22 is about 236,000 GJs per day?

23 MS. LORI STEWART: That's correct.

24 MR. BRIAN MERONEK: So that would
25 leave a peak requirement leftover of, for the sake of

1 argument, 230,000 GJs per day?

2 MS. LORI STEWART: That's correct.

3 MR. BRIAN MERONEK: And with the firm
4 transportation from Empress to MDA of ninety-one
5 thousand two hundred (91,200), there's roughly an
6 uncovered balance of peak requirement of 140,000 GJs
7 per day?

8 MS. LORI STEWART: That's correct.

9 MR. BRIAN MERONEK: So if you were
10 forced back to firm transportation for that, you would
11 -- that would be at fifty-four (54) cents times three
12 hundred and sixty-five (365) days, or roughly \$27
13 million, worst-case scenario?

14 MS. LORI STEWART: That's correct.

15 MR. BRIAN MERONEK: But you would be -
16 - then you wouldn't be using the short-term firm
17 transportation which you forecast at 88,000 GJs per
18 day, which I think in your filing is about 11 million
19 -- \$11 1/2 million?

20 MS. LORI STEWART: It would be one (1)
21 or the other right --

22 MR. BRIAN MERONEK: So if you -- if
23 you had to go back to firm transportation entirely,
24 that cost would -- you would deduct \$11.5 million from
25 that -- for the STFT service?

1 MS. LORI STEWART: I'm taking all of
2 your arithmetic subject to check, but yes.

3 MR. BRIAN MERONEK: You don't even
4 have to do that. I'm just trying to get an order of
5 magnitude.

6 So roughly in an order of magnitude
7 we'd be looking at probably a \$16 million, roughly,
8 hit to the consumer if you were forced back to firm
9 transportation and didn't have any other options?

10 MS. LORI STEWART: Yes. I think for
11 the Board's sake it's -- it's important for -- for you
12 to understand what the other options are currently.
13 We've talked about how STFT may not be an economic
14 option for Centra going forward. However, the Emerson
15 to MDA path is an option.

16 And, as well, we currently avail
17 ourselves of peaking delivered services which are a
18 supplemental gas component to the tune of
19 approximately 50,000 GJs per day in the winter and up
20 to 100,000 GJs per day of peaking in our shoulder
21 months. It's a good bookend for Mr. Meronek to talk
22 about the worst case because we are sitting here today
23 not knowing how our peaking delivered services will be
24 -- will be priced.

25 I think that it's safe to say that they

1 will be available. The question is at what price will
2 they be available, and will they be significantly more
3 expensive than what Centra has been able to secure
4 them for historically? And this is one (1) of the
5 topic areas that we're -- we're interested in in this
6 time of flux in the market as a result of the NEB's
7 decision.

8 MR. BRIAN MERONEK: One (1) of the
9 issues is -- that's been resolved are the tolls, but
10 as you advised the Board, through Mr. Peters'
11 questions, TCPL has taken another kick at the cat in
12 terms of some of the -- the tariff issues, correct?

13 MS. LORI STEWART: Yes, that's
14 correct.

15 MR. BRIAN MERONEK: And one (1) of the
16 issues that is going to be advanced before the NEB in
17 September is the elimination of out-of-path
18 diversions, which is (sic) successful, would take
19 another weapon in the arsenal of Centra, correct?

20 MS. LORI STEWART: That's correct.

21 MR. BRIAN MERONEK: And I take it that
22 Centra will be opposing that -- that application on
23 that -- for that particular item?

24 MS. LORI STEWART: That's correct.

25 MR. BRIAN MERONEK: The -- the other

1 thing that you mentioned was the issue of the renewal
2 provisions. And you articulated what they were, but I
3 didn't get the -- and I may have missed it -- I didn't
4 get the -- the position of Centra as to whether it
5 would be opposing that particular aspect as well.

6 MS. LORI STEWART: We haven't
7 concluded our position on that matter, Mr. Meronek.

8 MR. BRIAN MERONEK: Intuitively,
9 wouldn't -- wouldn't you be opposed to it? Why would
10 you want to be locked into a ten (10) to fifteen (15)
11 year renewal? Just intuitively.

12 MS. LORI STEWART: We're aware of
13 situations on the mainline where the pipeline invested
14 in plant then to have its customer go away. And in
15 that situation the investment is left to be recovered
16 by those shippers who are continuing to ship on the
17 pipeline. So it's -- it's a question of balance,
18 right?

19 I think that if Centra had its
20 druthers, for certain I'd prefer to only have to
21 commit to one (1) year of capacity. However, on
22 balance, given all of the -- the various competing
23 objectives and the need for this pipeline to be
24 economically viable in the long term, it -- it means
25 that we need to look at that issue from -- from a

1 higher level.

2 MR. BRIAN MERONEK: But isn't that
3 TCPL's problem to convince the NEB?

4 MS. LORI STEWART: Perhaps.

5 MR. BRIAN MERONEK: Now, you talk --
6 you talked about another option, and that was a
7 delivered service. And presently forecast in this
8 application is 25,000 GJs per day of delivered service
9 above forecast?

10

11 (BRIEF PAUSE)

12

13 MS. LORI STEWART: I think I'd have to
14 review your reference point, Mr. Meronek.

15 MR. BRIAN MERONEK: I was just looking
16 at Tab 10, page 9 of the application.

17

18 (BRIEF PAUSE)

19

20 MS. LORI STEWART: In the month -- in
21 the months that were -- in the months in which we may
22 experience a peak day, this past winter, the winter of
23 2012/'13, we did have 25,000 GJs per day of delivered
24 service come into the market. That, of course, is
25 distinct from the peaking delivered services that we

1 also have in play.

2 MR. BRIAN MERONEK: Okay. Thank you
3 for that distinction. But, regardless, delivered
4 services come from marketers, correct?

5 MS. LORI STEWART: Marketers or
6 marketers/producers.

7 MR. BRIAN MERONEK: Right. Any
8 thoughts on -- on the impact of these restrictions
9 imposed by the National Energy Board on the ability of
10 marketers to -- or marketers/producers to provide
11 delivered services at a reasonable price?

12 MS. LORI STEWART: I think
13 directionally the NEB's decision has made the
14 provision of those services, in an economic way, less
15 likely.

16 MR. BRIAN MERONEK: So that would be
17 another concern?

18 MS. LORI STEWART: Of concern; perhaps
19 of less concern.

20

21 (BRIEF PAUSE)

22

23 MR. BRIAN MERONEK: Now, one (1) of
24 the other items in the review and variance application
25 which was not successful was the elimination of STS

1 overrun service?

2

3 (BRIEF PAUSE)

4

5 MS. LORI STEWART: I think STS overrun
6 service is actually one (1) of the proposed tariff
7 amendments. So the elimination of STS overrun is one
8 (1) of the things that TransCanada has brought forward
9 since the NEB decision.

10 MR. BRIAN MERONEK: Oh, okay. So that
11 wasn't in the review and variance?

12 MS. LORI STEWART: I'm just struggling
13 with whether or not it was in the May 1st review and
14 vary application, or the May 9th tariff changes.

15 MR. BRIAN MERONEK: It -- it really
16 doesn't make any difference for the purposes of this
17 discussion, but maybe for the -- for my benefit and
18 the benefit of the Board, what is STS overrun service,
19 and is it something that Centra avails itself of?

20 MS. LORI STEWART: We don't currently
21 avail ourselves of it; however, given some of the
22 other proposed tariff changes -- for example, if
23 diversions were to be restricted to within path, then
24 the proposed elimination of STS overrun becomes of
25 greater concern to Centra.

1 So in the event that there were other
2 mechanisms such as RAM or diversions available to us,
3 you know, STS overrun has not been used by the market,
4 but it's in combination with proposed restrictions to
5 those other alternatives or, in the case of RAM, the
6 elimination of it.

7 MR. BRIAN MERONEK: So under the
8 circumstances, again, that wouldn't be a good thing if
9 -- if TCPL was successful in -- in having that service
10 eliminated?

11 MS. LORI STEWART: That's -- that's
12 correct.

13 MR. BRIAN MERONEK: I don't want to
14 ask a legal question, but it just seems to me, and --
15 and it was argued by Centra, how can all of these
16 services either be denied or restricted and -- and be
17 deemed to be just and reasonable?

18 If -- if that's a legal question, fine.
19 But I mean, it -- it just -- does Centra have a -- an
20 opinion on this?

21 MR. BRENT CZARNECKI: We -- we do, but
22 I think as you've alluded to, Mr. Meronek, what is
23 ultimately deemed to be just and reasonable is the
24 decision of the NEB after it's heard the variety and
25 very diverse amount of opinions from producers,

1 shippers, marketers, everyone under the sun who uses
2 the mainline, and also the Alberta system that
3 participated in the hearing.

4 So I'm leaving it to their wisdom as to
5 what they view as just and reasonable.

6 MR. BRIAN MERONEK: I appreciate that.
7 Is there any in -- intel on the ground which would
8 suggest that perhaps some party or parties would be
9 taking the NEB's decision to task by appealing?

10 MR. BRENT CZARNECKI: I -- I think
11 we'd only be speculating as to what's on the ground.

12 THE CHAIRPERSON: Although I recall
13 Ms. Stewart suggesting that Manitoba was unique in the
14 sense that we are captives of CPL.

15 Is anybody else in the same situation
16 as Manitoba?

17 MS. LORI STEWART: Yes, there are
18 shippers located on the Northern Ontario line part of
19 the main line system -- system who are also captive.
20 So Centra's not unique in being captive to -- to the
21 main line.

22 Mr. -- Mr. Meronek mentioned that we
23 argued that pricing services based on a delivery point
24 that -- that in our opinion that was discriminatory
25 and not just and reasonable. However, the NEB did not

1 agree with us.

2 It heard our argument and rejected it.

3

4 CONTINUED BY MR. BRIAN MERONEK:

5 MR. BRIAN MERONEK: And -- and
6 obviously I think you've indicated on the record that
7 Centra isn't going to be appealing this decision?

8 MS. LORI STEWART: We are not. And
9 the -- the grounds for appeal, of course, would be one
10 (1) thing to get into, but I -- I would prefer not to.

11 MR. BRIAN MERONEK: No, I -- I just --
12 I was going to stop at that question. But -- all
13 right, so we are where we are. The decision is -- the
14 ink is hardly dry on the decision.

15 But going forward with all of this
16 uncertainty, have you got anything to share with us in
17 terms of how you're going to approach this -- this
18 fiasco. Those are my -- that's my word. In light of
19 the fact that you have a new winter season shortly.

20 Can you share with us what your
21 contingency plans are, if any?

22 MS. LORI STEWART: Of course we have
23 contingency plans, Mr. Meronek. We are currently in
24 the process of -- of analyzing potential scenarios, of
25 performing analysis on potential outcomes as new and

1 confirmed data comes into our hands.

2 For example, we were at a decision -- a
3 decision tree point in terms of whether or not
4 compliance tolls would be in effect or whether or not
5 review and vary tolls would be in effect.

6 We now can start layering in compliance
7 tolls into our analysis, because the toll level has
8 been set subject to, of course, any appeal by
9 TransCanada.

10 I think that we will be putting
11 requests for proposals to the market to obtain
12 indicative pricing of services such as peaking
13 delivered services. That will, again, be another data
14 point that we can embed in our analysis in terms of
15 what are the most economic options for our ratepayers.

16 So at the highest level, our options
17 have settled down into, we believe, the question of
18 whether Empress to MDA is more economic than Emerson
19 to MDA. And that question is influenced, or is
20 informed by what we will see happening with Emerson
21 commodity pricing, both absolute level, as well as the
22 volatility of it.

23 And the third piece that I mentioned is
24 the availability of peaking delivered services. So,
25 you know, we're going to continue doing what we do,

1 which is to plan to have the deliverability needs of
2 Manitobans met for effective November the 1st.

3 MR. BRIAN MERONEK: So it may not be
4 until the next cost of gas application, at the
5 earliest, where there is some shape or crystallization
6 of -- of some of the uncertainties at this point?

7 MS. LORI STEWART: Yes, that's
8 correct.

9

10 (BRIEF PAUSE)

11

12 MS. LORI STEWART: I would like to
13 add, for the Board's benefit, that one (1) of the more
14 significant positive outcomes associated with the
15 NEB's decision is the fact that it put TransCanada on
16 notice that it is at significant risk of non-recovery
17 of some costs if actual through put does not
18 materialize as forecast.

19 And that was something that Centra --
20 it was a key plank in Centra's final argument before
21 the National Energy Board, that we believe that --
22 that TransCanada's interests need to be more closely
23 aligned with its shippers interests.

24 We believe that TransCanada's interests
25 were strongly weighted to its shareholder and that

1 there needed to be a better alignment of shipper and
2 TransCanada interest. And that's one (1) of the more
3 positive outcomes as it relates -- as it relates to
4 the order. It -- it was -- it was quite a step change
5 from where we were prior to this decision.

6 MR. BRIAN MERONEK: Is -- is that the
7 component that dealt with an incentive mechanism?

8 MS. LORI STEWART: Well, the incentive
9 mechanis -- incentive mechanism is in the event that
10 through put materializes greater than what -- what is
11 expected. Then, for sure, TransCanada has some upside
12 there. But we're more concerned at this point about
13 what happens if through put is lower than what is
14 forecast.

15 The balance of risk, I believe, lies to
16 that scenario. And it was very reassuring for Centra,
17 and I'm sure many other shippers, to hear from the
18 NEB's perspective that it wouldn't simply be shippers
19 who were on the hook for recovery of costs going
20 forward.

21 MR. BRIAN MERONEK: But in that
22 negative scenario, obviously, there -- there would be
23 a sharing of the risk. But TC -- Centra would, as a
24 shipper, would have to sh -- shoulder some of that
25 risk?

1 MS. LORI STEWART: That's correct.

2 MR. BRIAN MERONEK: All right. I
3 think we've flogged that to death. Just a couple of
4 questions dealing with the ConocoPhillips contract and
5 the RFP that was sent out, and Mr. Peters talked about
6 it yesterday. If you look to Mr. Peters's Tab 11,
7 page 41.

8

9 (BRIEF PAUSE)

10

11 MR. BRIAN MERONEK: Have you got it
12 there?

13 MS. LORI STEWART: I do.

14 MR. BRIAN MERONEK: I was struck with
15 the -- with the discussion. And I appreciate this was
16 a -- a Board request, but I got the impression that
17 this theoretical commodity cost comparison was of
18 limited, if no value in terms of assessing whether it
19 was a good deal to sign up with Conoco?

20 MS. LORI STEWART: I felt it was
21 important to qualify this theoretical cost comparison,
22 yes.

23 MR. BRIAN MERONEK: But I take it, and
24 maybe I'm overextending what you meant to say, was
25 that you really can't rely upon the schedule very much

1 in order to assess whether or not it was appropriate
2 to sign up with ConocoPhillips?

3 MS. LORI STEWART: The cost comparison
4 we're reviewing and discussing on page 41 has -- has
5 limitations.

6 MR. BRIAN MERONEK: And lastly, I was
7 also struck with the discussion that you had with Mr.
8 Peters ov -- with respect to page 34 dealing with the
9 weighting of var -- some of the descriptors and -- and
10 in terms of criteria.

11 Maybe it's just my uninformed
12 assessment, but it -- I got the impression that, as
13 long as you're happy with ConocoPhillips, they'll
14 always get a rating higher than the other parties even
15 though you have no market intelligence in terms of
16 reliability because you've never used them or you --
17 you haven't used them to any extent.

18 So how do you ever displace the
19 incumbent?

20 MS. LORI STEWART: Re -- reliability
21 is our number 1 -- our number 1 criteria. You see
22 that from the weighting assigned to it. And it is
23 important that we give credit where credit is due to a
24 party that has performed flawlessly in providing
25 Centra's supply requirements and has performed as it

1 relates to meeting our intra day swing requirements
2 given how critical swing supplies are to our
3 portfolio.

4 But clearly it -- it's possible for
5 another proponent to -- to beat out ConocoPhillips in
6 the other 60 percent of the criteria -- the criteria
7 that is assigned 60 percent weight, so it's -- it's
8 definitely possible. By virtue of a significantly
9 better price, another party could -- could beat out
10 ConocoPhillips in that regard.

11 MR. BRIAN MERONEK: But how do you
12 assess -- how do you ascribe a score to the other
13 parties in terms of reliable supply if there isn't any
14 market intelligence on that? How did you come up with
15 eight point five (8.5), for example?

16 MS. LORI STEWART: We don't have
17 demonstrated experience with any of those other
18 parties in terms of providing the magnitude of supply
19 we require at Empress or intra-day supplies. However,
20 if you move down to counterparty quality and, for
21 example, criteria 4.2, proven performance references
22 and existing -- existing contracts or customer service
23 and responsiveness, you see that we've rated other
24 counterparties higher than Conoco in those regards.

25 So we're -- we're not afraid to give

1 credit where credit is due to other counterparties.

2 But our number 1 priority with a supply contract is
3 reliable supply and the provision of swing supplies.

4 Conoco has performed flawlessly.

5 MR. BRIAN MERONEK: I -- I understand
6 that. I'm just curious as to how you ascribe a score
7 to the other parties and -- and was it arbitrary or
8 were you throwing a dart at the board or -- or how did
9 you do it? Was there an analysis done?

10 MS. LORI STEWART: It is arbitrary.
11 I've acknowledged on the record that our -- our
12 weighting of this is subjective.

13 MR. BRIAN MERONEK: Thank you for your
14 help. Those are my questions.

15 THE CHAIRPERSON: I believe that we
16 have completed today -- the work for today. Mr.
17 Peters, please.

18 MR. BOB PETERS: Yes, thank you. I
19 think I saw Ms. Geraldo-Gomez actively providing some
20 information to Centra's counsel, Mr. Czarnecki. And I
21 think he has some materials to be distributed before
22 the end of the day, if the Board could accommodate
23 that.

24 MR. BRENT CZARNECKI: Yes, thanks, Mr.
25 Peters.

1 Mr. Chairman, I have revised IRs PUB-1-
2 9(b); PUB-2-141(d); PUB-2-141(g), which are now ready,
3 and we'll provide copies in the back of the room for
4 all parties.

5 THE CHAIRPERSON: Thank you. I take
6 it none of these are -- have to be marked as exhibits,
7 they're just revisions? Okay.

8 Mr. Peters...?

9 MR. BOB PETERS: Yes, thank you. I
10 believe then that in terms of matters of business, we
11 -- we -- the Board could adjourn until Monday morning
12 at the time chosen by the Board, at which time CAC
13 will continue its cross-examination of the cost-of-gas
14 and DSM panel.

15 I'll suggest that Mr. Meronek and Mr.
16 Masi can speak to Mr. Czarnecki and figure out whether
17 certain witnesses can be excused from that portion of
18 the day, depending on the areas of question. And, of
19 course, Mr. Czarnecki may want certain witnesses in
20 attendance in any event.

21 But following -- and I'm not sure how
22 long Mr. Meronek will be, and I'm not looking for a
23 response, but I'm not sure if the revenue requirement
24 panel was -- was envisioned by Centra as coming on
25 later in the day or would it be stood over until

1 Tuesday morning. And I'll leave that to Mr. Czarnecki
2 to indicate.

3 MR. CZARNECKI: Yes, thanks. I -- I
4 think our intention would be that if Mr. Meronek is
5 concluded by -- before the day is out on Monday, that
6 we would like to get the revenue requirement sworn in
7 and started.

8 Ms. Stewart has, I think, one (1) more
9 clarification to make, and I would ask that we indulge
10 her because she may be one of the witnesses I request
11 of Mr. Meronek to be stood down on Monday if he's
12 completed with the cost-of-gas matters.

13 MS. LORI STEWART: Thank you. In
14 response to the last question that you posed to me,
15 Mr. Meronek, I don't think my response was as conclu -
16 - as complete as it could have been. And I've just
17 reference my notes which also mention -- I think what
18 was top of mind for me was, of course, Conoco's
19 performance as it relates to reliability. But we did
20 also consider the extent of the counterparties' assets
21 or their market presence in the Alberta area. So for
22 example, whether or not they held storage in Alberta;
23 what their pipeline capacity was; the level of their
24 trading activity.

25 And additionally, Conoco is affiliated

1 with the number 3 -- the third largest producer in the
2 Western Canadian sedimentary basin. None of the other
3 counterparties that we were evaluating as it relates
4 to reliability have significant production assets.
5 And we view that link with a producer in terms of
6 actually having hard assets behind the hub so to speak
7 as a benefit in terms of that specific criteria of
8 providing reliable supply.

9 The other counterparties that we were
10 evaluating for them are pure marketers, and the fifth
11 one has a very minor production presence in Alberta as
12 opposed to Conoco, which has significant production
13 presence.

14 So it's late in the day, those details
15 had slipped my mind relative to Conoco's performance,
16 but I do think it helps provide a better response to
17 the question you posed to me in terms of how did we
18 score those other counterparties relative to
19 ConocoPhillips.

20 MR. BRIAN MERONEK: It is late in the
21 day; I forgot what my question was.

22

23 (PANEL RETIRES)

24

25 THE CHAIRPERSON: There being no

1 further business I will adjourn the session -- today's
2 session, and we will see you again on Monday morning,
3 those of you who must be here. I wish you all a good
4 -- good weekend.

