



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO  
GENERAL RATE APPLICATION  
2012/13 AND 2013/14

Before Board Panel:

Regis Gosselin - Board Chairman  
Raymond Lafond - Board Member  
Larry Soldier - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
December 14, 2012  
Pages 957 to 1241

	APPEARANCES	
1		
2	Bob Peters	)Board Counsel
3		
4	Patti Ramage	)Manitoba Hydro
5	Odette Fernandes	)
6		
7	Byron Williams	)CAC (Manitoba)
8		
9	William Gange	)GAC
10	Peter Miller	)
11		
12	Antoine Hacault	)MIPUG
13		
14	Michael Anderson (np)	)MKO
15		
16	Denise Pambrun (np)	)City of Winnipeg
17		
18		
19		
20		
21		
22		
23		
24		
25		

1		TABLE OF CONTENTS	
2		Page No.	
3	List of Exhibits		960
4	List of Undertakings		961
5			
6	MANITOBA HYDRO PANEL 2 - REVENUE REQUIREMENT, RESUMED:		
7	VINCE WARDEN, Resumed		
8	DARREN RAINKIE, Resumed		
9	TERRY MILES, Resumed		
10	DAVID CORMIE, Resumed		
11			
12	Continued Cross-examination by Mr. Bob Peters		964
13			
14	Certificate of Transcript		1241
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

1	LIST OF EXHIBITS		
2	Exhibit No.	Description	Page No.
3	MH-18	Tabs for all of the PUB pre-asks	1180
4	MH-19	Letter from Manitoba Hydro to Mr.	
5		Stokke, dated April 26th, 2012 that	
6		deals with the Pointe du Bois	
7		spillway	1181
8	MH-20	Response to Undertaking 14	1182
9	MH-21	Package of IR responses based	
10		on IFF12	1240
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

LIST OF UNDERTAKINGS		
No.	Description	Page No.
15	Manitoba Hydro to provide the Board with quantification of how much return energy provided for in sales contracts is related to the diversity agreements with the two (2) counterparties, and how much of that is additional related to the adverse water	1024
16	Manitoba Hydro to quantify the lost revenue associated with the loss of Bipoles 1 and 2 as a result of the 1996 incident, as well as the incident that occurred in January of 2011; together with the capital costs that were necessary to restore facilities during both of those instances	1062
17	Manitoba Hydro to provide a history of RSG charges	1171
18	Manitoba Hydro to provide an analysis of day-ahead versus real-time prices	1172
19	Manitoba Hydro to provide merchant purchases and associated merchant transmission	1173

1		LIST OF UNDERTAKINGS (Con't)	
2	No.	Description	Page No.
3	20	Manitoba Hydro to provide a list	
4		of non-energy costs for the years	
5		listed on page 89 of Board	
6		counsel's book of documents	1187
7	21	Manitoba Hydro to provide the	
8		correct number to replace \$1.76	
9		shown for the month of February on	
10		the 2011/'12 chart on page 92 of	
11		Board counsel's book of documents	1192
12	22	Manitoba Hydro to provide the	
13		details of the other revenues and	
14		costs, excluding sales of Manitoba	
15		Hydro-generated energy that appear	
16		in the IFF for the test years under	
17		extraprovincial revenue and fuel	
18		and power for the years depicted up	
19		to '15/'16	1213
20			
21			
22			
23			
24			
25			

1 --- Upon commencing at 9:01 a.m.

2

3 THE CHAIRPERSON: Good morning. I  
4 believe we're ready to start. I think everybody's in  
5 position. Today's the last day of this -- this week, a  
6 long week. So do we have any matters to attend to  
7 before we commence the cross -- recommence the cross-  
8 examination?

9 MS. PATTI RAMAGE: We don't, Mr.  
10 Chairman. I spoke to Mr. Peters this morning and we do  
11 -- we are accumulating the answers to the pre-ask in  
12 the back, and we determined it would be better -- we're  
13 going to distribute them immediately prior to the lunch  
14 break so that people can look at them over the lunch  
15 break as opposed to giving you a few now, a few at the  
16 morning break, and then a few then. So we thought that  
17 would be preferred.