5

6

7 --- Upon adjourning at 3:32 p.m.

8

9

10 Certified Correct,

11

12

13

14 _____

15 Bob Keelaghan, Mr.

16

17

18

19

20

21

22

23

24

25

<u>\$</u>	\$259 305:22	\$81 305:23	401:5	389:4
\$1 399:19,22	\$27 435:12	\$879,000	402:25	435:18
400:5		359:4	405:25	448:6
\$1,058.95	\$27.4	\$9 298:4	409:16	11.3 328:20
346:5	292:12,20	\$9.4 298:7	410:14	11:06 302:10
\$1,193 305:3	294:25		415:24	117 331:24
\$1,200 305:2	\$3 392:11		416:7	336:15
\$102 344:23	\$3,300 283:3	<u>0</u>	420:8	342:12
\$109 306:5	\$3,400 283:4	06 379:20	424:17	351:17,18
\$109,000	297:4	380:14	425:23	11th 333:19
384:11,20	\$3,800,000	08 408:18	426:22	351:20
\$11 309:3	290:19	09 338:2	428:6	398:10
435:19	\$3.8 290:9		430:2	12 339:19
\$11.5 435:24	292:19	<u>1</u>	435:20	411:23
\$12.6	293:6,13	1 283:8	437:4,8,15	12/'13
295:3,8,15	298:13	284:8	438:21	410:19
\$1200 312:3	299:3	286:19	440:23	12:03 349:9
\$14 309:10	\$3.9 291:20	293:18	441:6,8	120 337:4
\$14.8 294:20	\$3300 298:2	298:12	444:10	348:6
295:1	\$336,089	300:21	446:13	349:23
\$15,853,000	360:5	304:25	447:2	350:25
289:22	\$34 308:4,7	307:14	449:21	121
\$15.9 292:8	\$35 307:25	310:13,16	451:2	350:10,12
\$16 436:7	\$4 429:9,23	315:8	453:8	124 306:7
\$16,000	\$4,500	316:16	1,200 429:5	343:17
287:25	284:12	327:24	1/2 298:4	345:4
\$18 303:9,16	\$4.42 433:14	341:2,20	332:6	125 345:17
304:3	\$4.48 433:22	344:1	397:3	129
\$19 302:24	\$4.84 433:15	345:5,9	435:19	356:12,14
\$2 377:7	\$400 311:14	346:21	1:01 349:10	357:22
392:7,10	426:12	347:18	10 280:7	367:1
399:20	\$4.82 433:24	350:4,14,2	338:19	384:5
\$2,200	\$4.84 433:15	0 352:8,9	339:12	386:23
283:18	\$400 311:14	356:5,22	356:13	398:4
\$2,283	426:12	358:16	376:13	13 277:3
295:17	\$5 428:14	362:18,19	379:21	340:12
\$2,300	\$500 311:21	364:23	413:3,5	13.3 350:11
295:18	\$531 344:19	369:20	438:10	131
\$2.2 356:16	\$590 307:22	370:5	439:16	359:17,18
357:23	\$60 284:13	372:6	10,752	133
\$20,000	\$633.85	378:20	352:24	409:10,17
313:8	344:13	384:7	10:31 279:1	135 411:19
\$748,000	\$7.6 291:12	385:25	10:59 302:9	137 376:11
367:5		386:6	100,000	377:4,14
		388:21	436:20	379:19
		389:6,9	11	
		392:7	309:3,9,21	
		395:7,8,12	310:10	
		,19,21,25	374:4,7	
		396:9,18	388:21	
		400:19,24		

380:13	281:4	20 286:15	356:16	24 302:19
14 374:20	18.99 336:18	298:5	359:10	322:6
375:1	18/'19	344:7	367:2	24.5 344:8
423:20	292:20	350:5	384:9	25 286:15
429:7	293:4	351:1	386:15	314:15
14/'15 293:2	19 334:10	20.95 332:21	2012/'13	317:16
140,000	336:17	2000 343:3	289:7,20	333:10
435:6	19.5 332:16	378:9,20	439:23	338:18
143,000	19.75 332:13	379:2	2013 274:22	25,000
356:25	1st 303:23	380:1,21	289:24	439:8,23
144 408:16	304:10	381:14	295:24	26.7 344:1
146 370:5	332:7	417:11	333:19,25	27 343:8
14th 274:22	333:24	2005 377:11	350:5,14	27.4 293:25
15 291:2	343:24	378:3,9	351:12,20	294:3
299:18	345:25	379:2	353:13,14	274 274:23
332:6	351:8,13	380:3	357:3	277 276:3
339:5,12	352:3	381:14	359:25	278 276:4
348:14	398:13	2005/2006	386:18	279 276:11
352:16	431:16	380:2	430:2	297 278:7
354:23	433:23	2006 377:11	433:23	2nd 297:9
414:14	441:13	378:9	2013/14	
438:10	446:2	2008 377:25	274:9	
15,000		378:4,7	2013/'14	
312:14	<hr/> 2 <hr/>	417:12	340:19	<hr/> 3 <hr/>
15,900,000	2 276:6	2009 301:6	352:21	3 278:3
291:10	279:8	331:4,7	2013-'16	284:25
15.9 291:12	283:8	338:3	278:5	290:17
15/'16 293:7	284:7	343:24	297:17	297:15
156 408:17	291:11	345:25	2015 293:13	312:2
16 295:24	293:16	2010 356:22	2017 423:24	315:16
16,000	310:13	417:12	2018/'19	332:12,17
280:10	327:23	2011 309:7	288:8	341:3
288:3,5,18	341:19	332:4	292:12	343:9,10
16,034	369:19	358:8,12	294:21	345:17,19
280:18	378:1,2	388:19	295:2	346:1,11
16.9 334:9	379:17	389:4	297:10	350:19,21
160 282:6	397:2,3	398:10	298:5	353:5
338:5	399:22	423:10	2020	358:23
172-C 297:9	409:16	2011/'12	432:15,25	360:12
18 280:24	421:23	398:13	21,000 431:2	376:21
314:18	426:25	2011/2012	22 280:5	389:12
340:7	2,000 389:19	428:14	287:22	454:1
348:16	2,555	2011th	23.5 293:24	3.8 293:2
18,000	289:8,13	388:21	230,000	3.9 292:11
280:25	2/3 299:4	2012 300:22	435:1	294:2
	2:18 413:8	309:7	236,000	3:32 455:7
	2:30 413:6	333:19	434:22	30 307:24
	2:33 413:9	351:20		316:22

364:19	4.2 450:21	416:16	88,000	406:4
30,000	4.9 428:15	50,000	435:17	421:20
423:10	40 315:9	436:19	8th 333:19	424:13
31 300:22	370:3	52 309:11,22	351:19	434:13
331:22	371:1	310:11,23		437:3
342:12	4-0 371:1	54 339:6,12	<u>9</u>	aboriginal
367:2	400 274:20	352:17	9 306:21	282:9
384:9	408 278:12	354:21	439:16	absence
31st 332:7	41 448:7	386:7	9(b) 452:2	376:7
359:25	449:4	414:14	9.67 334:5	absolute
32 337:3	41.8 329:8	435:11	90,000 429:4	425:25
348:6	413 276:12	<u>6</u>	91,000 429:3	428:23
349:23	42 309:10	6 352:8	91,200 435:5	445:21
351:18	310:4,22	60 450:6,7	92 303:11,24	accelerated
33 297:4	455 274:23	<u>7</u>	304:1,9	378:7
343:13,16	276:14	7 352:7	305:6	accept
345:17	466,400	374:19	93 303:11	292:4,13,1
330 274:20	434:18	7.6 292:9	304:5,9,10	6 297:6
335,000	4-8 277:4	70 422:8	,15	300:23
340:22	486 340:21	72 402:20	94 306:22	336:20
34 327:22	386:9	<u>8</u>	311:15	407:20
328:23	<u>5</u>	8 373:22	321:9	acceptable
356:12	5 283:13	374:1	322:6	403:10
384:5	287:18	375:5	338:4	access
449:8	332:20	379:1,8	95 306:22	315:19
35 386:10	333:10	381:25	321:9	317:14
36 409:11	341:4	386:12	322:6	322:22
365 435:12	350:20	387:1,8	338:4	324:15
37 376:11	352:9	8,000 288:21	96 386:11	335:25
379:19	353:5	289:12	97 317:16	426:19
39 408:16	358:23	8,088 288:10	98 317:15	accommodate
<u>4</u>	369:10	8.5 450:15	318:1	451:22
4 278:8	372:6	80 395:20	9th 441:14	accommodatin
311:20	373:20	83 289:4,19	<u>A</u>	g 397:11
317:4	379:2	290:15	a.m 279:1	according
333:10	381:13	291:17	302:9,10	292:10
350:22	397:5,12	296:4	ability	298:9,23
351:1,2,7	402:12	297:8	354:10	account
353:6	5,500 289:14	84 288:6	427:12	290:3
368:22	5,533	85 280:8	440:9	291:18
394:19	295:10,15	287:21,22	able 319:23	293:13
408:3	50 288:17	294:12,16	353:9	accrue
427:4	305:13	400:12	366:11	326:22
429:23	308:9		367:17	327:11
433:14	318:5		389:14	accruing
4,531 300:24				291:16
				accumulate

399:16	453:24	addition	advance	afraid
accumulated	actual 278:6	291:15	426:25	450:25
368:24	296:10	331:17	advanced	afternoon
399:21	297:19	344:4	427:23	348:3
accurate	352:1	366:17	437:16	349:12,15
280:23	374:3,13,1	383:13	advantage	413:1,14,1
301:17	4,15	386:1	279:22	6
308:8	375:14	420:12	421:20	against
361:4	409:18	additional	advantageous	379:14
370:13	410:22	372:4	343:19	381:9
373:7	431:11	375:10	advantages	392:6
accurately	446:17	386:2	312:12	409:20
409:6	actually	406:22	adverse	agency
achieve	281:25	431:8	342:21	281:21
288:16	282:1,19	additionally	378:14	aggregate
327:10	284:1,7,16	453:25	379:6	353:10
330:2	285:6	address	advertising	aggregating
acknowledged	293:1	330:17	367:20	353:22
451:11	302:24	394:4	advice 414:4	aggressive
acronym	314:8,14	409:24	advise 326:6	327:14
330:23	329:6,7	addressed	advised	385:7
acronyms	348:14	325:25	437:10	aggressively
331:3	351:1	addressing	advisor	324:7
across	363:5,10	326:8	300:18	ago 327:5
376:17	375:9	adequate	advocate	agreeing
405:10	382:20	402:9	414:19	293:9
407:14	383:14	422:10	AECO 371:20	agreement
act 379:10	441:6	adhere	372:10	288:15
action	454:6	353:25	373:8	418:8,24
394:4,6	add 291:11	adjourn	375:9	419:3
400:2	294:4	452:11	382:14,19,	ahead 362:1
activated	301:23	455:1	21 383:6	423:4
350:14,20,	308:6	adjourning	402:11,19	aid 323:25
22	324:5	455:7	417:23	akin 378:20
activation	335:23	adjust	418:1	381:16
350:19	347:5	296:21	419:9	Alberta
active	372:3	adjusted	420:20	374:21
340:17	375:10	287:19	421:3	375:8
354:8,12	397:22	adjustment	affect 321:3	377:20
actively	406:22	297:1	affected	383:4
451:19	415:21	320:19	429:19	420:8
activities	446:13	administerin	affiliated	443:2
376:8	added 292:9	g 366:22	453:25	453:21,22
388:5	294:2	administrati	affordable	454:11
activity	371:25	on 410:6	300:10	Alberta-
294:22	372:24	admitted	313:20	Saskatchewan
421:6	373:16	425:13		an 382:20
	382:10			
	383:16			
	398:7			

383:6,9	349:3	344:14,19	444:16	446:4
420:5	405:10	357:9	anyway	applications
422:3	amongst	384:18	281:19	350:13
align 319:8	376:17	389:19	320:11	applied
aligned	406:23	394:21	329:14	383:19
446:23	407:6	395:7	anyways	384:1
alignment	amortization	396:9	283:11	applies
447:1	386:2	397:4	apologize	300:17
allocation	411:15,22	424:12,15	293:17	apply 284:9
325:6	amortized	429:7,8	333:21	372:21
383:23	368:24	431:3	appeal 444:9	383:21
385:3	369:10	anomaly	445:8	appreciate
409:2,22	410:1	382:23	appealing	309:14
allow 283:15	411:24	answer	443:9	443:6
313:2	amount	280:16	444:7	448:15
322:16	279:19	310:8	appear 317:7	appreciated
323:25	283:18	316:4	APPEARANCES	297:13
363:10	285:25	319:10	275:1	appro 329:22
400:8	286:22	335:6	appeared	approach
402:21	287:6,7	347:17	413:13	313:10
allowed	298:3	362:13	appears	318:19
284:10	363:8,21	380:12	319:13	394:7
285:1	364:9,16	393:8	325:8	398:1
362:21	369:5	410:13	338:20	400:13
363:8	422:4,9	421:17,24	417:9	444:17
allows 282:4	426:15	answers	Appendix	approached
alluded	442:25	279:23	350:11	388:19
347:1	amounts	323:17	appetite	approaching
442:22	420:1	384:7	434:9	389:2
already	analysis	412:17	apples-to-	397:15
289:9	375:5	anticipate	apples	appropriate
292:8	376:5	391:16	407:12	281:23
364:2,17	377:22	anticipated	application	282:12
425:13	444:25	287:5	274:8	321:22
431:24	445:7,14	314:21	290:21	324:12
alternative	451:9	341:12	300:2	327:2,9
430:21	analyze	362:24	306:25	329:5
431:5	329:1	397:16	307:9	347:24
alternatives	analyzed	408:25	325:25	449:1
365:15	311:2	anticipating	370:3,20	approval
442:5	analyzing	296:1	371:2	355:22
am 355:2	444:24	anticipation	379:10	370:6,16
amelioration	announced	390:12	383:25	394:8
434:4	314:20	anybody	424:20	409:5
amendments	announcement	443:15	437:22	approvals
441:7	311:10	anyone	439:8,16	371:6
America	annual	420:19	440:24	approve
	305:1,12	anything	441:14	370:6
		359:15		

373:21	444:2	387:19	August	avoided
approved	446:20	392:22	358:12	283:12
307:9	arithmetic	399:13	388:19	326:23
338:14	429:11	410:5	389:4	327:1,18
383:20	436:2	424:14	398:10	aware 357:15
384:15	arrangement	446:14	authored	370:19
386:13	282:1,20	assume	408:18	438:12
387:2,8	arriving	311:13	Authority	away 342:14
394:11	372:22,24	401:22	282:11	372:2
approximate	arsenal	419:14	avail 436:16	394:15
295:9	425:21	427:22	441:21	419:15
384:19	437:19	assumed	availability	438:14
approximatel	articulated	371:23	445:24	<hr/>
y 280:10	438:2	assuming	available	<hr/> B <hr/>
284:13	ascribe	366:4,6	300:9,19	backup
305:13	450:12	389:23	301:13	314:9,15
308:9	451:6	assumption	312:20,22	backward-
311:14	aside 385:8	386:12	318:10	looking
312:6	aspect 438:5	assure	320:16,25	399:1
358:12	aspects	286:22	323:3	400:5
411:24	397:14	astonishing	337:21,22	bad 393:14
429:3	assess 449:1	392:2	357:7	399:2
436:19	450:12	attempt	374:9	415:19
April 334:4	assessed	428:19	379:16	balance
arbitrary	355:16	attempting	391:25	289:19
451:7,10	assessing	287:2	400:16	291:9
area 318:10	448:18	attendance	403:1	294:19
320:5,16,2	assessment	452:20	404:18	379:13
5 321:25	449:12	attention	437:1,2	387:16
355:21	assets	352:16	442:2	388:6
384:5	432:17	354:22	avails	435:6
409:19	453:20	359:20	441:19	438:17,22
412:24	454:4,6	370:3	Avenue	447:15
431:4	assigned	371:1	274:20	balanced
433:7	449:22	395:9	average	379:17
453:21	450:7	attract	303:3,13	403:9
areas 413:2	assist	382:1	340:14	balances
437:5	306:11	attractive	371:16,23	403:13
452:18	335:3,19	284:14,18	372:5,18,1	bank 399:1
aren't 287:4	assisting	285:11	9 375:15	bar 303:12
314:9	279:17	attributes	376:4,23	305:8
407:9	associated	347:18	382:18	337:11
414:22	282:22	attributing	390:18	350:24
431:25	326:24	293:6	aversion	Barnlund
argued 425:7	358:10	audits	347:2	277:12
442:15	371:17	300:25	avoi 328:21	290:8,11,1
443:23		301:12	avoid 327:20	9,23
argument			387:22	291:3,7,9,
435:1				14,16,25

292:4,7,15 ,24,25 293:9,15,2 0 335:22 336:4 343:22,24 344:3,9,15 ,20,25 345:4,7,12 ,16,21 346:7,14,1 9,24 356:19,20 357:1,3,6, 15,22 358:1,7,15 ,20 359:8,12,1 6,24 360:6 366:21 367:1,6,14 368:12,16, 20 369:1,22 370:10,12, 15,22 371:2,4,11 373:2 384:14,22 385:16,25 401:12 409:10,11, 15 410:12,17, 20,24 411:7,10,1 4 412:1,15 base 372:21,22 based 280:16 284:11 287:8 288:23 294:21 295:5 296:1,24 303:8 310:14 311:15 319:5 322:6 341:12 355:17	359:4 362:25 364:9 373:6 374:8 383:22 386:15,25 391:2,3 394:21 399:5 443:23 base-load 373:13 basic 310:15 basically 314:16 360:24 basin 419:15 420:8 454:2 basins 407:1 basis 313:5,10 344:19 372:1 374:12 382:14 402:16 418:25 429:7,8 bear 381:2 415:8 bearing 414:8 beat 450:5,9 became 364:15 become 373:7 397:4 430:14 becomes 283:16 299:24 390:8 441:24 behalf 327:10 361:11	364:7 366:5,6 387:18 413:17 behind 454:6 belief 427:17 believe 279:4 293:4 345:21 358:9 359:16 378:22 379:8 383:24 408:18 412:18 418:6 427:16,19 445:17 446:21,24 447:15 451:15 452:10 benchmark 327:15 328:23 347:20 368:3 372:1 397:13 404:9 beneficial 323:9 benefit 284:2 322:20,24 323:12 326:15 343:17 414:10 418:24 428:1 441:17,18 446:13 454:7 benefiting 283:6 benefits	282:22 283:8,21 322:8,14 324:4 326:17,22 327:11 328:14 396:5 besides 315:4 best 319:3 322:3 325:7,14 351:14 372:11 376:25 407:25 bets 424:17,19 better 285:19 319:2,8 321:6 344:22 407:22 416:13 447:1 450:9 454:16 beyond 293:2,7 363:10 bid 427:3,6 bigger 314:11 390:6 bill 284:22 285:25 286:24 287:6 296:13 305:1 325:13 328:3 342:23 344:14 billed 372:24 374:22	bills 281:10 283:9 284:23,24 287:4 bit 297:7 302:7 309:15 316:9,10 324:3 331:24 332:20 397:1 434:1 black 376:22 377:5 blocks 427:18 blue 305:8 375:4 board 274:1,13,1 4,15,16,19 275:2 279:16 280:6,8,9 281:5,8 282:17 287:22 290:2 294:13,16 300:1,5,22 302:19 303:11 304:5 306:12 307:8 322:6 325:25 326:8 329:6 330:12,23 333:9 335:3,18,1 9,23 337:1,5,14 ,21 338:1,10,1 5 339:5 343:17 347:7 350:3
--	---	--	---	---

351:17	281:5	319:10	19 360:2	296:7
352:1	282:10,15	321:8	361:24,25	book 280:6
353:1,10	285:3,13,1	322:5,13	362:11,12,	287:23
354:16	8	323:12,16	22	289:5
355:21,22,	286:10,11,	324:16,21,	363:12,25	294:16
25	17,21	24	364:11	302:19
356:5,7,14	287:14,20	325:3,12,1	365:19,24	303:11,25
,15	288:4,14	7	366:8,16,2	311:16
357:5,9,12	289:4,11,1	330:21,22	5 367:11	317:16
358:3	8	331:1,6,9,	368:5,11,1	321:9
369:17	290:1,10,2	17,22	8,21	322:7
370:6,19	5	332:2,9,15	369:25	331:23
373:4,21	291:4,8,15	,19,23	370:11,18,	337:4
375:1,19	,24	333:5,14,2	25	339:6
376:12	292:6,17	2	371:5,12	343:13
377:3	293:8,16,2	334:2,7,12	373:1,15,1	349:23
380:12,20	1	,17	9,25	352:17
383:20	294:1,6,11	335:2,16,2	374:18,25	354:23
384:16,17	,25	1	375:18	356:14
393:5,19,2	295:7,13	336:2,11,2	376:9,20	359:18
3 394:7,12	296:12,16	2	377:3,12,1	370:4
398:6	297:5,12,2	337:9,14,2	7,25	374:20
400:22	3,24	0	378:12	375:1
401:8,10,1	298:7,12,1	338:1,9,17	379:18	376:12
6 403:1	7,21,25	339:1,4,11	380:11,19	377:4
407:20	299:10,16,	,18	381:3,21	395:4
408:13,17,	21,24	340:1,6,11	382:4,9,22	398:4
19,22	300:13,20	,18	383:12	399:6
409:5,11	301:3	341:1,9	384:4,14	408:14,16
412:9	302:14,15	342:11,18	385:14,24	409:10
413:23	303:1,10,2	343:12,23	386:4	414:14
416:2	4	344:4,10,1	393:4,5,18	bookend
417:22	304:4,14,1	6,21	394:9,18	436:21
423:10	9,22	345:3,8,16	395:3,11	border
426:19	305:5,11,1	,24	396:8,25	382:20
432:11	5,21	346:9,17	397:17	383:6,9
437:10	306:8,11,1	347:16,23	398:3,14,1	420:5
440:9	7,21	349:14,17,	8,22 399:8	422:4
441:18	307:6,11,1	18	400:22	431:24
446:21	8,21	350:2,9,16	401:7,17,2	432:10
448:16	308:5,12,2	,24	4 402:4	bottom
451:8,22	1	351:4,10,2	407:18	304:19
452:11,12	309:13,19	5	408:1,11,1	305:16
Board's	310:7,19	352:5,11,2	2 409:9	333:6,15,1
359:20	311:3	0 353:1,8	410:12,18,	7 334:20
370:2	312:17,18	354:14	21	350:3,11,1
371:1	313:13	355:8,19	411:5,9,19	6,17
436:11	314:4,19,2	356:4,10,2	412:3,8,21	351:6,18
446:13	4	0	413:11	377:1
Bob 275:2	315:3,11,2	357:2,12,1	451:18	387:7
276:11	2,25	7,21	452:9	408:21
279:14,15	316:3,8	358:2,11,1	455:15	bought
280:5,15	317:4,10,1	6,22	boilers	
	8,25 318:7	359:11,14,		

390:14	21,24	,23	370:2	bulk 312:12
bound 353:25	399:11	441:10,15	brings	bullet
bounds	401:2	442:7,13	382:20	360:12
317:12	402:18	443:6	broken	burn 316:20
Boyd 275:5	403:6	444:4,5,11	356:21	317:2
brackets	404:3	446:3	broker	business
357:13	405:3,7,23	447:6,21	332:10,11	319:21
break 310:5	406:21	448:2,11,1	416:18	388:25
366:9	407:24	4,23 449:6	brokers	394:3
break-even	414:25	450:11	331:19	400:8,11
309:23	415:10,15	451:5,13	348:11	405:9
Brent 275:6	417:24	454:20	403:23	417:5
276:9	418:6,18,2	BRIEF 290:6	404:14	452:10
277:13	3 419:13	291:22	416:1,7	455:1
279:11	442:21	295:21	brought	butane 420:1
325:10,16	443:10	299:14	321:1	buy 322:1
335:7	451:24	301:9,21	354:22	391:1,18
353:15	Brian 275:8	302:3	441:8	buyers
354:5	276:12	303:18	bubble 378:5	390:13
361:3,7	413:21,22	308:1	budget	421:5,7
362:6	414:18	310:1	292:23	buying
363:18	415:4,13	311:5,18	409:23	326:24
364:5,13	417:2,19	312:25	410:19,22,	391:16
365:21	418:2,9	330:19	23 411:4	421:4
366:1,10	419:1	333:3	budgeted	431:11
371:15	421:10,11,	334:22	410:19	
373:11,18,	16	336:9	budgeting	<hr/> C <hr/>
23	423:7,8,17	339:9	410:25	CAC 275:8
374:5,24	,22	341:7	411:1	401:19
375:7,25	424:5,16,2	342:9	builder	413:18
376:16,22	3	347:13	318:23	418:12
377:9,15,2	425:6,11,1	354:3	builders	452:12
3 378:1,16	8	357:19	318:12,14,	calculate
379:24	426:2,9,14	360:8	18	287:5
380:16	,22	375:23	319:7,11,1	374:12
381:1,11	427:7,11,2	387:4	3,17	397:23
382:2,8,11	1	395:1	320:9,17,2	calculated
,24 383:17	428:5,11,1	406:19	5 321:5	327:19
384:13	6,20	412:6	324:9	329:20
387:11	429:6,11,1	414:16	building	calculating
388:17	3,18,22	418:16,21	317:13,23	372:7
390:1,15	430:1,4,10	439:11,18	318:20	calculation
391:3,23	433:12,13,	440:21	320:19	372:14
392:17	19,25	441:3	321:15,17,	392:21
393:13	434:11,16,	446:10	23	calculations
394:1,16,2	20,24	448:9	built 320:6	295:19
3	435:3,9,15	briefly	394:13	Canada
395:10,14	,22 436:3	322:14		
396:13	437:8,15,2	330:22		
397:7,21	1,25 438:8	376:21		
398:12,17,	439:2,5,15	bring 294:2		
	440:2,7,16	320:20,21		

372:13	306:8	308:13	423:1,2	304:6,7
Canadian	318:16	317:19	424:6,11,1	307:9
422:8	369:14	318:7	7	332:5
432:10	376:25	321:8	425:1,5,7,	335:14
433:8	377:2,10	322:8	14,19	337:6
454:2	379:21	323:18	426:24	338:11,13
cancel	427:10	331:10,12,	427:22	339:24
392:15	436:22	14,18,25	428:8	340:15,21
canvassed	442:5	332:12,20	430:20,23	342:14
414:3	cases 318:14	333:7,8	434:18	344:23
cap 385:11	362:13	334:3,8,14	436:14	345:18
397:5	364:19	336:4	437:3,19,2	347:19
capacity	382:13	337:21	2 438:4,19	350:6
422:3	cat 437:11	338:23	441:19,25	352:12
424:15	catch 309:20	340:23	442:15,19	355:14
425:24,25	caught	341:9,10	444:7	358:4
428:12,13	396:21	342:15	446:19	365:24
431:1,3,9	cause 279:24	343:19	447:16,23	370:3,13
438:21	394:10	344:17	452:24	374:22
453:23	395:8	346:22	CENTRA-4-1	375:14
capital	397:13	352:2	277:4	378:13
281:9	401:1	353:9	CENTRA-5-1	404:9,10,1
283:10,12,	cease 389:3	354:24	277:5	9,24
17 284:19	ceased	355:10,14,	277:23	406:5,9,12
318:15	388:15	19,22	CENTRA-5-10	428:17
321:2	cent 309:10	356:6	277:23	443:20
399:17	335:14	358:5,13,2	CENTRA-5-2	446:20
captive	429:7	2 360:5	277:7	449:25
443:19,20	Centra 274:7	363:16	CENTRA-5-3	451:20
captives	275:5	364:1,2,12	277:9	centre
443:14	276:6	365:20	CENTRA-5-4	413:17
capture	278:3,8	366:6	277:11	cents
284:1	279:8,17	371:7	CENTRA-5-5	309:3,11,2
422:23	280:19	373:25	277:13	1,22
captured	281:7	374:2	CENTRA-5-6	310:10,11,
410:15	286:21	376:13	277:15	23 327:22
418:11	288:6,8,9,	378:24	CENTRA-5-7	328:21,23
capturing	16	387:13	277:17	329:1,8
423:2	289:7,20	392:14	CENTRA-5-8	332:6,13,1
careful	290:20	393:22	277:19	6,21
314:25	291:2,5	394:10,13	CENTRA-5-9	333:10
404:4	292:18	395:9,12	277:21	334:5,9,10
Carefully	293:19	397:2,20	Centra's	336:17,19
307:6	294:18	402:9	280:9,17	338:18,19
carve 425:24	295:8,10	403:1,9,11	282:11	343:8
case 284:18	297:15	,16,23	292:10	344:1,8,13
293:12	298:18	404:6	294:21	346:5
	300:14,23	408:3,23	295:2	355:9
	303:2	409:4,13	298:23	356:11
	306:22	411:11		423:20
		414:4,9		433:15,22,
		416:6		24 435:11
		421:18		

CEPU 275:15	CHAIRPERSON	370:6	311:9	452:12
certain	279:3	371:7	332:4	circumstance
337:22	286:2	427:5,8	333:15,17,	382:16
364:16	302:5,12	447:4	18 334:20	383:1
366:14	311:7,23	changed	337:4,11	399:25
419:22,24	312:4	288:9	340:3	circumstance
427:18	325:20	316:6	348:7	s 399:12
438:20	330:11	changes	350:4,10,2	400:3,18
452:17,19	348:4,24	296:22	4 351:6,18	442:8
certainly	349:4,12	307:4	357:3	cited 346:22
329:21	360:10	325:7	374:20	City 317:13
336:25	361:6,13,2	331:13	379:19	318:3
343:1	2 362:2	384:16	380:13	clarificatio
348:1	388:13	424:20	381:17,19	n 293:22
367:7	389:22	427:1	411:21	297:25
393:8	390:11,25	431:15	charts	375:10
407:24	391:12	441:14,22	303:12,15	376:10
417:13	392:13	changing	check 301:1	386:6
423:11	401:20	315:22	336:13,20	397:22
certainty	402:2,5,24	channels	409:21	453:9
400:10	403:20	283:8	429:12	clarify
423:23	404:16	characterize	436:2	362:3
Certificate	405:6,17	382:12	chemicals	clarity
276:14	412:18	charge	420:16	411:6
Certified	413:5,19	284:22	cheque 364:3	class 290:15
455:10	419:4	290:20	chequebook	clear 325:6
cetera 323:8	421:8	310:15	365:25	364:15
Chair 401:19	422:21	353:16	chimney	369:17
408:19	430:18	366:2	306:18	387:12
chairman	431:23	404:5	choice	400:23
274:14	432:12	426:4,11,1	318:4,5,10	404:7
279:16	433:4	5	,12	415:7
286:18	443:12	charged	319:3,5	426:18
304:4	451:15	368:14	321:6,11	clearly
325:5,18	452:5	406:8	322:3	300:7
339:5	454:25	409:20	323:19	450:4
347:23	chair's	charges	346:23	client
349:19	354:22	373:9	415:1,2,3	296:13
351:10,17	434:2	424:14	choices	413:18
352:11	challenge	charging	319:9	client's
362:13	283:16	332:11	choose 319:4	414:20
363:14	327:7	369:18	323:1,24	close 298:4
393:6	challenges	chart 287:22	415:1	309:11
408:13	284:3	288:7	choosing	334:25
412:8,24	423:4	289:5	318:15	362:19,21
413:23	challenging	290:14,17	347:1	404:9,25
452:1	284:6	291:17	chose 332:10	closely
Chairman's	chance 302:6	292:1	chosen	
312:19	change 296:5	303:21,22		
	313:14			
	319:21			

446:22	422:9	comparable	404:8	372:14
closer	431:15	308:20	406:15	comprise
288:20	434:4,6	310:24	competitor	407:17
294:3	452:24	335:3,18	336:17	comprising
356:24	commencing	336:14	competitors	376:24
cluster	279:1	406:24	334:18	con
395:18	430:2	comparative	335:9	336:13,16
coal 323:7,8	commensurate	335:24	competitor's	concept
coal-	366:4	compare	340:2	320:23
generated	comment	278:9	compilation	399:15
322:18	303:6	311:24	359:20	conceptualiz
coffee	309:20	346:2	complete	e 390:16
279:19	403:20	347:20	453:16	conceptually
coincidence	414:24	404:19,23	completed	400:15
404:13	432:20	405:19	345:23	concern
colder	comments	407:14	451:16	298:20
362:23	415:22	408:5	453:12	318:18
colleagues	417:4	compared	completely	319:1
405:10	434:3	304:9	388:3	380:10
coloured	commercial	305:18,23	compliance	393:16
303:12	335:13	396:10	445:4,6	416:11
376:21	337:19	404:24	complicated	418:12
column	386:10	Comparing	326:14	440:17,18,
304:24	commercially	421:22	330:10	19 441:25
305:7,9	353:18	comparison	complying	concerned
332:5	Commission	307:1	355:15	329:14
356:21	432:5	308:8	component	330:11
combination	commit	407:12	341:25	353:22
323:7	438:21	415:13	372:16	447:12
337:19	commodities	448:17,21	373:13	concerns
400:25	378:6	449:3	421:12	353:18
425:12	407:3	comparisons	436:18	389:7
442:4	commodity	302:19	447:7	conclu
combinations	378:4	compensate	components	453:15
400:18	407:1,4	366:5	307:5	conclude
combined	431:11,21	competing	369:19	354:20
350:4	445:21	321:16	373:10	356:15
379:9	448:17	388:7	424:9	381:12
399:22	communities	403:10	composition	384:17
comes 295:16	316:12,14	404:1,21	351:7	concluded
445:1	317:5	422:18	compounded	438:7
coming	community	438:22	365:9	453:5
282:20	313:4,11	competition	422:16	conclusion
362:20	314:20	347:10	comprehensiv	293:4
385:17	316:13	414:20	e 397:14	339:2
419:17	364:24	416:8	400:21	364:14
420:7	365:17	competitive	compressor	365:5
	comp 416:8	382:1		419:10

conclusively 399:14	consequences 424:6	389:19	continuing 438:16	converged 404:9
concur 338:25 339:1	conservation 326:16 327:3	contained 306:24 409:22 411:3	contract 332:12 339:22,25 340:24 344:2 350:21 352:9,10 353:5,6 373:13 375:16 391:15,17, 21 392:14,15, 18,20,24 402:19 403:22 404:19,22 417:21 418:5,12,1 4 421:13,19, 20 422:23 448:4 451:2	conversation s 405:9 converse 363:22 399:2 400:4 conversion 324:3 convince 281:10 439:3
concur 338:23	consi 380:20	contaminate 376:5		copies 452:3
condensing 306:1,12	consider 285:10 324:20 342:21 364:20 380:20 453:20	content 419:21,23		corner 350:3
conditions 374:13,16 396:7	consideratio ns 379:17 388:7 403:10,14	CONTENTS 276:1		Corporation 291:16 324:6,16 356:16 369:12 387:14,17 388:4 394:5 401:13 411:1
conduct 353:24 397:8 400:20	considered 301:5 324:22 387:13	contingency 444:21,23		correct 280:11 285:17 288:11 289:10,16, 25 290:22,24 291:7 294:23,24 295:12 298:6,11 299:20 302:25 304:13,17, 18 305:4,9,10 ,20,24 307:10,15 309:17,18 317:12,17, 22 318:6 323:15 325:10,16 331:5,7,8, 20,21,25
conducted 300:15	consistent 295:19 406:14 417:8,11	continual 345:13		
confidence 354:18	considering 325:2 399:12	continually 387:20		
confidential 418:3,4	constant 296:5	continuation 291:5 388:9		
confidential ity 419:2	constructed 320:12	continue 302:16 346:22 355:11,15, 17,21 356:1 402:1 445:25 452:13	contracts 340:17 345:5,10,1 5,17,19,22 346:11 348:7,10 350:18 362:5 372:13 390:12 402:10,13, 15 403:3,22 404:19 421:23 432:25 450:22	
confirmation 292:16	construction 319:23	continued 276:11 279:14 286:10 297:23 302:14 312:17 330:21 349:17 361:24 362:11 363:19 393:4,14 408:11 421:10 423:7 433:12 444:4		
confirmed 445:1	consult 330:16	continues 292:18		
connected 317:5 338:13	consumer 290:3 292:19 414:19 436:8			
Conoco 418:8 448:19 450:24 451:4 453:25 454:12	consumers 331:10 381:9		Contrast 305:5	
ConocoPhilli ps 417:20 418:5,24 448:4 449:2,13 450:5,10 454:19	consumption 369:5 374:14		contributed 366:18	
Conoco's 453:18 454:15			conventional 306:6	
			converge 401:3	

332:1,8,14 ,22	434:15,19, 23	376:4	22 412:10	430:11
334:1,6,10 ,11,15,16	435:2,8,14	382:18,21	428:19	448:3
337:8,12,1 7,25	437:12,14, 19,20,24	383:18,22	446:17	course
338:8,16	440:4	384:25	447:19	283:22
339:23	442:12	385:3	coughing	385:17
340:15,25	446:8	409:1,3,12 ,22	302:18	401:16
341:5	448:1	410:1,15	counsel	409:25
342:17	455:10	411:13	275:2	410:16
343:21	corrected	417:23	280:6	425:24
344:2,14,1 5	351:20	424:6,7	354:18	432:9
345:6,9,20	correction	435:24	407:19,23	439:24
346:8,25	308:6	446:4	451:20	444:9,22
350:7,8,15 ,23	386:1	448:17,21	counsel's	445:8
351:3,9,23 ,24	CORRECTIONS	449:3	287:23	452:19
352:18,19, 24,25	277:3	costing	294:16	453:18
353:7	correctly	363:16	302:19	cover
355:12	322:15	cost-of-gas	303:11	399:17,25
356:19	404:2	452:13	322:6	covered
358:6	correlation	453:12	352:17	287:21
359:23	301:4	costs 283:13	356:14	CPL 443:14
360:18	338:20	285:20,21	375:1	create
361:1,2	corresponds	296:24	376:12	316:20,23
363:19	337:11	302:21	counter	creation
368:12,19, 20 370:9	345:13	304:8,17,2 3	363:21	317:1
373:17,18, 22	cost	305:12,13, 16 306:24	389:9	credit
382:1,7,8	283:1,10,1 3 284:24	312:11	390:20	449:23
384:13	296:20	318:17	counterparti	451:1
385:23	297:3	321:2	es 358:17	crew 320:1
390:1	302:19	326:24	389:5,16	criteria
393:12	306:25	327:18	390:21	449:10,21
395:6	309:19	328:20,21	450:24	450:6,21
396:12	310:18	329:8	451:1	454:7
398:20	311:11	360:15	453:20	critical
400:25	312:13,15	367:23	454:3,9,18	450:2
412:2	313:11,12	368:13,23	counter-	cross 413:12
422:25	318:15,19	369:2,8,9, 11,21,22	parties	cross-
423:16,21	325:6	370:14	388:25	examination
424:9,22	326:23	382:10,13	counterparty	276:11,12
425:10	327:1,17,1 9 328:10	383:13,15, 18 384:25	360:23	279:14
426:8,13,1 7 427:2	360:5,25	385:6,21	389:6	413:21
428:9,10	367:19	386:3	450:20	452:13
429:25	368:3	400:1	counter-	crossover
430:2,11,1 2	369:17	408:24	party	308:15
	371:16,23	409:1,12,1 8,19	countertops	crude
	372:5,18,2 0,21,23	410:1,2,5	321:20	288:22,23
	375:15	411:12,15,	counts 355:7	327:15
			couple	
			413:2,24	

crudely	382:15	319:3	customer's	426:25
312:2	384:1	321:7	415:2,3	427:4
crystalized	405:15	322:9	417:14	429:3,5
364:4	431:2	323:23,25	Customers	431:2
crystallizat	436:12,16	324:8,13	414:25	434:17,18,
ion 446:5	441:20	326:18	custom-	22
cubic	444:23	327:25	tailored	435:1,7,18
309:4,11,2	customer	328:4,13,1	390:20	436:19,20
1,22	278:10	6 331:13	cut 367:23	439:8,22,2
310:23	284:20	332:24	cycles	3 450:1
329:2	287:2	337:10,15,	388:10	451:22
332:6,13,1	300:16	16	Czarnecki	452:18,25
6 334:5	318:22	338:3,4,5,	275:6	453:5
335:14	322:21	21 339:20	316:10	454:14,21
336:18,19	323:1	340:2,8,9,	317:11	days 338:2
338:18,20	326:23	13,14,21,2	325:5,10,1	415:8
344:1	327:12	2 341:21	3,16	435:12
cumulative	328:22	342:5,19,2	330:17	deal 314:1
288:7	332:9	5 343:2	407:19,24	411:17
289:6	337:5	344:17	412:14	448:19
292:2	339:14	346:12	413:15	dealer
362:8	341:13	347:3,11,2	442:21	364:18,20,
367:2	342:15	0	443:10	24
cumulatively	343:20	348:7,10,1	451:20,24	365:2,9,17
291:18	344:10,21	6,19	452:16,19	391:5
398:14	346:2,4,23	350:5,21,2	453:1,3	dealers
curios 451:6	348:22	2		391:10
curious	349:21	351:2,5,8,	<hr/>	dealing
404:13	350:13,20	15,21	D	320:17
current	351:7,13	352:2,3,15	dad 343:6	389:9
293:12,18	352:1	,23	Darren 277:5	414:12
295:6	354:25	353:3,11,2	dart 451:8	448:4
308:22	355:7	1 360:20	data	449:8
309:7	362:20	363:4,6,10	353:2,22	deals 304:20
310:9	369:4	364:1	354:10	413:18
314:17	391:16,18	366:3,7	406:17	dealt 384:24
334:3	392:14	367:25	445:1,13	385:2
342:20	396:23	368:2,14	date 359:5	418:13
386:20	397:11	372:25	398:8	447:7
393:7	405:20	379:16	408:25	death 448:3
416:25	408:7	382:1,3	430:7,9	debate
418:23	415:17	384:17	dated 309:15	322:7,12
433:20	416:15	386:8,25	dates 398:11	dec 321:17
currently	438:14	387:18	dating 430:5	decade 343:3
282:5	450:22	388:22	day 315:17	December
298:3,14	customers	390:13	329:25	300:22
312:21	282:21	392:18	364:3	decide 300:5
323:18,23	283:25	395:17	389:2	327:7
340:16	284:2	396:2,11		
345:18	288:3,5,24	403:4,5		
	289:1	405:16		
	313:2,21,2	416:5,13,1		
	3 314:2	7,20		