18 THE CHAIRPERSON: I think it makes good  
19 sense, thank you.

20 MR. BOB PETERS: Thank you. And good  
21 morning, Mr. Chairman, Board members, witnesses, and  
22 ladies and gentlemen.

23

24 MANITOBA HYDRO PANEL 2 - REVENUE REQUIREMENT, RESUMED:

25 VINCE WARDEN, Resumed

1 DARREN RAINKIE, Resumed

2 TERRY MILES, Resumed

3 DAVID CORMIE, Resumed

4

5 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

6 MR. BOB PETERS: Mr. Chairman, at Tab 3  
7 of the book of documents that I have referred to  
8 yesterday and will refer to today, which is marked as  
9 PUB Exhibit 14, is a copy of the IFF11-2 selected  
10 statements.

11 In addition to that, we're mindful that  
12 there's been a new IFF provided for -- called IFFMH12  
13 (phonetic). But in dealing with the one in the book of  
14 documents found at page 21 yesterday we dealt with some  
15 general consumers matters and discussed, amongst other  
16 things, the -- the revenues associated with that line  
17 item at the top of the IFF, together with the load  
18 forecast and related matters.

19 I just want to work down a couple of  
20 lines this morning. And the next line on the IFF is  
21 the general consumers revenue called "Additional  
22 Revenues." It's the one with the asterisk beside it.  
23 And, Mr. Warden, that line item at additional revenues  
24 is to reflect the additional revenue that is forecast  
25 to be received if the rate increases as proposed are



1 granted.

2                   Would you -- would you accept that as  
3 accurate, Sir?

4                   MR. VINCE WARDEN:    Yes.

5                   MR. BOB PETERS:    And so the Board has  
6 to follow the asterisk, if I may, in -- in this  
7 presentation, and follow the asterisk down to the  
8 bottom part of the page where there is a line item  
9 called, "Additional General Consumers Revenue," Mr.  
10 Warden.

11                   And that represents the rate increase  
12 that's being sought in the years under which -- which  
13 are noted above?

14                   MR. VINCE WARDEN:    Yes, that's correct,  
15 Mr. Peters.

16                   MR. BOB PETERS:    And we see that we are  
17 -- in test year 2013 and test year 2014 have the --  
18 have the rate increase numbers at the bottom. The  
19 numbers that go past for '15 and beyond, although not  
20 part of this General Rate Application, as much as  
21 anything, Mr. Warden, you're forewarning the Board and  
22 the public that that's on Manitoba Hydro's radar  
23 screen.

24                   MR. VINCE WARDEN:    Those are indicative  
25 rate increases based on the best information that we

1 have here before us today; however, they are definitely  
2 subject to change on a year-by-year basis as conditions  
3 change, as they inevitably will.

4 MR. BOB PETERS: I think the Board saw  
5 that in spades with your IFFMH12. There's another  
6 example of what was on, IFF11-2, a forecast rate  
7 increase into the future for I think twelve (12) years  
8 at 3 1/2 percent. That's been replaced now by rate  
9 increases of 3.9 percent for eighteen (18) years in  
10 IFF12.

11 MR. VINCE WARDEN: Yes, Mr. Peters.  
12 And -- and when we -- when you say the Board saw that  
13 in spades, I do want to reiterate that -- that  
14 forecasts are prepared ba -- based on the best  
15 information available. And I might in that context  
16 bring your -- to put that in context, might bring your  
17 attention back to Exhibit -- Manitoba Hydro's Exhibit  
18 number 15 in which we demonstrated on page 6 of that  
19 exhibit the significant changes that have occurred over  
20 the past four (4) years on an actual basis. So  
21 forecasts change, yes, but so do actual conditions.