382:3	423:19	324:8	390:22	desire 396:1
decided	dedicated	396:20,23	derivatives	detached
282:14	368:6	397:11	358:9	317:20
392:15	deduct	424:14	384:23	318:2
deciding	435:24	428:13	388:24	detail 373:2
327:9	deemed	demand-side	389:10,15	detailed
decision	300:17	325:7,22	Derksen	372:4
282:12	394:5	demographics	277:24	details
322:1	442:17,23	343:15	325:8,15	335:1
324:1	default	demonstrate	385:2	454:14
355:23	372:16	355:4	409:21	determine
365:12	376:3	demonstrated	411:5,18	326:2
423:9,14	deficiencies	411:11	describe	373:5
424:3,9	367:16	450:17	371:13	375:5,20
426:18	deficiency	demonstrates	385:20	381:23
431:21	299:5	379:4	394:17	determined
433:10	deficit	380:5	described	369:18
434:14	367:4	denied	353:23	381:22
437:7	defined	442:16	398:25	determines
440:13	424:2	department	419:7	355:19
441:9	definitely	409:19	describes	determining
442:24	450:8	410:14	348:10	374:1
443:9	degree	depend 315:1	360:14	developers
444:7,13,1	399:16	399:11	description	317:23
4 445:2,3	415:17	dependent	277:2	318:10
446:15	429:16	385:7	278:2	320:17,24
447:5	degrees	depending	361:5	324:9
decision-	314:15,18	303:7,20	descriptions	developing
making	deliver	400:3	400:12	391:25
282:3	318:23	452:18	descriptors	development
321:16	deliverabili	depends	449:9	387:25
decisions	ty 434:21	286:13	design	410:9
321:23	446:1	311:1,21,2	285:10	diesel
decline	delivered	2 314:7	314:7,8,12	316:11,13
338:7	436:17,23	434:8	328:14	317:6
341:17	439:7,8,23	depict 307:7	385:3	differ
345:13	,25	depicted	designated	398:23
348:18	440:3,11	345:18	315:7	403:11
378:6	445:13,24	362:6	designed	406:23
386:18	delivery	depicts	314:10	difference
389:25	371:21	338:13	332:24	304:2,7
415:9	372:10	deploy	designs	319:16
433:3	431:4	431:17	319:19	333:7
declined	433:7	derivative	desirability	334:12
422:7	443:23	358:18	415:16	345:1
declining	demand	388:3	desirable	403:25
377:21	318:21	389:1	394:6	441:16
422:2,5,16				
423:4				
decreased				

differences 404:25 406:25 407:5,15	y 403:15 418:10 421:11 440:13	401:10 discussed 320:23 355:3 415:25 427:20 428:7 434:21	diversions 437:18 441:23 442:2	305:1,3,22 ,23 306:5 307:22,25 308:4,7 309:2
different 313:9 318:1 326:13 329:10 330:7,8 356:3 396:7 401:25	directly 316:17 317:3 406:24	discussing 413:11 449:4	documents 280:6 287:23 289:5 294:17 302:20 303:11,25 311:16 317:16 321:9 322:7 331:23 337:4 339:6 343:13 349:23 352:17,18 354:23 356:15 359:18 370:4 374:20 375:1 376:12 377:5 395:4 398:4 408:15,17 409:10	311:14,21 312:3 313:8 328:5,12 330:5 344:13,19, 22 346:5 355:9 356:11,23 359:4 367:5 384:11,20 392:7 397:18,23 398:7,15,1 9 410:19 411:24 426:12 433:14,15, 21,23
differential 319:25 341:15 342:3,4 367:24 382:14 418:25 429:8	disadvantage d 346:12,18 disadvantage ous 343:20 disagree 415:18 disbursement s 278:4,6 296:3,4,5, 10,13,18,2 3 297:16,19	discussion 292:14 329:21 330:15 427:16 441:17 448:15 449:7 disincentive s 324:17 dismal 414:21 displace 322:18 449:18 displacing 323:7 disputed 427:19 distances 406:25 distinct 439:25 distinction 440:3 distributed 396:4 451:21 distribution 376:17 379:20 380:5 diverse 442:25 diversificat ion 396:4	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
differential s 382:19 422:15	discern 406:4	dismal 414:21	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
differentiated 340:2	discipline 397:13	displace 322:18 449:18	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
differing 403:12	discontinued 299:1	displacing 323:7	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
difficult 281:10 406:24	discounted 432:16	disputed 427:19	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
diminished 342:16	discounts 432:19	distances 406:25	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
diminishing 355:7	discovery 389:8 392:4	distinct 439:25	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
dip 419:5	discrete 402:20,22	distinction 440:3	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
direct 301:4 346:20 353:16	discretion 425:3,4 426:4 431:18	distributed 396:4 451:21 distribution 376:17 379:20 380:5 diverse 442:25 diversificat ion 396:4	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
directed 352:15	discriminato ry 425:8 443:24	diverse 442:25	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
direction 365:4 378:11	discuss 285:9 349:21	diversificat ion 396:4	dollar 309:10 360:5 366:12 385:10 392:10,11 dollars 282:2 283:3,4,18 284:12,13 287:25 289:22 290:19 295:17,18 297:4 298:2 302:24 303:9,16 304:2	399:7 410:19 411:24 426:12 433:14,15, 21,23 done 289:8,13 300:23 313:20 358:13 377:13,18 381:6 386:12 391:24 451:9 door-to-door 403:24 downward 367:10 381:17 downwards 384:8 dramatic 378:3 dramatically 349:3 422:6 430:22 draw 294:15 drawing
directional 403:19				
directionall				

359:19	434:1	education	289:11,21	319:14
drawn 370:25		416:19	290:18	320:13
drew 352:16	<hr/> E <hr/>	effect	329:8	323:2,24
drill 342:1	earlier	304:25	359:3	324:14,18
drinking	297:3	376:2	450:15	326:13
279:20	298:20	390:2,25	eighteen	330:6,8
drive 312:10	328:25	391:1	280:24	electrician
366:11	355:3	430:2	281:4	320:11,13
425:14	379:25	445:4,5	303:9,15	electricity
driven	417:22	effective	304:2	304:11,23
395:16,17	earliest	303:23	336:18	305:13,18
driver	446:5	430:7,9	eight-five	306:9
347:6,9	early 338:2	431:16	344:13	307:12
drivers	364:12	433:23	eighty 360:4	308:10,14,
425:23	377:7,11	446:2	eighty-eight	19 312:21
driving	378:9	effectively	288:10	313:24
313:12	392:20	383:5	eighty-four	316:15,19,
drop 302:21	easily	397:25	433:15	21,23
dropping	354:11	420:21	eighty-one	318:4
328:10	east 383:11	effectiveness	305:23	319:4
349:3	easy 407:14	s 415:5	eighty-six	322:10,17,
drowsiness	economic	effects	340:20	18,19
279:22	313:12	372:17	eighty-three	323:13,21
druthers	314:10	efficiency	295:17	325:24
438:20	315:17,20	280:10,11,	eighty-two	electrons
dry 444:14	317:7	19	433:24	323:2
DSM 412:25	322:4,8	287:16,24	either	element
413:18	326:15,20	299:9,11	306:4,8	326:8
452:14	328:7	301:6	329:9	eleven
due 320:3	329:3,9	305:6,7,22	335:5	309:2,3,9,
385:18	364:20	,24 306:1	353:13	21 310:10
401:16	378:23	307:12,23	365:22,23,	328:20
406:25	400:9,13	308:7	25 442:16	374:3,7
449:23	436:13	316:22,24	el 313:23	eligible
451:1	440:14	317:2	elect 307:12	281:16
Dunsky	445:15,18	327:6	elected	282:1,19
329:25	economically	efficient	339:21	300:17
during	438:24	285:25	electing	313:23
318:25	economics	301:18	366:3	eliminated
335:9	313:9	306:16	electric	442:10
379:1	315:21	307:13	287:10	elimination
392:1	319:6	327:4	305:22	428:8
dynamics	330:8	328:6	308:20	437:17
320:14	edification	330:2	309:6,12,2	440:25
dyslexic	337:21	410:7	4 310:5	441:7,24
	educate	EFT	314:16,21	442:6
	319:2,8	367:12,15	318:25	else 443:15
	324:8	368:6		elsewhere
		eight		340:3
		288:10,21		

embed 397:3 445:14	283:9,13 284:24 285:21,24 286:6,24 287:15 299:9,11 300:10,18 306:4 313:20 326:16 327:3,4,6, 20 328:1,5 330:2 378:6 423:10 426:18 432:4,11 440:9 446:21	403:3 404:7 432:19 entering 391:17 406:9 enters 402:10 entertain 389:14 entertaining 389:1 entire 375:17 377:2 407:7 entirely 318:1 378:24 435:23 entities 404:23 entity 278:11 405:20 408:8 432:4 entry 406:5,12,1 4 environment 379:22 380:7,9 environmenta 1 319:6 322:14,20, 25 323:10,11 envision 397:11 envisioned 452:24 equal 285:21 308:14 419:14 equivalent 286:23	309:12 321:10 335:8 389:18 391:14 error 296:8 310:21 erudite 414:3 especially 354:6 essence 285:20 289:7 essentially 296:23 establish 402:14 estimate 288:23 301:17 351:14 353:11 estimated 294:19 et 323:8 ethane 420:1 evaluating 454:3,10 evaluation 326:1 evaluations 300:15,25 evenly 396:3 event 378:3 399:8 423:25 424:3 430:25 442:1 447:9 452:20 events 395:24 everybody 279:4	everyone 443:1 evidence 346:20 393:20 394:25 395:5 403:21 423:11 428:12 evident 320:16 exacerbates 395:24 exact 308:25 335:1 416:16 exactly 382:12 401:14 examination 361:24 362:11 401:13 407:11 413:13 example 327:21 328:19 332:3 343:6 391:18 395:20 399:18 430:21 441:22 445:2 450:15,21 453:22 except 307:11 413:24 426:6 excess 364:16 Exchange 402:19 excluded
embedded 364:10,17, 20 372:12 382:17,18 383:3 391:10 406:5				
embedding 391:10				
Emerson 429:14 430:19,23 431:3,7,9, 13,20 432:1,7 433:5,7,21 434:9,21 436:14 445:18,20	engage 389:5,13,2 0 390:17 405:13 engaged 321:13 405:8 engaging 372:4 387:22 enjoy 380:8 396:4 enjoyed 380:18 enjoys 403:16 enlighten 430:19 enroll 352:7 enrolled 337:15 397:4 enrollment 348:8 350:12 ensure 376:4 enter 391:21 entered 392:14,18			
employ 366:13 378:24				
employee 410:8				
Empress 370:14 372:15 373:8 382:14 417:23,25 419:8 421:3,7 429:2 435:4 445:18 450:19				
encounter 400:19				
encourage 321:6 323:19,23 395:23				
endeavour 407:25				
energy 275:11,13 280:11				

310:16	447:11	explaining	363:6,8,19	391:9
exclusively	expecting	326:11	395:17	409:6
378:10	287:11	explicitly	412:11	426:18
388:19	385:12	411:17	413:15	fall 301:25
excuse 423:9	expects	explore	424:5,13	363:20
excused	342:15	411:7	449:17	378:2,18
413:16	expended	explosion	453:20	fallen 365:8
452:17	298:3	396:11	extract	falling
executed	expense	export	292:18	377:14
371:20	366:18	322:17	408:17	380:9
execution	367:9,20	323:13	extremely	396:6
391:6	384:8,10,2	exported	411:2	familiar
Exhibit	1 385:20	323:4	eye	357:25
277:2	expensed	exposed	431:14,19	371:3
280:7	386:3	330:13		family
339:12	expenses	361:16	<hr/> F <hr/>	303:3,14
356:13	366:22	376:7	faced 364:17	304:24
376:13	367:3,7	392:15	facilities	fashion
exhibits	369:3,11,1	403:18	420:4	414:3
276:3	4	exposure	421:2	father
277:1,3,4	expensive	379:6	facility	343:14
452:6	329:2	390:5	422:11,19	344:5
exist 421:13	345:10	392:5	fact 346:19	favourable
existed	346:15	395:24	350:9	424:25
374:17	419:15	399:5	354:6	425:5
existing	437:3	400:6	380:5	feature
385:9	exper 377:10	exposures	382:13	407:8
430:15	experience	360:16	389:10	features
450:22	351:12	397:9	391:20	407:9
exists	352:12	express	392:8	February
372:23	369:12	370:5	419:16	303:23
expect 300:1	377:10	expressed	420:18	333:19
348:1	381:13	341:21	423:18	334:4
355:21	439:22	expressly	425:7	350:4,14
357:13	450:17	411:20	426:6	351:8,12,1
427:15	experienced	extant	444:19	9 353:13
expectation	381:14	358:24	446:15	federal
318:21	396:17,18	extend 297:9	factor 312:2	432:4
361:8	expired	313:16,17	417:17	feel 378:25
425:17	345:20	extension	421:14,18	379:12
expected	explain	324:11	422:1	387:16
341:10	318:8	extensive	factors	388:6
360:20	330:23	387:24	346:21	397:7,12
369:6	360:15	extensively	399:13,22	403:13
382:25	376:20	428:9	400:21	feeling
385:11	398:6	extent	fair 316:9	343:2
390:13	402:17		359:6	feet 423:11
	407:22		fairly	
			388:11	

felt 448:20	fin 286:11	326:20	427:24	355:11
FERC 432:5,8	final 384:5	343:7	fixed 325:18	356:17
fewer 350:5	446:20	346:1	330:25	358:4,14
fiasco	finalized	363:3,14	331:2,7,16	366:22
444:18	430:14	380:23	,18,24	370:7
fields	finance	381:16	333:8	371:8
419:17	285:24	394:2,20	334:7,13	386:19
fifteen	324:2	398:24	337:6	395:7
289:20,21	financed	first-come	338:22	397:4
291:2,10	287:7	337:23	339:20	405:16
299:18	financial	first-served	342:13,19	415:17
312:14	358:9	337:23	343:18	fixed-term
332:5	362:7	fiscal	345:2	331:13
438:10	366:23	289:23	349:21	flatfooted
fifth 454:10	374:11	291:1	352:3	396:22
fifty-eight	375:11,12,	293:12	354:25	flatter
346:4	13	298:5	355:16	381:8
fifty-five	financially	356:16	366:19	flawlessly
289:8,13,1	343:19,20	359:10,21	369:19	449:24
4 295:14	346:12,18	384:9	388:18	451:4
fifty-four	366:19	398:5	390:19	flexibility
435:11	financing	411:23	393:23	428:17
fifty-nine	284:22,24	fiscally	409:13	422:11
305:22	285:20	330:4	412:11	414:13
fifty-three	286:12,23	fitter	422:3	423:18
289:22	287:3,14,1	320:1,10,1	428:19	429:1
fifty-two	7	8,21	432:15,18	flip 306:21
309:11,22	findings	five 283:13	fixed-price	317:25
310:11,23	341:15	287:18	278:12	floating
352:24	fine 442:18	293:24	339:22,25	390:19
figure	finer 290:12	295:9	340:15,23	flogged
452:16	finish 348:1	300:24	341:22	448:3
figures	firm 375:8	307:21,25	343:7	floor 427:3
376:4	424:12,14,	311:20	344:11	floors 427:6
414:21	25	332:13,16,	401:23,25	flow 333:24
file 278:3	425:14,19,	20,21	404:22	338:6
296:9	24 426:20	333:10	405:21	398:10
297:15	431:1,3,8	341:3	408:9	399:6
filed 306:22	434:4,5,21	344:8,18	414:22	flow-dates
307:9	435:3,10,1	350:20	416:3	353:12
350:10	6,23 436:8	352:9	fixed-rate	flowed 331:6
357:10	first	353:5	331:20	351:7
filing 304:6	286:1,2,3	358:23	341:16	352:2
348:14	287:6,18	369:10	345:11	flowing
354:17	294:15	372:6	346:6,13,1	422:4
435:18	311:11,12,	379:2	5 347:18	flows 422:7
	25 312:20	381:13	348:21	fluctuation
	314:14	402:12	350:6	342:22
		450:15	354:9	fluctuations
		fix 417:3		344:18

flux 437:6	form 418:13	429:7	y 403:24	283:23
focus 321:18	formula	fourth	funding	286:5,7
foolproof	370:7	290:16	283:4	287:10,13
387:13	371:8	free 323:2	290:15	355:17
footnote	formulas	front 413:17	291:6,11	365:4
360:12	372:12	FRP 294:18	298:13	389:21
force 426:16	forth 420:15	FRPGS	299:1	396:21
forced 389:9	forties	330:23,24	funds 281:23	399:17
435:10	308:25	FT 426:7,16	300:9	400:11
436:8	fortunate	FT-RAM 428:8	329:5	401:11
forecast	399:20	fuel 308:18	furnace	408:25
291:1,5	forty 315:9	309:16	280:2,19,2	414:6
293:3	forty-eight	310:13	0 282:23	416:25
294:21	367:4	312:23	283:10	futures
298:10,23	433:21	313:3,14,1	284:8	372:9
340:20	forty-five	5,16 314:2	286:14	390:14,17
361:10	284:11	316:16,17,	287:24	391:1,2,4,
370:13	forty-one	20 318:5	288:7,8	7,13,14,19
371:16	329:8	319:8	289:6,23	,22
372:5,17	forty-three	323:19	290:3,13	402:11,19,
386:7,8,15	356:24	372:14	292:21	22 406:10
,16,17,19,	forty-two	373:9	293:6,14	future's
24,25	309:10	full 344:11	295:17,18	392:16
410:23	310:22	376:18	296:16	
424:1,4	433:14	392:4	297:3	<hr/>
429:2	forward	426:4	298:14,25	G
434:18	292:3	430:6	302:23	<hr/>
435:17	296:25	full-time	304:17	gain
439:7,9	362:9	368:9	305:6	316:24,25
446:18	372:18	fully 285:4	307:23	317:2
447:14	381:5	345:19	308:8	363:24
forecasted	399:19,23	368:24	314:17	366:12
369:24	402:21	376:6	318:21	390:9
forecasting	422:24	function	320:13	399:21
294:18	436:14	384:2	328:25	400:7
forecasts	441:8	400:14	329:13	gains 379:23
288:8	444:15	431:15	furnaces	380:18
292:10	447:20	functional	280:10,14	game 400:14
386:12,15	forward-	390:2	281:17,22	gas 274:7
foresee	looking	fund 282:25	283:1	275:5
400:17	399:4,5	290:9	288:10,18	287:11
foreseen	400:6	292:8,9	289:2,9	302:21
365:3	foundation	294:19	295:10,15	304:11
foresight	375:11,12	298:8	296:6,19,2	305:7,9,18
366:11	fourteen	300:10	2,25	,24
forgot	309:9	313:21	298:1,9	306:1,13,2
454:21	423:20	Fundamentall	301:5,14,1	0,24
			8 306:16	307:13,20,
			319:20,24	23
			329:13	308:7,13,1
			future	9
				309:1,9,21
				,23

310:4,8,15 ,18 313:24 315:18,20 317:14,24 318:4,9,21 319:12,18, 20 320:1,7,10 ,16,18,21, 23,25 322:8,9,16 ,22 323:1,8,13 ,20,24 324:10,15 325:19 326:12,14, 25 327:5,7,18 328:10 329:17 330:25 331:6,10,1 1,14,19 332:10,25 333:24 334:18 335:4,19 337:22 339:21 340:23 342:23 344:14 345:14 346:13,16 347:21 348:10,11 349:22 351:8,21 352:2,3 355:11 356:17 358:4,5 360:17 361:15 363:19 370:8,13 371:17,23 372:5,16,1 8,20 375:15 376:2,3,4 377:14 382:18	383:4,6,9 386:24 388:18 389:23 390:6,7 394:21 395:8 396:18 397:5 402:19 409:14 412:12 415:25 416:6 417:12 419:14,17, 19,24,25 420:2,3,6, 7,9,13,19, 20,22,23 421:4 422:4,9,13 ,17 427:4 430:21,23 431:13 432:22 434:9 436:18 446:4 gather 323:16 406:17 gathered 410:13 ge 378:19 general 274:8 278:8 290:21 303:7 336:16 342:7 345:13 367:16 378:4,19 386:11 405:22 408:4 generally 313:1,19 314:6 326:22	328:8 371:14 377:20 378:2 410:4,25 432:21 generation 317:1,6 gentlemen 279:18 geothermal 311:10,12 312:5,20,2 2 313:6,15 314:4 315:4,8,19 316:6,11,1 5,18,19,25 317:7 Geraldo- Gomez 451:19 gets 342:14 getting 313:11 398:7 gigajoule 309:10 392:10,11 given 353:16,24 354:10 355:2,5 364:24 367:24 372:2,12 374:10 378:17 382:13 388:23 395:19 399:15,25 407:1 416:25 420:18 421:7 438:22 441:21 450:2 gives 316:10	328:23 giving 421:15 422:15 GJ 426:12 GJs 429:3,4,5 431:2 434:18,22 435:1,6,17 436:19,20 439:8,23 global 322:19 323:10 globally 322:24 378:5 goal 366:8 399:25 gone 429:15 Gosselin 274:14 Gosselin's 421:24 government 281:21 287:1 315:7 GRA 304:6 grand 350:22 granite 321:20 graph 337:10 338:10,12 348:9,12 350:4 380:15,23, 24 graphing 379:20 graphs 348:7 376:13 great 300:10 419:1 432:22	greater 305:17 370:2 380:7 441:25 447:10 Greg 277:11 290:8,23 291:3,7,14 292:4,15,2 5 293:15,20 335:22 343:22 344:3,9,15 ,20,25 345:7,12,2 1 346:7,14,2 4 356:19 357:1,6,15 358:1,7,15 ,20 359:8,12,1 6,24 360:6 366:21 367:6,14 368:16,20 369:1 370:10,15, 22 371:4,11 384:22 385:25 401:12 409:15 410:17,20, 24 411:7,14 412:1 grid 317:5 ground 443:7,11 grounds 444:9 group 353:17 growth 379:12 guess 280:23 332:3 367:16
---	--	--	--	--

379:24	401:9	3	385:18	378:10
382:2	402:8	305:12,16,	388:14	highway
390:15	412:19	19 306:25	389:10	319:13
401:13	416:1,7	309:12	424:17,19	hindsight
415:15	423:3	310:6	held 274:18	343:18
417:1	442:9	311:11,25	296:4	hire
guidelines	454:6	317:19	453:22	320:10,11
330:1	head 299:23	318:11,13	help 319:2	historical
	heading	320:7,24	321:6,25	376:14
<hr/>	339:20	321:18	339:4	391:25
H	hear 299:2	322:2,3,23	379:12	historically
halcyon	336:23	324:10,14	395:4	437:4
415:7,11	417:4	419:23,24	431:20	history
half 288:17	447:17	heavier	451:14	331:24
304:19	heard 310:21	420:6	helps 405:25	hit 363:14
306:9	355:9	hedge 358:22	454:16	401:4
328:11	442:24	360:12,19,	Henri 277:17	436:8
332:6	444:2	21,22	he's 453:11	hold 403:19
380:23,24	hearing	361:17	hesitate	424:11
395:6,12	331:2	362:15	280:12	431:2
396:9	347:8	363:23	hesitated	holding
hand 405:25	398:9	364:2,6,10	314:3	364:25
handicap	415:24	365:18	high	holds 420:19
428:17	427:16	372:3	305:6,22	Hombach
hands 445:1	443:3	390:23	306:1,16	275:3
happen	hearings	392:8,22,2	307:12,13,	home 283:7
283:23	329:21	5 400:9,13	23	302:18
381:6	heat 308:20	hedged	308:7,24	303:2,5,7,
385:10	309:12,24	361:16	342:3	8 306:25
414:5	312:21	hedges	383:7	308:15
happened	313:17	357:24	420:14	311:11,22
368:21	314:5,9,21	359:7	431:5	312:15
happens	316:17	361:4,7,11	higher 287:4	315:2
447:13	317:3	362:4,9	332:20	316:17
happy 449:13	322:9	363:4,15,2	334:8	317:3,19
hard 399:14	323:2,24	1,22	338:18	318:2,20
401:6	324:18	6,22,25	383:15,25	319:16
454:6	419:21	365:11,13,	403:16	321:15,17,
hardly	heated	15,16	406:11	23 322:1
444:14	300:12	385:9,17,1	407:8	328:19
haven't	heater	9 389:25	419:10,25	homeowner
355:16	305:23	390:3,7	420:13	308:16
368:24	306:5,6,12	392:19	426:15	321:9,15
438:6	,13 314:16	397:25	439:1	homeowners
449:17	heaters	hedging	449:14	312:23
having	304:20	358:5,12	450:24	319:12
346:17	heating	364:25	highest	321:14
391:15	302:18	366:17	445:16	
	304:8,16,2	373:6	highly	
		375:20		
		376:2,8		

homes 281:15	312:3,11	IFF 293:5,19	411:2	448:16
300:7,11,1	317:21	ignoring	413:23	449:12
5 301:19	329:1	385:16	415:6,10,1	improved
306:4	334:13	I'll 294:11	8 418:7,9	416:23
312:20	338:5	299:7	419:7	improvement
315:2,3	340:20,21	330:16	427:24	287:16
317:14,20	344:12,18,	336:11	436:1,4	inappropriat
324:10,14	22 352:24	354:14	441:12	e 356:1
329:11	356:24	388:14	443:4	Inc 274:7
389:20	359:3	408:21	447:17	275:6,8
hook 447:19	360:4	412:9	448:24	incented
hope 399:16	367:4	428:3	451:6	422:11
hopefully	384:10,19	433:19	452:21,22,	incentive
282:7	385:10	452:15	23	318:17
302:1	411:24	453:1	image 380:2	426:15
394:8	426:11	I'm 288:4	immediately	447:7,8,9
hot 322:10	435:5,12	290:14	349:6	incentives
hour 347:24	hundredths	292:18	impact 424:7	323:18,23
348:1	335:14	293:9	440:8	inception
house 320:12	Hydro 318:25	294:9,12	impacts	358:3
household	322:8	297:6,7	319:6	368:19
311:24	Hydro's	300:6	325:13	include
312:5	322:17	310:7	360:12	281:3,14
houses 320:6	326:3	311:15	366:17	293:3,13
housing	hypothetical	315:5,25	imparts	297:10
282:8,10	376:14	325:6	415:16	370:20
319:19	hypothetical	330:11	implement	373:8
hub 371:21	ly 427:8	346:20	292:21	382:6
372:10		349:22	328:5	407:9
431:11		353:16	implemented	408:23
454:6		355:13	286:14	included
hun 404:18		357:15,16	316:11	281:16
hundred		359:14,17	implications	290:2
282:6		360:19	434:14	291:1
283:3,18		361:25	implicit	306:25
284:11		367:14	391:4	310:14
289:8,12,1		368:12	implies	375:19
4,21		370:22	399:15	393:18
290:18		371:3	implying	407:3
291:10		373:2	404:4	409:12
295:9,14,1		377:15	important	412:11
6,18 297:4		380:11,12	327:14	including
298:2		381:1	436:11	284:23
300:24		387:6	448:21	293:1
305:1,2,21		389:23	449:23	301:19
306:5,6		391:13	imposed	397:24
307:22		395:6	440:9	398:13
311:14,21		398:9	impression	431:7
		401:24		
		402:8,10		
		404:18,25		
		405:21		

income	369:3,22	industrial	369:9	363:24
280:11	388:8	420:4	401:13	364:7,19
281:15	390:6	421:1	initially	365:3
282:9,21	incurred	422:11	368:11	372:3
283:6,19,20,25	375:14	industry	initiative	388:20
284:2,20	408:24	383:8	313:5	389:5
301:19	410:3	420:16	315:14	390:10,19
329:7	incurring	inefficientl	341:14	insufficient
incorporate	365:8	y 316:20	425:19	369:15
370:13	Indeed	infer 354:10	initiatives	insulate
402:21	366:21	influenced	326:16	378:24
incorporated	independent	362:23	ink 444:14	insulated
374:15	403:23	445:19	insignifican	300:11
incorporatin	404:5	inform	t 363:9	311:22
g 372:11	in-depth	401:15	install	329:12
375:15	303:6	431:20	317:24	insulates
382:19	index 364:9	information	318:11,12,	388:4
increase	375:8	301:12,24	13 319:20	insulating
284:9	382:21	302:1	324:10	390:3
304:10	indicate	321:14,25	installation	insulation
306:24	278:8	324:4	s 288:7	286:15
309:1	347:25	336:1	289:6	300:8
310:17	371:5	339:12	installed	328:20
396:21	384:7	351:15	313:6	insurance
433:2	408:3	353:19	318:22	372:22
increased	453:2	354:1,16,17 355:3	319:18	intel 443:7
307:24	indicated	356:14	installing	intelligence
341:17	383:14	357:8,11,22 360:3	312:11	391:9
342:4	402:12	374:9	instance	449:15
367:16	413:15	375:3,4	323:20	450:14
382:6,12	444:6	377:18	334:3	intend
422:15,24	indicating	385:1	345:9	400:20
426:1	281:8	405:25	346:10	402:22
430:22	305:12	423:12	401:7	intended
increases	indication	451:20	instances	415:11
378:15	388:24	informed	302:22	intends
432:24	indicative	319:5	instead	425:3,4
increasing	445:12	389:16	307:21	427:18
381:10	individual	445:20	379:23	intensely
429:21	283:6,7	infrequently	381:7	406:2
433:22	308:16	401:5	instrument	intention
incremental	313:5,10	inherent	388:3	368:17,19
385:7	353:9	407:9	390:20,22	397:23
incubator	individuals	initial	391:5	453:4
299:22	368:10	323:20	393:1	intentionall
incumbent	indulge	364:18	instruments	y 367:23
449:19	453:9	365:10,13	358:18	intentions
incur				

413:12	interstate	IR 359:17	281:2	421:17
intently	432:6	irrespective	282:19	422:14
405:11	intra 450:1	326:21	283:1,2	423:1,2
intents	intra-	IRs 452:1	284:5	424:13,21
390:4	Alberta	isn't 318:22	286:14,21	426:25
interest	419:16	336:17	287:8,12,1	427:17,23
291:17,18	intra-day	382:22	9 288:22	429:2
292:3	450:19	432:2	290:25	432:3
294:1,5	intrigued	434:3	296:20	433:22
341:22	391:13	439:2	299:17,21	434:11
414:20	introduced	444:7	302:17	436:11,21,
417:14	396:14	450:13	303:8,13	25 438:17
447:2	introducing	isobutane	306:8,13	442:4,24
interested	330:12	420:1	308:9	449:11
338:21	intuitive	isolate	309:1	450:4,7
341:21	427:25	398:1	310:16,17	454:14
342:5	intuitively	isolation	311:22	I've 381:21
347:3	438:8,11	421:23	312:9	394:20
367:25	invested	issue	313:5,12	405:9
437:5	438:13	325:18,25	314:10,16	451:11
interesting	investing	364:16	315:1	453:16
386:23	328:17	401:25	319:20,21	
interests	investment	408:12	323:6,7	<hr/>
446:22,23,	312:4	415:3	324:13	J
24	327:10	416:1,14,1	326:12,21	Jacobs
interim	438:15	9 434:6	327:2	277:18
388:12	investments	438:1,25	329:1,2,8	job 368:10
397:8	311:10	issues	330:6,10	Johnston
430:11,14	312:8	304:12	333:24	275:15
intermediary	invited	321:1	334:24	Judging
353:20	351:21	437:9,12,1	336:18,24	279:19
internal	involve	6	338:19	judgment
394:13	369:19	item 292:23	351:1	328:18
401:9	involved	339:19	354:11	330:1
internally	285:4	340:12	355:13	415:16
355:20	347:9	357:23	365:24	July 277:3
394:5	364:21	409:25	366:1	332:7
interpretati	371:18	411:10	368:9	430:2
on 359:6	374:6	437:23	380:22	431:16
interpreting	410:9	items 339:19	385:11,15	433:23
380:11	involves	340:12	386:16	June 274:22
interrogator	372:9	410:14	394:5,21	332:4
y 307:16	392:20	440:24	396:17	jurisdiction
interruptabl	involving	it'll 314:13	397:22	407:8
e 426:5	371:20	385:7	399:1,25	432:11
interruptibl		398:9	401:3,5	jurisdiction
e 424:24		425:14	405:7,12	s 348:25
		it's 280:22	406:23	404:17,21,
			407:12	22 405:1
			410:19,21	406:16
			414:19	
			415:7,23	
			417:11	
			419:19,20	

407:6,15,1 6 jury 415:6 <hr/> K <hr/> Kapitany 274:15 281:6 282:17 386:5,22 387:6 393:6 Keelaghan 455:15 Kelly 277:23 Kerr 275:13 key 446:20 kick 314:13 437:11 kicked 314:14 kicks 314:18 kidding 315:25 Kim 275:15 KINU 281:25 knew 335:3 364:24 369:21 knowledge 372:11 404:4 405:14,15 406:3 known 420:6 Kuczek 276:7 277:8 279:9,25 280:4,12,2 2 281:12 282:13,18 285:6,17,2 3 286:4,13,2 0,25 287:17 288:2,12,2	2 289:10,17 292:8,23 293:23 294:2,4,8, 9 297:2 298:16,19, 24 299:7,12,1 7,20,23 300:4 301:11,23 306:15 308:24 310:10,12 311:1,20 312:1,7,19 313:1,19 314:6,23,2 5 315:5,13,2 4 316:1,2,5, 8,13 317:9 324:5,17,1 9,23 325:1 326:10 341:18 342:13,17, 24 343:15 347:5,17,2 2 349:1 355:10,13, 24 356:8 363:2 367:22 368:7,8 369:16 385:5,15,2 3 409:7,8 412:16 415:21 417:10 Kuczek's 297:25 309:20 323:17 344:5 <hr/> L <hr/> labour 410:8 ladies	279:17 Lakes 432:22 landlord 281:11 283:16,19, 24 285:1,4 landlords 281:8,14 282:16 283:15 284:7 285:8 landscape 415:25 large 386:11 389:17 399:9 415:17 largely 380:2 larger 278:7 296:10 297:20 319:23 320:4 largest 454:1 Larry 274:16 last 279:21 325:18,24 333:18 359:21,22 362:3 401:17 408:12,14, 16 414:12 418:12 453:14 lastly 449:6 late 299:18 377:11 378:9 380:2 454:14,20 later 357:10 452:25 launched 313:4,25	327:6 343:8 363:3 launching 341:13 lawyer 414:19 layering 445:6 leading 388:24 learned 367:18 least 300:22 315:8 318:19 323:19 334:20 365:13 403:21 leave 294:12 299:3 300:4,6 354:14 412:9 416:7 434:25 453:1 leaves 383:9 leaving 443:4 led 365:19 left-hand 337:10 381:16 leftover 434:25 legacy 385:19 legal 296:13 442:14,18 legisla 287:1 legislation 286:8 287:1,5	less 302:24 306:9 318:4 326:13 338:19 350:25 377:7 404:10 440:14,19 let's 285:14 337:1 343:13,23 355:8 356:10 370:11 384:15 394:18 405:17 413:5 letting 317:11 374:10 lev 396:19 level 326:2 327:9 353:22,23 363:13 378:17 379:13 380:6 396:20 397:10 403:7,13 406:22 416:8 419:19 431:25 439:1 445:7,16,2 1 453:23 levelized 327:19 328:21 levels 327:16 396:7 leverages 390:5 LGS 337:19 liberty
--	---	---	--	---

418:7	348:15,16	282:13,18	417:15	5
licenced	357:23,25	285:6,17,2	locked	339:3,16,2
348:11	362:3	3	287:15,18	4
LICO 280:18	375:3,4,8	286:4,13,2	332:16	340:4,10,1
LIEEP 284:15	376:22	0,25	438:10	6,25
285:1,5,12	377:1,6	287:17	locking	341:5,11
300:14	387:7	288:2,12,2	392:9	348:13
lies 447:15	401:17	2	logic 419:9	350:1,8,15
life 281:18	405:8	289:10,17	Lois 276:8	,23
315:16	410:14	293:23	277:9	351:3,9,24
390:10	411:10	294:4,9	279:10	352:4,6,19
light 297:25	422:2,4,8,	297:2	289:25	,25 353:7
347:24	22 423:3	298:16,19,	294:24	355:1
444:18	431:7,25	24	295:5,12,2	361:20
likely	443:18,19,	299:7,12,2	3	362:17,25
283:17	21	0,23 300:4	296:15,18	386:14
289:1	lined 285:8	301:11,23	297:11	long 438:24
329:12	lines 376:21	306:15	298:6,11	449:13
355:5	link 454:5	308:24	300:16	452:22
424:11	liquidity	310:12	301:1	longer
440:15	431:14	311:1,20	302:25	314:11
likewise	liquids	312:1,7	303:4,20	330:15
290:25	383:3,7	313:1,19	304:1,13,1	389:14
322:10	419:20	314:6,23,2	8,21	402:15
325:13	420:7,12,2	5	305:4,10,1	Long-haul
331:20	2 421:25	315:5,13,2	4,20,25	422:7
332:19	422:15	4	306:10,19	long-term
380:12	List 276:3,4	316:2,5,13	307:3,10,1	366:8
limit 328:15	277:1	317:9	5,19	388:9
379:12	278:1	324:5,19,2	308:3,11,1	400:1
397:16	listening	3 325:1	7 309:5,18	loop 314:11
400:6	329:20	326:10	310:3,25	Lori 276:10
426:10	literally	341:18	317:17,22	277:15
limitations	388:1	342:17,24	318:6,9	279:12
449:5	little 297:7	349:1	319:15	421:14,22
limited	301:24	355:13,24	321:12	422:25
448:18	302:7	356:8	322:11,21	423:15,21,
limits 363:4	309:15	363:2	323:15,22	25
396:23	326:13	367:22	330:24	424:10,22
line 290:16	330:6	368:8	331:5,8,15	425:2,10,1
292:3,23	332:20	369:16	,21	6,22
294:16	338:12	385:5,23	332:1,8,14	426:8,13,1
296:4	410:8	409:8	,18,22	7
338:12	live 389:12	415:21	333:1,12,2	427:3,9,15
339:19	Lloyd 276:7	417:10	0	428:3,10,1
340:7,12	277:7	Lloyd's	334:1,6,11	5,18
341:12	279:9	299:23	,16,24	429:4,10,1
342:6	280:4,12,2	lobby 299:7	335:20	2,16,20,25
	2 281:12	located	336:6,21	430:3,8,12
		443:18	337:8,13,1	,16,25
		lock 400:14	8,25	432:3,14
			338:8,16,2	

433:6,17,2 0 434:8,15,1 9,23 435:2,8,14 ,20 436:1,10 437:13,20, 24 438:6,12 439:4,13,2 0 440:5,12,1 8 441:5,12,2 0 442:11 443:17 444:8,22 446:7,12 447:8 448:1,13,2 0 449:3,20 450:16 451:10 453:13 lose 316:23,25 395:22 loss 359:3 360:5 365:9 366:13 377:7,10 378:25 379:15 384:19 387:14,19, 21 388:4 389:24 390:8 392:10,11 399:19,23 losses 363:13 379:6,12,2 3 388:8,12 389:22 390:7 393:7,10 397:19 398:16,20, 23	399:9,17 403:3 lost 316:24 356:16,22, 24 lot 300:7 361:18 396:11 407:11 431:18 lots 315:9 low 280:11 282:9,21 283:6,19,2 0,25 284:2,19 301:19 308:25 396:20 lower 281:15 283:9 284:23 285:21 318:15 329:7 341:10 369:5,7 382:17 403:17 417:25 419:8 421:2 447:13 lowered 283:9 lowering 383:14 ludicrous 426:11 lunch 348:1 349:19 354:23 <hr/> M <hr/> ma'am 335:21 magnitude 381:18 428:22 436:5,6	450:18 main 419:3 422:2,4,8 423:3 431:7 443:19,21 mainline 372:15 432:13 433:8 438:13 443:2 major 335:9,12,1 9 336:16 380:10 423:3 425:23 management 325:7,22 428:13 manager 353:16 Manitoba 274:1,7,21 275:5,8 282:10 317:5 318:25 322:8,17 323:14 326:3,25 327:5 348:11 352:13 354:8,12 355:5 405:11 406:2,9 417:8 431:3 433:7 443:13,16 Manitobans 282:9 322:16 446:2 manner 403:10 425:3	Manny 277:19 mar 338:3 380:17 381:9 March 333:19 351:20 359:25 367:2 384:9 margin 339:19 364:18,20 365:2 379:20,23 380:17 391:4,9 406:4 marginal 327:17 363:8 marginally 362:17 429:21 margins 365:9 381:8 389:8 406:8 422:12 Marilyn 274:15 386:5,22 387:6 mark 277:21 434:10,12 marked 280:6 376:12 452:6 markedly 396:21 market 280:14,17, 18 281:1,3,16 287:24 317:18,19 320:15 321:13 328:9	331:19 335:13 336:4 341:19 349:2 352:14 354:7,8,10 ,12 355:7 359:4 360:16 364:9 368:1 370:8 371:9 374:3,5,12 ,13,16 375:8,13 376:6,18 377:14,21 378:3,20 379:21,22 380:7,9 381:6,9,23 382:14,15 383:1 385:13 386:21 387:19 388:9,10,2 0 390:4,17,2 0,23 391:24 392:2,6,9, 16,25 393:11 395:24 396:6,7 399:7,24 400:3,13,1 8 404:7 406:1,3,6, 10,12,14 407:2 416:1,11,2 2 417:12,17, 24,25 418:3 420:13 421:2,4 431:19 437:6 439:24
---	--	---	--	---

442:3	395:21	matters	333:9	379:9
445:11		452:10	374:18	
449:15	market-to-	453:12	381:23	mechanis
450:14	mark		385:25	447:9
453:21	392:21	matured	387:9	mechanism
marketer	mark-to	364:3	409:23	384:3
353:25	392:24	maximum	412:22	410:7
404:5	mark-to-	384:18	415:21	447:7,9
	market	432:25	441:17	mechanisms
marketers	357:24	may 281:10	448:24	375:16
335:12	359:7,9,22	295:2	449:11	407:6
348:21	360:3	302:21	Mayer 408:18	442:2
353:20	362:3	304:10,25	MD 430:19	meeting
355:4	389:24	307:13,14	MDA 372:15	450:1
404:5,8,14	399:3,19,2	313:16	423:19	member
405:4	3	315:2	429:2,5,14	274:15,16
417:5	Marla 275:5	319:4	431:7,9	281:6
440:4,5,10	Masi 275:9	320:10,18,	433:21	282:17
443:1	452:16	19 331:7	435:4	393:6
454:10	massive	332:4,7	436:15	members
marketers/	379:6	333:24	445:18,19	279:16
producers	mater 418:3	338:3	mean 300:5	304:5
440:6,10	material	343:24	315:15	330:12
marketing	418:4	345:18,25	346:25	351:17
364:15	materialize	347:3	360:18	408:13
365:5	361:12	351:13	376:23	412:8
367:23	424:4	352:2	377:6	413:23
385:8	446:18	353:3,4,13	384:22	mention
416:21	materializes	359:17	419:10	453:17
marketpla	447:10	360:10	426:10	mentioned
335:10	materially	362:13	427:23	285:15
marketplace	426:1	378:9,20	442:19	288:1
296:1	materials	380:1,20	meaning	290:20
301:14,19	351:13	381:8	415:11	297:2
313:7	378:6	383:14	means 295:2	301:14
327:14	451:21	388:8,12	387:13	302:20
330:3	math	397:5	391:6	322:14
335:10	292:1,12	399:23	438:24	328:24
347:8	295:13	400:9,12,1	meant 302:17	438:1
358:25	mathematical	4,16 401:4	310:22	443:22
404:12	ly 288:16	404:13	392:9	445:23
431:16	matter	406:24	448:24	mentioning
markets	325:14	407:7,8	measure	342:1
366:14	411:17	427:5	286:14	mentions
404:23	414:1	431:1	375:10	360:13
406:23	425:6	436:13	399:1,4	Mero 419:5
407:1	438:7	438:3	measures	Meronek
417:5		439:21	328:6	275:8
market's		441:13,14	367:19	276:12
434:13		446:3		
market-share		452:19		
		453:10		
		maybe 326:10		

348:2	5 454:20	million	413:3	284:5
412:23	Meronek's	289:21	minutes	298:22
413:4,17,1	422:22	290:9,18	302:6	363:17
9,21,22	messaging	291:10,12,	370:2	395:22
414:18	321:22	13,20	413:6	399:1,2
415:4,13	met 320:22	292:8,9,11	mirror 380:2	month 284:13
417:2,19	400:23,24	,12,19,20	mirrored	302:22,24
418:2,9,19	446:2	293:2,6,13	403:23	303:9,16
419:1,5	methane	294:2,20	MISO 323:4	304:3
421:10,11,	420:2	295:1,3,8,	missed	427:14
16	methodology	15	411:10	433:22,24
423:7,8,17	370:12	298:5,8,14	438:3	439:20
,22	371:13,14,	299:3	misspoke	monthly
424:5,16,2	18,19	356:16,23	293:17	364:6,8
3	378:13,23	357:23	mitigate	374:21
425:6,11,1	379:1	377:7	424:13	375:8
8	382:16	397:18,23	mo 306:3	377:20
426:2,9,14	metre	398:7,15,1	model 313:11	402:22
,22	309:4,11,2	9	319:16	months
427:7,11,2	2 310:23	399:19,21,	385:3	402:20
1	329:2	23 400:5	405:11	436:21
428:5,11,1	332:6,13,1	428:14,15	409:2,22	439:21
6,20	6 334:5	429:9,24	modelled	morning
429:6,11,1	335:14	435:13,18,	378:8	279:3,16,2
3,18,22	336:18,19	19,24	modelling	0 349:18
430:1,4,10	338:19,20	436:7	375:5,20	452:11
,13	344:1	mind 325:21	377:12,18	453:1
433:12,13,	metric	388:13	378:21	455:2
19,25	371:25	414:8	393:12	Morrison
434:11,16,	407:14	419:4	modellings	276:8
20,24	MHA 281:15	453:18	376:15	277:10
435:3,9,15	mic 279:5	454:15	models 405:2	279:10
,22	microphone	minds 329:4	modestly	280:1,8
436:3,21	348:2	mine 397:1	389:23	281:6
437:8,15,2	401:18	minimal	molecule	282:16
1,25	mid-2000s	410:6	422:18	289:25
438:7,8	415:8	minimization	moment	290:2,11,1
439:2,5,14	middle	367:20	418:19	3 291:9
,15	376:23	minimize	Monday	292:7,22
440:2,7,16	411:21	368:3	412:25	294:13,23,
,23	migrate	minimum	413:17	24
441:10,15	395:7	389:11	452:11	295:5,7,12
442:7,13,2	396:9	427:20	453:5,11	,14,23
2 443:6,22	migration	minor 454:11	455:2	296:12,15,
444:4,5,11	395:15	minus	money 281:20	18
,23 446:3	396:24	314:15,18	282:25	297:6,11,2
447:6,21	mil 429:23	362:18		4 298:6,11
448:2,11,1		minute		300:13,16
4,23 449:6		304:15		301:1
450:11				302:16,25
451:5,13				303:4,20
452:15,22				304:1,7,13
453:4,11,1				

,18,21	413:13	313:24	366:19	nobody 368:8
305:4,6,10	motivation	315:18,20	381:17	Nola 275:11
,14,20,25	404:14	317:14,24	382:15	nomination
306:10,19,	motivations	318:21	417:23	427:5
23	346:25	319:18,20	418:25	none 324:25
307:3,10,1	move 286:5	320:6,23	423:2	325:1
5,19	383:6	322:16,22	424:24	428:22
308:3,11,1	401:21	323:1,8,13	428:7	452:6
2,17	419:14	,20,24	447:22	454:2
309:5,14,1	420:9	324:10,15	negatives	non-gas
8 310:3,25	422:13,18	326:12,14,	423:13	307:4
317:17,22	431:11	24 327:4,6	negotiated	non-profit
318:2,6,9	450:20	329:17	432:16	282:8
319:11,15	moved 392:6	331:19	neighbour	non-recovery
321:12	419:20	348:10,11	422:19	446:16
322:5,11,2	movements	377:14	neighbourhoo	noon 347:25
1	378:14	383:3	d 291:20	normal
323:15,22	390:4,5	402:18	net 390:9	405:12
330:24	movents	415:25	400:7	410:15
331:4,5,8,	378:14	417:12	424:7	normalized
15,21	moving	420:2,3,6,	night 279:21	363:1
332:1,6,8,	401:22	13,19	nine 289:21	normally
14,18,22	420:20,23	natural-gas	291:10	419:9
333:1,12,1	mu 393:15	300:12	306:5	North 349:3
5,20	multi-	nature	332:21	405:10
334:1,6,11	faceted	nearby	334:4,9	Northern
,16,24	422:14	402:16	336:18	443:18
335:17,20	<hr/>	404:21	360:5	note 290:15
336:6,11,2	N	NEB 433:9,10	384:10,19	292:25
1	National	437:16	nineteen	350:3
337:7,8,13	423:10	439:3	302:24	367:8
,18,25	426:18	441:9	332:13,15	noted 369:4
338:8,10,1	432:11	442:24	334:9	notes 453:17
6,25	440:9	443:25	336:17	notice 296:3
339:3,6,11	446:21	NEB's 437:6	ninety	320:4
,16,24	Nations	440:13	307:22	446:16
340:4,10,1	311:11,12,	443:9	ninety-five	notified
6,25	25 312:21	446:15	338:4	401:8
341:5,11,2	natural	447:18	346:5	notionally
5 348:13	287:11	necessarily	ninety-one	308:6
349:19,25	302:21	337:17	435:4	November
350:1,8,14	305:7,9,18	385:11	ninety-seven	388:20
,15,23	306:1,13,2	393:14	359:3	398:13
351:3,9,23	0	403:7	ninety-six	446:2
,24	307:13,23	necessitate	386:10	np
352:4,6,19	308:7,19	431:8	ninety-three	
,21,25	309:9,20	negative	305:2	
353:7	310:15	342:23		
354:22				
355:1				
361:20				
362:12,17,				
25 386:14				
412:15				

275:3,11,1 3,15 num 300:11 <hr/> 0 objective 328:15 366:2 objectives 438:23 obscure 360:11 observationa lly 404:6 observations 417:4,7 obtain 367:17 445:11 obviously 367:19 381:4 444:6 447:22 occasion 362:16 occasions 363:6 occur 362:15 369:3 occurred 363:15,22 375:17 378:5 380:3 occurring 369:2 o'clock 349:6 offer 331:20 345:6 346:22 355:15 388:22 402:23 416:3 offered	278:10 331:25 345:15 372:25 403:23 405:19 408:6 offering 331:18 333:13,18, 19 334:8,14,1 8,25 335:8,10,1 3,15 336:7 337:6,22 338:6 341:16 342:20 343:25 344:12 346:1,2 347:4 348:21 349:22 350:6 358:14 368:2 370:9 371:8,10 372:7,20 374:7,11 386:20 388:21 389:18 392:3,20,2 2 393:2 395:22 396:6 401:23,25 403:17,25 404:11 405:2,16 406:15 407:14 414:23 offerings 278:12 334:19 335:4,18 336:15 337:3 343:18	346:6 356:18 358:4,10 364:8 365:16 371:17 372:8 374:8 383:16 387:21 395:18,19 397:24 398:2,13,1 5 399:7 404:1,22 405:4,5,6, 14,21 407:16 408:9 410:10 417:6 offers 331:10 offhand 315:6 off-ramps 424:2 offset 299:4 323:9 369:13 434:5 offsets 396:5 oftentimes 391:11 392:9 Oh 296:15 315:13 441:10 oil 312:23 313:3,14,1 7 314:2 316:16,17, 20 422:14 okay 293:21 294:6 307:6 325:3 351:11 361:6,13,2	2 370:22 371:12 376:9 383:12 402:4 419:3 434:1 440:2 441:10 452:7 old 373:19 421:13,19 one-offs 320:9 onerous 364:17 365:2 ones 353:12 one's 434:8 ongoing 385:20 410:6 Ontario 404:21 443:18 open 430:20,23 operate 367:18 operating 318:17 355:4 366:18,22 367:3,9 369:3,11 384:8,10,2 0 385:21 416:11 operations 321:3 opinion 403:12 442:20 443:24 opinions 355:18 442:25 opportunitie	s 300:19 327:16 330:3 opportunity 285:25 326:19 oppose 427:22 opposed 284:14 293:24 322:9 323:1 328:5 353:3 438:9 454:12 opposing 437:22 438:5 opposite 361:14 optimal 403:7 option 284:14,16 285:2,10 316:16,18 318:16 319:12,14 322:22 331:10 356:5,6,9 400:9 402:25 416:6 426:20 431:12 436:14,15 439:6 options 284:7,25 285:9 298:13 327:23 333:8 400:16 436:9,12 445:15,16 order 326:9
---	---	--	---	--

329:16	437:17	owners	379:19	419:22,24
355:15	outputs	280:18	380:13	partake
356:2	377:13	owns 283:7	384:5	281:11
389:12	outset 358:8		386:7,23	partakes
394:2	366:2,14	<u>P</u>	398:4	302:23
408:17	outside	p.m 349:9,10	408:14,16	partici
426:15	318:3	413:8,9	409:10,17	284:17
428:22	319:12	455:7	411:19,21	participants
436:4,6	396:16	page 276:2	414:14	354:8
447:4	405:12	277:2	439:16	participate
449:1	outstanding	278:2	448:7	282:4
ordered	318:20	280:8	449:4,8	283:15
329:6	384:23	287:21,22	pages 274:23	284:17
ordering	390:10	288:6	321:9	288:25
416:2	ov 360:16	289:4,19	322:6	289:2
orders	449:8	290:15	paid 343:8	313:2,21
409:20	overall	291:17	344:12,18	328:16
organization	287:12	294:7,12,1	346:3	365:17
281:24	355:6	6 296:4	368:25	participated
282:8	410:25	297:8	383:5	443:3
original	over-	303:11,24	pain 343:3	participatin
371:19	emphasis	304:5,9,10	panel 274:13	g 285:11
387:25	329:22	,15,16	276:6	326:18,23
392:1	overextendin	306:21	279:8,17,2	327:12,25
405:18	g 448:24	311:15	0 299:2,5	328:4,13,2
originally	overlaid	317:15	302:20	2 348:19
396:15	338:9	318:1	318:25	participatio
ostensibly	overlay	331:22,24	322:15	n
393:11	348:9	333:6,7,17	323:18	341:10,11,
others	overlaying	336:15	324:22	17 342:6
390:14	417:16	337:3,4	325:9,18	380:8
otherwise	overlook	339:6,11	326:6	386:19
328:2	346:19	342:11,12	330:22	397:10,16
399:2	overlook	343:13,17,	339:7	415:17
ourselves	overrun	25	349:5	particular
436:17	441:1,5,7,	345:4,16,2	356:13	284:5
441:21	18,24	5 348:6	408:13,20	285:10
outcomes	442:3	349:23,24	412:23	312:9
376:14,17	over-	350:10,12,	413:1	325:22
444:25	subscribed	17,25	452:14,24	326:2,8
446:14	361:14,21	351:16,17	454:23	333:13
447:3	362:14	352:17	panel's	334:3
outlay	over-	354:21	346:20	382:15
318:15	subscripti	356:12,14	paper 315:15	392:22
out-of	on 363:7	357:22	par 397:10	393:1
317:11	owner 285:22	359:17,18	paragraph	394:21
out-of-path	286:22	367:1	408:20	415:2
		370:4	parameters	427:13
		374:19		431:19
		375:1		432:22
		376:11		
		377:4,13		

437:23	357:19	23 439:25	1 396:9	381:14
438:5	360:8	445:12,24	397:3,5,12	391:25
particularly	375:23	penetration	416:17	395:25
352:16	387:4	317:19	422:8	396:22
particulars	395:1	354:25	450:6,7	402:21
285:19	406:19	355:6	percentage	427:1,13
parties	412:6	people	305:17	periods
363:22	414:16	305:25	308:22	365:5,13,1
443:8	418:16,21	306:3	310:20	4 372:18
449:14	439:11,18	317:13	320:6	388:12
450:13,18	440:21	347:1	341:23	392:1,2,6
451:7	441:3	351:1	perfect	428:1
452:4	446:10	405:2	366:11	person
part-time	448:9	per 290:9	performance	283:19
368:9	paused	295:17,18	450:21	411:6
party 279:20	313:13	297:3	453:19	personnel
389:10	pay 281:9	302:22	454:15	279:17
443:8	285:16	307:25	performed	perspective
449:24	286:22	309:3,10	379:1	282:4,11
450:9	326:21	312:5,15	449:24,25	322:25
past 374:3	328:2	329:1	451:4	323:10,11
399:21	342:2,4	334:5	performing	326:4
439:22	389:9	335:14	444:25	328:7
path 431:12	392:24	343:3	perhaps	347:19
436:15	payable	393:13	333:16	392:12
441:23	363:21	424:4	342:19	417:14
paths 427:19	paying	429:3,4	360:14	419:11
Paul 275:13	296:19	431:2	401:19	423:3
pause 279:24	311:25	433:22,24	408:14	447:18
290:6	346:4	434:18,22	411:6	perspectives
291:22	360:25	435:1,7,17	439:4	284:6
295:21	364:17	436:19,20	440:18	Peters 275:2
299:14	365:1,10	439:8,23	443:8	276:11
301:9,21	payment	percent	perimeter	279:5,6,14
302:3	284:22	288:17	319:13	,15
303:18	Pays 284:17	305:6,13	period	280:5,15
308:1	285:14,24	308:9	283:11	281:5
310:1	286:12	310:4	335:9	282:10,15
311:5,18	324:2	316:22	345:2,14	285:3,13,1
312:25	P-A-Y-S	317:15,21	348:8	8
330:19	285:15	318:5	350:12	286:10,11,
333:3	PCR 409:3	333:10	351:19	17,21
334:22	peak	334:13	364:15	287:14,20
336:9	434:17,25	362:19	367:7	288:4,14
339:9	435:6	373:20,22	369:10	289:4,11,1
341:7	439:22	374:1	374:7,8,17	8
342:9	peaked 338:4	375:6	375:17	290:1,8,10
347:13	peaking	379:1,8	378:8,9,11	,25
354:3	436:17,20,	381:25	,21 379:2	291:4,8,15
		386:12	380:1,4	,24
		387:2,8		292:6,17
		395:7,12,2		

293:1,8,16 ,21 294:1,6,11 ,25 295:7,13,2 3 296:12,16 297:5,12,2 3,24 298:7,12,1 7,21,25 299:10,16, 21,24 300:13,20 301:3 302:12,14, 15 303:1,10,2 4 304:4,14,1 9,22 305:5,11,1 5,21 306:8,11,1 7,21 307:6,11,1 8,21 308:5,12,2 1 309:13,19 310:7,19 311:3,8 312:17,18 313:13 314:4,19,2 4 315:3,11,2 2,25 316:3,8 317:4,10,1 8,25 318:7 319:10 321:8 322:5,13 323:12,16 324:16,21, 24 325:3,11,1 2,17,21 330:16,21, 22 331:1,6,9, 17,22 332:2,9,15	,19,23 333:5,14,2 2 334:2,7,12 ,17 335:2,16,2 1,22 336:2,11,2 2 337:9,14,2 0 338:1,9,17 339:1,4,11 ,18 340:1,6,11 ,18 341:1,9 342:11,18 343:12,22, 23 344:4,10,1 6,21 345:3,8,16 ,24 346:9,17 347:16,23 348:17 349:13,14, 17,18 350:2,9,16 ,24 351:4,10,2 5 352:5,11,2 0 353:1,8,15 354:14 355:8,19 356:4,10,2 0 357:2,12,1 7,21 358:2,11,1 6,22 359:11,14, 19 360:2 361:24,25 362:11,12, 22 363:12,25 364:11 365:19,24 366:8,16,2 5 367:11	368:5,11,1 8,21 369:25 370:11,18, 25 371:5,12 373:1,15,1 9,25 374:18,25 375:18 376:9,20 377:3,12,1 7,25 378:12 379:18 380:11,19 381:3,21 382:4,9,22 383:12 384:4,14 385:5,14,2 4 386:4 393:4,5,18 394:9,18 395:3,11 396:8,25 397:17 398:3,14,1 8,22 399:8 400:22 401:7,17,2 1,24 402:4 407:18 408:1,11,1 2 409:9 410:12,18, 21 411:5,9,19 412:3,8,21 413:11 414:2,14 437:10 448:5 449:8 451:17,18, 25 452:8,9	390:22 phonetic 281:25 364:7 367:12 400:12 physical 360:24 391:15 pick 321:19 331:13 395:12 picture 318:1 piece 420:22 445:23 pieces 320:2 pipe 433:1 pipeline 383:10 419:18,21, 23 420:9,10,2 1 432:5,6,7, 8,18,23,24 438:13,17, 23 453:23 placed 361:8,11 363:3 364:2 392:19 393:1 397:24 placement 363:20 364:18 365:11,16 places 409:16 placing 389:14 plan 278:5 295:24 297:18 299:11,18 300:3	446:1 plank 446:20 planned 278:4 296:3 297:16 planning 293:5 297:1 plans 290:20 301:24 394:7 428:17,18 444:21,23 plant 422:9,13 438:14 plants 383:8 420:24 422:5,17 plastics 420:15,16 play 329:20 422:1 440:1 players 354:13 please 279:6 326:6 333:16 402:6,17 418:19 451:17 plotted 299:25 plus 284:24 293:12,18 362:18 391:4 point 281:7 285:3 290:12 291:6 293:24,25 294:3 308:15,18 309:23 314:17
---	--	--	---	---

321:24	pool 323:3	401:3	378:23	425:18
322:25	Portage	possible	379:1,9	price 286:6
328:20	274:20	366:15	381:25	312:12
329:8	portfolio	380:22	382:6	316:7
332:13,16,	450:3	388:2,5	383:19	319:25
21	portion	396:2	386:13	331:12,13,
334:4,9,18	282:22	400:17	403:9,16,1	16,18
336:18	332:7	401:2	7 406:10	332:5,20
340:19	348:3	450:4,8	422:24	333:8
343:25	392:25	posting	prepared	339:20
344:8	421:6	335:24	307:16	341:15
357:7	431:6	potential	309:8,17	342:13
358:8	452:17	399:17	358:17	344:7
360:11	pose 414:7	444:24,25	389:6	347:10
363:10,14	posed 346:10	power 278:5	415:18	355:16
372:12,15	453:14	295:24	422:12	360:16
374:19	454:17	297:17	preparing	364:9,10
379:25	position	300:2	388:21	367:24
380:14,21,	279:4	306:20	presence	368:3
22	282:19	313:2,22	388:9	369:19
381:15,21	355:14,25	324:2	453:21	370:9
384:6	357:4	practices	454:11,13	371:9,24,2
385:6,15	360:21,23	416:21	present	5 372:9
389:13	361:17	417:17	433:2	374:13,21
393:22	364:23	pre 300:24	presently	375:9
406:11	367:4	pre-audits	290:1	377:20
411:20	391:14,19	300:15	324:24	378:4,7,14
424:8,18	392:21,25	301:4	429:2	379:3
425:17	400:7	precipitate	439:7	380:7,9
431:14,20,	401:15	394:10	pressure	382:17
22 432:1	417:3	precisely	432:21	389:7
439:14	427:22,24	375:2	presumably	390:4
443:23	438:4,7	prefer 299:8	398:10	391:2,7,8
445:3,14	positions	438:20	presupposes	393:15
446:6	368:6	444:10	393:12	402:22
447:12	390:14	preference	pretty 298:4	403:22,25
450:15	391:22	347:2	414:21	404:1,9
pointed	positive	pre-	prevailed	406:10
429:14	381:18	inspection	383:2	407:7
points	421:12,18	300:18	prevent	410:10
374:10	423:1,18,2	premium	403:3	414:13
383:11	3 424:6	366:2,11,1	previous	417:25
394:13,20	428:21	3 369:20	323:17	421:2,4
policies	446:14	371:25	350:25	422:15
324:12	447:3	372:22	previously	425:25
policy	positives	373:16,19,	348:17	427:1,5
282:12	423:13	20 374:2	377:19	437:1
313:15	possibility	375:6	384:6	440:11
389:11	396:16			450:9
polymers				priced
420:15				390:18
				426:25

436:24	primarily	355:2	420:8	296:17,20,
price-	414:9	pro 281:2	454:4,11,1	21,24
offerings	primary	probably	2	298:9,15,2
404:17	304:11	299:2	products	3 299:1
prices 278:9	307:20	306:3	341:22	300:14,17
308:19	309:1,8	331:1	343:7	302:23
315:18	310:3,8,18	338:3	349:2	312:22
319:24	325:19	343:2	354:9	313:4,25
331:20	327:18	348:23	355:16	317:7
335:8,13,1	330:25	365:1	358:23	324:2
5 343:4	331:11	385:1	366:3	326:2,3
345:14	332:25	387:9	369:19	327:9
351:22	344:14	396:15	371:20	328:20,25
363:19	346:13,16	411:16	373:6	329:2,3,5,
365:4,7	349:22	413:25	376:7	7,10,13,15
368:2	352:3	416:13	379:15	,18
374:3	355:11	436:7	384:2	331:7,10,2
375:21	356:17	problem	385:8	5 332:23
378:2,9,15	358:4	439:3	387:23	336:7
,18 379:16	360:17	problems	390:24	338:22
380:24	361:15	363:3	391:11	340:15
387:19	370:7	426:23	399:6	342:6,14
389:23	372:16	428:6	400:1	345:11
390:6,7	376:2,3	proceedings	402:23	346:23
396:6	386:24	413:6	403:17	347:19
399:7	388:18	process	405:16	358:8
402:11,16	397:5	281:2	406:2,4,9,	366:18,20,
404:8,11,1	409:14	321:16	23 407:10	23
9	412:11	372:7	415:18	367:3,9,13
405:18,19	primary-gas	385:4	416:3	,18
406:5,15	374:22	444:24	420:15	368:6,13,2
407:8	prior 307:17	processes	profile	3
408:5,6	328:9	319:18	405:12	369:2,14,2
417:15	341:13	320:19	profiles	1 372:23
431:6	365:17	producer	375:17	376:2
price-wise	382:16	454:1,5	program	377:8
374:16	406:9	producers	280:2,11,2	379:7,11
pricing	447:5	442:25	1 281:11	380:18
344:24	priority	product	284:15,17	383:15,18,
345:1	451:2	354:25	285:1,5,12	22
372:12	private	372:7,8	,15,16,18,	384:8,9,15
375:16	278:11	392:11	24	,18,20,25
378:17	281:14	405:13	286:12,18	386:9
382:19	282:15	406:25	288:9,25	387:8,15,2
386:20	285:4	407:2,3	289:3,15,2	1,25
402:14	347:20	415:2	3	388:7,15,1
418:7	348:21	production	290:4,9,14	6
424:24	353:10	383:4	291:19	389:11,15
431:18,22	405:20	419:15,17	292:21	393:8,24
443:23	408:8		293:5,7,14	394:3,11,1
445:12,21	privy 353:19		294:14	4
			295:3,4,11	395:8,9,15
				,16
				396:10,12,

14	proportions	provided	401:16	18 351:5
397:3,8,15	373:12	300:9,21	published	qualificatio
,19	proposal	376:13	338:11	n
398:15,20	384:2	403:21	pull 430:23	277:5,7,9,
400:11,15	387:12,25	provides	purchase	11,13,15,1
401:11	392:1	282:8	322:2	7,19,21,23
409:3,12	393:19	339:13	331:11	406:22
410:1,3,6	proposals	380:6	332:10,12	qualificatio
411:13	445:11	providing	339:21	ns 393:9
412:12	propose	319:14	353:17	407:21
415:5	372:3,21	357:8	375:16	qualify
416:5	proposed	368:2	431:13	448:21
programs	371:18	449:24	purchased	quality
313:3,22	383:25	450:18	331:12	419:19
314:20	441:6,22,2	451:19	390:18	450:20
327:3,6	4 442:4	454:8	purchases	quantifying
328:14,16	proposing	province	373:12	397:18
progress	307:4	416:8	purchasing	quantity
326:7	372:2	420:10	312:12	337:23
project	409:13	provision	434:9	quarter
312:9	protect	440:14	pure 454:10	394:22
projected	287:2	451:3	purport	395:8
278:7	378:13	provisions	403:7	396:19
289:7	protecting	438:2	purporting	quarterly
296:11	379:5	proxy 355:2	406:7	331:12
297:21	387:14	prudent	purposes	332:5
320:5	protection	397:8	293:5,19	333:8
387:7	353:18,25	Prydun	390:5	334:3,14
projection	379:14	277:22	411:1	338:10,14
360:3	380:6	PUB 280:7	441:16	341:16
projections	402:9	293:12	pursue 281:3	342:15
288:13	403:3,16	326:5	326:16	344:6,7,17
295:6,25	proven	339:12	pursuing	,24
296:6,22	450:21	356:12	284:14	345:1,11
projects	provide	376:12	327:16	346:3
319:23	301:17	410:11	329:15	376:3
promoting	309:23	PUB/Centra	putting	395:15
327:4	319:11	297:8	315:19	407:13
329:16	322:19	PUB-1 452:1	431:8	question
prompt 401:9	324:3	PUB-2-141 (d	445:10	281:3,6
pronounced	328:3	452:2	<hr/>	282:20
379:3	335:17	PUB-2-141 (g	Q	297:9
propane	347:10	452:2	<hr/>	311:8
313:17	353:10	Public	Q.C 275:8	312:19
314:2	358:18	274:1,19	quadrant	325:21
420:1	411:6	335:23	334:20	343:16
proponent	440:10	338:14	336:15	346:9,18
450:5	452:3		350:11,17,	349:20
	454:16			351:11
				352:14

375:2	radical	374:22	370:7	329:19
377:16	427:1	376:3	371:7	342:25
386:6	radically	382:5	rather	369:9
391:12	427:8	383:18,20,	323:20	378:7
393:7		22,24	331:11	387:6
402:7,25	rails 293:10	385:1,3	360:13	403:25
405:18	Rainkie	388:18	390:3	404:13
416:24	277:6	393:24	rating	415:8,22
421:17,24		407:6,13,1	449:14	425:24
424:12	raise 283:20	6	rational	426:3
431:10	284:10,12	409:4,13,1	282:3	434:3,12
434:10,12	RAM 442:2,5	8	rationale	441:15
437:1	ran 376:18	410:2,7,13	326:12	448:25
438:17	range 283:18	411:13	329:17	realm 396:16
442:14,18	298:1	412:11	416:2	reason
444:12	315:9	426:21	Re 274:7	313:16
445:17,19	333:9	rated 450:23	449:20	329:10
452:18	373:20,22	ratepayer		340:1
453:14	376:16	282:25	reach 397:9	reasonable
454:17,21	385:10	284:4	400:19	284:4
questioning	rapidly	328:12	401:5	379:13,16
401:18	389:2	329:5	reached	425:8
422:22	396:22	330:4	377:10	440:11
questions	rate 274:8	ratepayers	reaching	442:17,23
325:6	286:5	281:20	400:5	443:5,25
342:2	287:15,17	283:4	react 434:13	reasons
349:5	290:21	327:10	reaction	289:1
384:6	307:5,19	378:14	337:5	355:10,20
388:14	309:9	421:19	ready 452:2	358:17
402:3	310:4,9	424:7	real 319:24	406:8
412:9,16,2	317:19	433:1	415:9	424:17
3,25	325:19,24	445:15	realisticall	reassuring
413:1,18,2	330:25	rates 286:5	y 288:20	447:16
4 414:7	331:2,7,24	287:8,9	realize	recall 280:2
437:11	332:25	290:3,8,20	282:21	306:23
448:4	333:8	291:1,11	283:17,21	308:21,25
451:14	334:3,8,14	292:19	404:24	312:13
quite 279:21	336:17	293:13	realized	341:20,24
324:3	337:6	299:2,3	285:22	374:25
334:24	338:11,14,	303:22	424:1	416:16
379:4,5	17,22	304:11,25	realizing	431:2
391:11	341:16	308:22	283:7	443:12
406:2	342:15,20	309:2,6	328:13	receipt
410:7	343:18	335:24	really	372:15
447:4	345:2	354:25	280:13	recent
quote 313:7	349:22	372:8,24	313:25	335:11
389:5	352:3	381:24	318:4	360:1
quotes	354:25	410:9		423:13
389:12	366:20	425:9		recess
	372:1,16,2	430:6,8,11		347:25
	0,22,23	,14 432:16		
R	373:6	rate-setting		

348:5	reduced	377:14	432:13	381:2,13
349:5,19	342:16			407:22
354:23	429:23	refusing	relationship	replace
412:22		365:17	335:15	277:4
413:4	reduction	regard	382:25	280:20
recessing	283:13,17	421:24	403:19	281:1
302:9	286:1	450:10	relative	283:10
349:9	287:6	regarding	309:2	284:8
413:8	367:12	353:18	334:19	289:2
recognize	reductions	384:3	337:2	295:9,11
321:5,14	328:3	regardless	371:18	296:19
322:23	refer 394:24	440:3	382:16,21	replaced
407:21	reference	regards	396:16	281:19
recognizes	291:25	450:24	419:19	282:5,7
319:1	370:23	Regis 274:14	454:15,18	329:14
recognizing	374:21	regulated	relax 302:7	replacement
319:4	394:24	405:13,15	relevant	280:2,20
410:21	439:14	431:24	399:13	281:21
412:24	453:17	432:1,8	reliability	282:23
424:2	references	433:9	449:16,20	288:9
425:22	450:21	regulates	453:19	289:23
recommended	referred	432:5	454:4	290:4,13
373:24	348:17	regulatory	reliable	292:21
reconnaissance	referring	408:23	336:3	293:7,14
ce 336:5	306:2	409:1,12,1	450:13	296:17
record	405:4	9	451:3	298:14
336:12	411:15	410:2,5,15	454:8	299:1
444:6	refined	411:12	rely 448:25	302:23
451:11	373:7	412:10	remain	328:25
recorded	refinement	432:4	358:24	replacing
343:15	371:18	rejected	remained	281:2
recourse	372:4	444:2	344:16	283:1
426:21	reflect	related	remaining	298:9
recover	296:21	321:1	390:9	358:9
428:19	306:23	360:16	remedial	report
recovered	307:3	373:10	394:4,6	309:16
368:13	330:14	393:7	renewal	310:13
369:23	348:23	397:9	438:1,11	357:9
438:15	367:11	398:19	rent	reported
recovery	reflected	412:25	283:20,25	359:9
411:12	366:23	413:2	284:9,10	reporting
428:13	376:6	relates	rental	345:22
447:19	418:4	325:23	280:25	reports
red 375:3,8	reflecting	447:3	rents 281:15	represent
377:1	386:20	450:1	284:12	397:12
reduce	reflection	453:19	repeat	410:2
425:19	430:6	relation	377:16	representati
	reflects	402:9	380:23	ve 373:12
	367:15			

representing 380:17	400:15	449:8	374:11	394:3
represents 340:14 345:4 350:12	residen 301:25	respond 389:3	375:11,12, 13	395:9
request 336:1 339:13 354:17 356:7 370:20 423:12 448:16 453:10	residence 303:3,14 304:24	response 297:8 307:16 312:19 339:13 404:8 452:23 453:14,15 454:16	381:12,15, 18,19 383:22 395:15 399:21	397:6,8,14 ,20 398:16 400:21 401:1,9 439:14 440:24 441:11,13 445:5
requests 370:5 445:11	residential 301:6,16,2 5 324:2 327:20 328:9 335:12 336:16 337:16,19 340:8,9,12 ,13 351:8 352:8,15,2 3 354:7	responses 423:12	resume 413:6 Resumed 276:6,7,8, 9,10 279:8,9,10 ,11,12	reviewed 325:14 326:6
require 314:5 320:19 419:23 450:19	386:9 389:20 390:13 391:18 392:13 403:4	responsivene ss 450:23	resuming 302:10 349:10 413:9	reviewing 324:11 449:4
required 394:4 413:14	resolved 437:9	rest 352:13	retail 335:9 352:13 416:1	reviews 394:11
requirement 325:8 434:25 435:6 452:23 453:6	respect 296:14 304:11 311:9 325:21 326:7 336:25 354:6 356:17 358:13 361:3 367:13 371:15 388:18 393:9 402:15 411:4 412:10 413:25 414:5,11,2 2 416:4,9 417:20 426:23,24 427:2 428:21	restraint 367:19	retailer 353:9	revised 452:1
requirements 434:17 449:25 450:1		restrict 413:23	retailers 331:19 335:4,19 347:21 353:10	revision 278:3 296:9 297:15
requires 348:3 354:16 389:11 407:11 408:22		restricted 412:24 441:23 442:16	retirees 454:23	revisions 295:25 452:7
requisite 372:8,10		restrictions 440:8 442:4	return 420:23	RFP 448:5
research 341:19 342:7		result 301:3 360:2 365:1 376:23 377:4,6 393:11 398:15 423:4 432:18,24 434:13 437:6	reveal 418:7 revenue 299:5 325:8 386:24 452:23 453:6	RH-003 423:10
resetting		resulting 363:21 372:19	revenues 293:2 369:7,13,1 5	ri 382:6
		results 359:21,22 366:19	reverse- engineer 391:7	right-hand 332:4 350:3 381:19
			review 347:8 393:23	RIM 329:19,22 330:7
				rise 303:14 378:18 380:15 387:20 390:8 421:6 422:15
				rising 379:21 380:7

396:5,23	rounds	379:21,24	303:9,15	370:17
risk 342:21	292:11	380:13,16	305:17	371:7
347:2	route 430:24	381:1,11,2	saw 377:19	411:12
366:6		4	451:19	seemed 417:8
369:20	row 289:5,19	382:2,8,11	scenario	seems 427:25
370:9	290:16	,24 383:17	376:19	442:14
371:10,24	run 296:20	384:4,13	434:17	seen
372:22	316:14,18	387:11	435:13	354:21,24
373:16,19,	394:15	388:17	447:16,22	sees 295:10
20 375:6	runaway	390:1,15	scenarios	338:1
378:25	379:12	391:3,23	444:24	segue 423:9
379:15,20	running	392:17	schedule	select
381:25	296:21	393:5,13	320:20	331:16
382:6	359:3	394:1,16,2	409:17	self 372:21
383:19	396:12	3	414:21	388:11
386:13	Ruzycki	395:3,10,1	448:25	self-hedging
387:14,17,	275:11	4 396:13	Schultz	365:20,22
18,21		397:7,21	277:20	self-
388:4		398:12,17,	score 450:12	insurance
399:17	<hr/> S <hr/>	21,24	451:6	365:21
403:8,18	safe 436:25	399:9,11	454:18	370:16,21
405:12	sake 371:22	401:2	se 393:14	383:19
433:1	434:25	402:18	season	384:3
434:9	436:11	403:6	427:14	387:12
446:16	sale 387:22	404:3	444:19	398:1
447:15,23,	sales 394:21	405:3,7,23	second	399:15
25	395:7	406:21	333:16	403:8
risks 366:4	396:9	407:18	370:4	self-insure
riverbanks	397:4	412:15	371:1	370:8
379:11	Sanderson	413:25	376:1	371:9
393:20	276:9	414:12,25	380:24	self-
robust	277:14	415:10,15	397:2	supporting
378:13	279:11	417:21,24	408:20	388:11
379:4,5	335:5,7	418:6,18,2	secure	sell 390:13
388:11	353:15	3 419:13	425:21	sellers
role 353:20	354:5,15	429:14	437:3	421:5
room 349:6	361:3,7	433:16	securing	selling
434:3	362:6	Saskatchewan	425:14	358:13
452:3	363:18	278:11	sedimentary	421:4
rope 316:10	364:5,11,1	404:20	seeing 311:9	send 300:17
roughly	3 365:21	405:20	348:23	sense 282:3
284:23	366:1,10,1	408:7	355:5	315:20
285:21	6 371:15	satisfaction	386:20	316:14
293:25	373:3,11,1	403:14	seek 355:22	335:25
312:14	8,23	save 285:16	394:8	422:20
429:8	374:5,18,2	286:24	seeking	443:14
435:5,12	4 375:7,25	426:5		
436:6,7	376:15,16,	saving		
Round 297:9	22	327:25		
	377:9,15,2	savings		
	3 378:1,16	283:12		
		302:22		

sensitive 353:19 418:3	445:12,13, 24	444:16,20	shown 304:9 305:7	sign-up 351:19
sent 448:5	session 455:1,2	shared 417:21 420:25	307:22 317:15 333:18 336:15 337:10 338:11 340:3,5,6, 13 352:23 353:13 377:13	sign-ups 348:22 392:5
sentence 294:15	sessions 365:18	shareholder 446:25	shows 351:18 380:4 428:12	similar 312:9 343:14 348:21,23 355:5
September 437:17	sets 333:9	sharing 418:3 447:23	sic 352:7 392:21 437:18	simple 390:16 407:13
sequencing 321:2	setting 410:7	Shell 275:13	sides 428:7	simplicity 371:22
series 377:2 381:17	settled 346:11 359:20,24 397:19 398:23,25 399:9,21 400:5 445:17	ship 438:16	signed 343:7 350:6 352:8,9 391:21 416:18	simply 284:8 355:1 385:21 419:7 447:18
seriously 324:7	settlement 364:8	shipper 428:2 447:1,24	sign 343:9 351:21 408:15 419:2 448:19 449:2	simula 376:24
serves 347:19	settlements 364:6	shippers 383:5 421:1 422:12 426:16,19 438:16 443:1,18 446:23 447:17,18	significant 282:22 309:1 341:23 380:6 385:12 388:23 391:11 393:10 446:14,16 454:4,12	simulation 374:6 375:14 376:19,25 391:24
service 324:11 325:19 330:25 331:2 336:16 340:5,7 346:13,15, 16 348:15,20, 22 349:22 355:11 356:17 370:8 386:11 388:18 397:5 409:14 424:24 426:16,23 427:2,12,1 3,25 428:8 435:25 439:7,8,24 441:1,6,18 442:9 450:22	seven 332:13 334:4 343:25 352:7,23 367:4	shipping 421:4	significantly 312:8 363:20 396:17 437:2 450:8	simulations 381:6
	seventy-two 402:20	short 283:11 412:22 413:24 414:12 417:19 427:1	single 303:3,14 304:24 317:20 318:2	simultaneous ly 401:4
	several 424:9	shortly 444:19		
	severe 428:17	short-term 379:14 424:25 431:20 435:16		
	SF 430:22	shoulder 436:20 447:24		
	SGS 290:15 340:7,12 352:22 386:9	showed 360:22 374:20		
	sh 447:24	showing 343:17 358:3		
	shape 418:13 428:24 446:5			
services 431:6 436:17,23 439:25 440:4,11,1 4 442:16 443:23	share 354:10 357:4 394:7 422:11			

395:10	354:13	359:14	323:6	409:3
398:17	358:19	361:25	325:24	stands
410:17	364:21	370:23	340:8	330:24
sit 308:13	389:1	371:4	344:6	star 306:4
sitting	411:2	373:2	348:6	start 279:25
289:20	429:16	377:15	352:14	316:15
399:20	smaller	381:1	370:18	326:11
436:22	320:9,17	sort 315:9	412:14	343:23
situation	390:8	sought 389:4	specificity	349:23
284:5	Smart 278:5	sound 387:16	353:23	398:7,8
322:4	295:24	397:12	specifics	445:6
357:16	297:18	source	370:1	started
400:4	300:2	312:22	specs 420:9	331:4
401:14	313:2,22	317:6	speculating	377:21
416:25	324:2	320:24	443:11	378:21
426:11	snap 395:9	430:21	speculative	380:25
438:15	snapper	434:7	365:7	381:10
443:15	417:20	sources	spend 295:3	453:7
situations	snappers	313:18	328:1,10	starting
438:13	413:24	south 318:9	spending	381:15
six 334:4	414:12	320:16,25	330:4	starts
344:12	softer 397:1	383:11	spent 295:8	380:14,15
352:8	sold 391:15	431:23	298:8	startup
sixteen	Soldier	space	split 318:17	369:9
280:9,17	274:16	304:8,16,2	spoke 282:16	386:3
287:24	solution	3 309:24	299:18	410:1,3
288:2,5,17	317:8	310:5	spread 396:2	411:15,22
334:9	somebody	320:7,24	squares	start-up
sixty 282:6	360:14	322:9,22	338:12	356:23
284:12	someone	324:10,14	SSDA 429:5	startups
338:5	302:22	speak 299:6	staff	320:9
sixty-five	343:14	385:2	320:1,10,1	state 431:25
435:12	sometime	452:16	8 367:12	432:1
size 303:7	357:10	454:6	368:5	stated
311:21	somewhat	speaking	stage 285:7	355:10
389:8,24	429:15	313:20	299:22	statement
slightly	somewhere	326:22	standard	380:1
287:12	307:24	328:8	280:10,14,	381:2
383:25	333:9	410:5,25	19 287:23	statements
404:10	sorry 288:4	432:21	301:6,13,1	362:7
slipped	290:18	spec 419:18	8 317:23	366:24
454:15	303:20	specific	353:24	States 432:6
sloping	307:12	341:20	standardized	434:5
381:17	308:19	371:6	390:22	statistics
small 320:5	318:11	418:7,10	standing	415:8
335:12	342:12	454:7		stay 362:19
336:16	357:16	specifically		377:5
337:19		280:7		

401:24	450:16	448:14	363:5,11	400:7
stayed	451:10	449:7	384:17	sufficiently
344:11,23	453:8,13	structure	subscribed	396:20
staying	STFT 426:5,7	388:2	360:17	suggest
401:23	427:11,18	structured	361:15	317:12
step 447:4	431:6	319:19	362:5,8	412:21
steps 319:2	435:25	390:21	368:15,23	443:8
	436:13	407:2	395:18	452:15
Stewart	stone 388:1	422:23	subscriber	suggested
276:10	stood 452:25	structuring	360:24	326:5
277:16	453:11	374:8	subscribers	330:1
279:12	stop 298:13	391:5	361:9,10	369:22
412:15	444:12	struggle	subscription	431:5
413:25	stopping	281:7,13,1	s	suggesting
421:14,22	298:20	4 282:24	360:20,22	286:18
422:25	storage	294:12	subsequent	292:18
423:15,21,	372:17	328:24	300:2	293:11
25	429:19	329:3	367:8	303:13
424:10,22	432:17	struggling	370:9	347:17
425:2,10,1	453:22	294:10	371:10	384:16
6,22	story 407:7	441:12	374:11	443:13
426:8,13,1	straddle	STS 429:20	387:20	suggestion
7	383:8	440:25	substantial	298:1
427:3,9,15	420:23	441:5,7,18	310:17	suite 432:17
428:3,10,1	strategy	,24 442:3	367:24	suits 319:3
5,18	324:7	studied	386:18	322:3
429:4,10,1	stream 383:4	380:4	substantiall	sum 361:10
2,16,20,25	420:2,7,22	406:1	y 313:9	summer 282:7
430:3,8,12	street 315:8	studies	substantiate	357:10
,16,18,25	stretch	374:6	301:13	378:7
432:3,14	297:7	381:12	subtrades	sun 443:1
433:6,17,2	strikes	391:24	320:21	sunset 295:4
0	387:16	subject	success	supplemental
434:8,15,1	388:6	292:1,15	279:21	314:5,21
9,23	strip 420:5	301:1	successful	379:9
435:2,8,14	stripped	331:12	281:1	436:18
,20	376:1	336:13,20	415:23	supplementar
436:1,10	383:8	429:9,10	416:5	y 314:5
437:13,20,	420:17	432:23	437:18	supplies
24	stripping	433:10	440:25	450:2,19
438:6,12	422:3,5,9,	436:2	442:9	451:3
439:4,13,2	17	445:8	suffered	supply 323:3
0	strongly	subjective	343:8	339:20
440:5,12,1	446:25	451:12	344:17	346:3
8	struck	submissions	Suffice	372:13
441:5,12,2	379:13	410:10	354:20	373:13
0 442:11		submit 409:4	sufficient	414:13
443:13,17		subscribe		
444:8,22				
446:7,12				
447:8				
448:1,13,2				
0 449:3,20				

425:21	416:15	337:3	433:16	ten 338:19
434:7	sus 362:4	339:5,12	436:13	352:23
449:25	sustained	342:12	439:6	413:3,5
450:13,18	379:3	343:13,16	448:5	438:10
451:2,3	380:8	345:17	talking	tenant
454:8	382:25	348:6,14	280:1	283:20
support	393:14	349:23	325:23	tenants
298:18	Sven 275:3	351:18	343:10	281:9
301:5	swap 364:7,9	352:16	370:16	tend 395:16
313:21	371:20,24	354:23	388:17	407:5
365:16	382:17	356:12	411:21	tended 367:9
376:3	390:19,20	370:3,23	428:24	tends 354:24
388:20	391:2,8	371:1	talks 357:24	term 286:12
392:19	swing 373:13	374:19	tank	287:15
393:1	450:1,2	376:11	306:2,20	288:6
397:25	451:3	379:19	target	331:16,18
suppose	switching	384:5	280:9,17	341:2,3,4
354:17	308:18	408:16	287:24	364:6
356:22	309:16	409:11	288:17	372:20
384:15	310:13	414:14	289:12	402:15
402:7,24	323:19	439:16	targeting	438:24
sur 341:14	sworn 453:6	448:6	280:20,23	terminate
sure 280:16	sys 318:11	table 276:1	335:12	392:20
285:2	system 313:6	278:4	tariff	terminology
309:14	314:12,13,	296:9	419:22	365:20
310:7	14,17	297:10,17	433:1	terminology'
315:11	315:23	386:23	437:12	s 397:1
321:13,24	316:6	411:11	441:6,14,2	terms 278:8
325:5	321:19	tail-end	2	284:3,4
346:21	322:2,3	353:4,5,6	task 443:9	294:7
355:13	383:10	taking	TC 447:23	300:8
367:15	420:21	313:10	TCPL 373:9	302:18
370:19,23	433:8	335:5	414:1,10	304:22
371:3	443:2,19	340:23	423:9	305:16
380:12	systems	342:19	425:7	309:19
390:11	314:9	355:25	426:14	311:24
394:14	318:13	372:9	427:12,23	312:10
407:12	420:11	387:17	432:13	321:5
411:3	system	417:17	434:6	322:13
415:10	443:19	436:1	437:11	325:13
447:11,17	surplus	443:9	442:9	329:4
452:21,23	323:3	talk 285:14	TCPL's 426:3	330:2,4
surplus	surprises	303:12	439:3	347:2
323:3	342:23	337:1	technology	349:21
surprises	survey	340:8	306:14,16	351:4
342:23	301:7,16,2	371:6	316:11	352:1
survey	5	425:12	temporally	365:23
341:13,14	302:19	436:21	396:2	367:15,17,
	317:16	439:5		20 368:1
	322:6	talked		
	331:22	281:17		
		327:17		

370:3	329:24	300:10	433:8,13	359:13,16
371:12	thank 279:15	306:2	434:1,10,1	364:6,8
372:10	290:10	314:3	5,19,23	368:8
375:16	293:21	323:15	435:2,8,14	377:20
377:19	297:13	324:12	437:9,13,2	378:22
378:19	302:15	325:3,10	0,24	380:22
379:4	307:7	326:20,25	442:11,18	383:15
381:5,6,7	309:13	327:21	444:18	384:23
384:24	317:10,11	328:14,17	446:7	385:1
385:8	325:12	329:4,10,1	447:2	387:22
389:22	330:17	7,22,23	448:1	391:6
390:16	335:21	341:23	themselves	397:18
392:4,5	336:3	342:5	384:25	403:24
394:24	339:16	344:15,25	theoretical	407:15
395:14	349:7,14	346:7,24	380:17	408:17,20
397:17	350:2	349:1	388:2	410:8
400:8	354:15	352:12	448:17,21	411:21
402:8	373:1	356:19	theory 328:2	416:24
405:18,22	376:9	358:20	368:12	419:22,25
407:16	381:22	360:14	thereafter	420:25
408:4	385:14	361:4	291:4	423:23
409:22	386:4	363:18	therefore	426:9,10
411:3	396:25	365:19,22	288:16	435:5
413:12	408:1	366:15	322:19	thereunder
415:5	409:9	368:16,20	368:23	400:12
416:5	412:3,13,1	373:18,23	408:22	they'd 299:2
418:7,10	6 413:22	377:6,13	424:7	340:6
424:18	421:8	383:2	they'll	
425:9	440:2	384:13	318:19	
428:12	451:13,18	385:19	319:25	
429:1	452:5,9	387:9	320:10,12	
434:4,16	453:13	390:16	356:7	
437:12	thanks	395:23	449:13	
444:17	451:24	396:10,11,	there's	
445:3,14	453:3	15 401:2	280:17	they're
448:18	that'll	402:25	281:13	281:18
449:10,15	301:17	404:11	282:6	282:5,19
450:13,18	382:3	409:23	284:3,25	284:10
452:10	383:15	410:14	289:13	287:3
454:5,7,17	425:11	412:1	298:22	312:11
territory	that's	415:19	300:7,10	313:3
323:4	282:12,13,	419:17	315:20	319:23
test 295:4	16 284:13	420:16	318:20	321:17,19,
410:23	285:15	421:12,15	319:24	23 322:2
411:4	286:7	422:1,25	320:2	342:2
tested	288:12,24	423:8,15,2	322:7,11	353:11
299:25	290:23	1	326:15	358:24,25
testified	291:7	424:16,22	327:23	359:2
318:24	292:22	425:10,16	333:16	396:3
tests	293:15	426:8,13,1	337:4	411:23
326:1,6	298:11,21	7	345:17	414:21
	299:20,25	428:10,16	352:22	420:14,18
		429:25	357:23	424:19
		430:12,16		

452:7	291:10	386:21	287:4	425:2
third 290:16	295:9,16	415:14	292:2	427:17
350:17	300:23	416:12,22	293:23	446:22,24
351:5	305:2	417:22	295:1	Transcript
445:23	312:14	431:12	350:22	276:14
454:1	313:8	436:22	352:6	transfer
third-party	340:22	451:16	357:23	281:20
405:4	346:4	today's	360:3	transition
thirties	352:23	455:1	362:8	432:10
308:25	356:24	toll 424:10	367:2	transmission
thirty 283:2	359:4	429:21	395:21	432:23
295:14	360:4	430:15	totals 298:4	transparency
297:3	367:5	431:23	toward	347:10
307:24	384:10,20	432:24	352:15	392:4
344:12	385:10	433:5,6,21	track 348:17	transporta
364:19	389:19	445:7	367:10	418:25
thirty-five	435:5	tolls	tracking	transportat
340:22	threshold	423:19,23	359:2	383:10
386:10	326:1,5	426:7	trade 323:5	transportati
thirty-four	394:12,19	428:21	trades	on 327:18
280:18	395:13	429:14,19	402:19	340:5,7
283:3	396:19	430:1,22	trading	348:15,20
297:4	397:2,18	432:5,6,8,	382:15	352:22
308:4,6	398:25	13,15,18,2	453:24	373:8
327:21	400:6	2 433:2	traditionall	382:10,13
328:22	thresholds	437:9	y 319:17	383:10,13
thirty-one	393:22	445:4,5,7	transactable	406:25
300:24	400:20	Tomas 275:9	389:12	407:4
344:19	throughout	tool 324:12	transaction	417:23
thirty-six	349:3	tools 323:25	365:18	419:18
360:4	374:7	top 290:17	389:17	420:10,21
thirty-three	375:17	291:12	391:7,8	423:19
295:10	388:10	292:10	421:5	424:12,25
298:2	396:3,5	304:15,16	transactions	425:15,20
thorough	throughput	332:3	359:1	426:5,20
414:3	422:2,17	333:6	389:2,13,2	429:1,19
thou 290:17	423:5	343:24	1 390:18	431:12
thoughts	424:1,3	345:25	TransCanada	432:15,17
440:8	throwing	373:16	372:14	434:4,5
thous 280:24	451:8	453:18	419:20	435:4,10,1
thousand	thrust 414:4	topic 316:9	427:17	7,23 436:9
280:9,17,2	thus 396:17	384:6	431:17	transporting
4 281:4	tied 384:19	401:21	441:8	326:25
287:25	today 291:9	414:3,13	445:9	tree 445:3
288:2,5,10	309:3,4	419:3	446:15	trend
,18,21	315:19	437:5	447:2,11	354:21,24
289:12,22	327:8,21	topics	TransCanada'	381:7
290:18	378:17,20	330:12	s 424:1	trending
	382:21	total 284:22		

384:8	355:8	15	436:12	369:4
trends 355:5	356:11	304:8,24	451:5	unhedged
trial 374:12	370:11	311:24	understandin	360:16
trials	390:9	335:15	g 306:12	uninformed
375:13	398:4	typically	310:8	449:11
376:18,24	401:18	335:11	349:2	unique
tried 368:3	408:14	357:8	358:21	443:13,20
	413:4	404:10	430:17	United 432:6
trigger	414:13	405:12	understands	unless 331:3
394:19	turned 339:5	typo 333:16	369:17	434:6
395:13	363:5	typographica	understood	unrecovered
397:6,20	381:9	l 333:17	300:14	369:8
398:16,19	turning		395:5	unrelenting
	337:3		under-	393:15
triggers	turns 395:22	ultimately	subscribed	unsettled
393:21	twelve 305:1	390:9	361:4	357:24
400:23	312:3	395:22	under-	359:7,22
troublesome	twenty	442:23	subscripti	362:4
399:24	286:15	uncertain	on 365:14	385:17
true 337:24	313:8	424:8,21	undertake	389:24
348:24	332:21	uncertaintie	296:9	392:23
try 321:6	344:7	s 446:6	301:24	398:20,23
324:7	350:5,25	uncertainty	308:17	399:3,5,9,
328:15	twenty-five	444:16	335:17	19,23
362:18	286:15	uncovered	360:21	unsubscribed
364:12	289:8,12	354:11	undertaken	360:12
401:14	338:18	435:6	319:2	362:8
trying 307:7	twenty-four	underlying	341:13	363:16,23
312:10,13	306:6	329:17	undertaking	366:17
321:18,19,	twenty-seven	371:16,23	297:6,15	390:2,7
21 327:7	293:25	372:6	335:6,8	untuned
362:19	294:3	382:21	336:14,23	388:1
363:12	343:8	392:19	405:24	unusual
379:25	twenty-six	397:25	406:17	405:8
381:4	343:25	406:3	407:20,23	unutilized
385:22	twenty-three	underpin	408:3	424:14
417:2	293:24	361:9	Undertakings	428:13
419:7	295:18	understand	276:4	unwind
425:7	twenty-two	280:16	278:1	364:12,22
427:24	283:17	290:13	undertook	365:1,2,13
436:4	two-thirds	322:15	282:2	392:23
Tuesday	299:4	363:13	unfettered	unwinder
453:1	type 347:3	390:12	426:3	364:24
tune 290:9	388:3	401:14	unfold	unwinding
436:18	types 367:21	404:2	374:12	365:11
turn 279:4	typical	415:22	unfortunatel	unwound
331:23	303:2,4,8,	419:6,7	y 302:16	
343:12		425:4		
348:2,5,14		426:3		
351:16				

365:7	378:11	448:18	421:20	WACoG 383:14
upcoming	379:3	var 449:9	450:8	wait 391:20
400:8	381:7	variable	vis-a-vis	wasn't
427:16	393:15	403:8	414:10	285:13
update 296:2	426:10	variance	421:19	304:5
300:2	432:21	440:24	void 282:16	408:19
359:15	usual 414:2	441:11	voided	417:2
updated	usually	varied	328:21	441:11
295:25	314:12	296:24	volatile	watching
299:17	319:25	variety	343:4	405:11
301:25	334:24	442:24	378:10	water
304:10	357:9	various	393:12	304:8,20
307:13	utilities	345:4	417:13	305:16,19,
386:16,17	274:1,19	376:18	volatility	23
updating	335:23	396:5	332:24	306:1,4,6,
295:24	338:14	410:9	376:6	12,13,20
301:15	401:16	420:10	379:3	322:10
upfront	405:15	438:22	392:2	Waverley
321:2	utility	vary 312:8	393:13,15	312:10
upgraded	313:11	441:14	431:21	315:4,5
300:8,12	322:17	445:5	445:22	weapon
upon 279:1	326:15	varying	volume 369:5	437:19
302:9,10	339:13	420:1	370:4	weapons
341:12	345:5	vent	371:2	425:20
349:9,10	353:17,21	306:18,20	386:15,17	weather
363:1	358:18	verse 403:25	389:18	362:23
410:3	379:5,14	version	volumes	363:1
413:8,9	401:8,10	306:20	358:5,13,1	374:3,13
448:25	403:13	versus 364:9	9 360:17	website
455:7	405:5,6,8,	404:1	361:9,15,2	304:7
upper 328:15	13	422:19	1 362:14	335:25
397:16	<hr/>	via 430:23	363:1,15	336:5
upper-bound	<hr/> V <hr/>	viable	364:1,21	we'd 303:5
376:25	valid 329:23	438:24	368:14,22	357:8
upside	359:1	Vice 408:19	369:23	436:7
447:11	385:6	view 443:5	384:18	443:11
upstream	valuable	454:5	389:1	week 409:24
407:4	420:19	views 426:19	399:6	427:13
uptake 296:6	value 327:24	virtually	400:7	weekend
315:12	328:22	281:18	volumetric	455:4
317:15	329:9	317:15,21	370:8	weigh 400:21
337:2	330:7	338:7	371:9,24	weight 450:7
338:6	383:3,7	virtue	374:16	weighted
342:15	419:25	353:19	vulnerable	371:16,23
369:4	420:13,14,	365:9	364:23	372:5,17,1
385:12	22,25		<hr/>	9 375:14
387:1	421:6,21,2		<hr/> W <hr/>	376:4
upward	5 422:16		wa 392:11	
	423:2		398:5	

382:18	397:15	308:15	wisdom 443:4	works 283:2
446:25	406:15	whether	wish 392:23	317:1
weighting	410:25	297:9	455:3	worries
449:9,22	414:8	310:14	withhold	293:10
451:12	428:24	323:7	427:12,18	333:23
we'll 279:22	437:5	326:2,7	withholding	worse 284:20
299:1	438:12	329:4	427:25	worst
303:12	445:25	330:15	witness	377:1,9
316:9	447:12	343:18	277:5,7,9,	436:22
324:20	449:4	355:16	11,13,15,1	worst-case
331:1	450:25	375:5	7,19,21,23	434:17
332:3	West 312:10	381:24	279:16	435:13
336:3	315:4,6	412:10	339:7	worth 386:2
349:5	western	415:19,23	346:20	worthwhile
351:17	340:5,7	417:7	413:14	326:3
354:16	348:15,20	424:18	witnesses	wrestling
369:25	352:22	438:4	302:7	370:24
377:5	372:13	441:13	412:14,19	write 364:2
407:24	454:2	445:3,4,18	452:17,19	written
412:21	we've	448:18	453:10	286:8
413:6	281:1,25	449:1	wonder	299:12,16,
425:12	287:25	452:16	293:10	17
431:13	313:20	453:22	302:5	wrong 360:19
452:3	320:22	whoever	311:7	368:12
we're 280:13	325:23	421:3	348:5	395:6
282:24	351:20	whole 315:14	wondering	wrote 310:20
283:23	355:9	414:22	300:6	<hr/>
285:2,6,7	367:17	wholesale	387:7	Y
287:10,11	373:24	345:14	402:10	year-by-year
293:5	379:10,13	whom 352:2	404:18,25	356:21
294:7	396:17,18	who've	433:4	year's 386:2
296:19	406:1	395:18	worded 307:7	409:23
301:15	434:20	Wiens 279:21	work 292:21	yesterday
309:3,4,14	436:13	willing	296:2	280:2
,15 311:9	448:3	342:2,3	320:1,20	281:7,17
314:1	450:23	343:9	321:5	282:17
315:14	whatever	windows	387:24	287:22
318:16	332:11	427:5	392:12	288:15
321:18,21,	355:20	Winnipeg	451:16	299:19
24 324:11	357:13	274:21	workable	301:15
329:14,15	414:9	317:13,20	365:23	302:20
333:6	426:4	318:3	worked	311:10
334:25	whereas	319:11,17	281:25	313:4,25
335:7	319:12	320:5,15	284:10	314:20
353:19,24	321:19	433:5	315:16	448:6
355:14	329:12	winter	working	yet 300:8
370:16	425:18	436:19	319:7	334:7
371:6	whereby	439:22	368:9	
378:19	417:5	444:19		
385:12	Where's			
386:20				
396:21				

345:19 349:24 399:6 400:6 422:4 424:11 yield 409:2 you'll 285:19 320:8 395:6 418:18 yours 315:4 323:17 346:21 yourself 280:1 380:21 you've 298:7 353:13,23 373:4,5,7, 16 381:6 383:13 425:13 433:17 442:22 444:6 449:16 <hr/> Z <hr/> zero 381:15 400:15 410:19				
--	--	--	--	--