22 I just wanted to make that point. I --  
23 because so much has been made about forecast accuracy  
24 and -- as though Manitoba Hydro's projections can be  
25 absolutely accurate and I know I'm repeating myself,

1 but we do base those forecasts on the best information  
2 we have available at the time and we do know that  
3 conditions will change.

4 MR. BOB PETERS: And, Mr. Warden, your  
5 bringing the Board's attention to page 6 on Manitoba  
6 Hydro Exhibit 15 was to primarily show that the  
7 extraprovincial revenues have decreased by over 40  
8 percent from where Manitoba Hydro was --

9 MR. VINCE WARDEN: Yes.

10 MR. BOB PETERS: -- in '09?

11 MR. VINCE WARDEN: That's right. And  
12 just as significantly, gas prices have declined by 40 -  
13 - 54 percent over that same period of time.

14 MR. BOB PETERS: And I suppose, Mr.  
15 Warden, not meant to be humourous this early in the  
16 morning, but sometimes the only thing we agree on with  
17 your forecasts is that they're going to be wrong. You  
18 just don't know if they're going to be wrong in which  
19 direction?

20 MR. VINCE WARDEN: Well, the forecasts  
21 are 100 percent accurate based on -- on the date we put  
22 them together.

23 MR. BOB PETERS: And the next day  
24 they're wrong. Mr. Warden, when we look at the extra -  
25 - I'm sorry, when we look at the additional revenues

1 that we are focussing on in the IFF, the top line is to  
2 isolate the rate increase revenues, correct?

3 MR. VINCE WARDEN: The additional  
4 revenues is -- is -- represents the rate increase  
5 revenues, yes.

6 MR. BOB PETERS: When the Board looks  
7 at page 21 at Tab 3 of the book of documents, under the  
8 2012 year, it appears that the additional revenue is  
9 noted as zero.

10 Is that correct?

11 MR. VINCE WARDEN: Yes, that was  
12 depicted that way for forecasting purposes, but as we  
13 reviewed earlier, Mr. Peters, there are a number of  
14 orders that have been approved on an interim -- interim  
15 basis and are still subject to final approval.

16 MR. BOB PETERS: Right. There was a 2  
17 percent rate increase on April 1st of 2011, which would  
18 have fallen into your fiscal '12 year that's not  
19 reflected on the IFF?

20 MR. VINCE WARDEN: That's right. And  
21 even going back further than that there's the rate  
22 rollback of April the 1st, 2010, that would be  
23 reflected in revenue at approved rates that would be  
24 subject to a final approval from this Board.

25 MR. BOB PETERS: But you've taken the 1

1 percent rollback revenue, Mr. Warden, have you not, and  
2 you've put it in the general consumers "at approved"  
3 rates line under the first test year, under 2013?

4 MR. VINCE WARDEN: Yes, and that was  
5 just the point I was making, Mr. Peters, yes.

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: And, Mr. Warden, I  
10 think -- did we agree yesterday that if your numbers  
11 are a little bit different than the ones that we  
12 presented to you in Tab 2, we -- we consider those to  
13 be more or less rounding -- rounding errors or rounding  
14 to --

15 MR. VINCE WARDEN: Rounding  
16 differences, yes.

17 MR. BOB PETERS: Difference. Yes,  
18 okay. And, Mr. Warden, when you -- when you indicate  
19 that the 1 percent rollback has already been rolled  
20 into general consumer's revenues at approved rates,  
21 that's money that you transferred, I suppose, from  
22 either notionally or factually, I'm not sure how you do  
23 it, from the deferral account?

24 MR. VINCE WARDEN: Yes, the deferral  
25 account would be included in that line at approved

1 rates.

2 MR. BOB PETERS: When Manitoba Hydro  
3 put that 1 percent deferral -- deferred revenue or  
4 money into the deferral account as a result of the  
5 interim rate arising from Board Order 5/12, did that  
6 money also attract interest?

7 MR. VINCE WARDEN: In -- in -- yes, in  
8 accordance with the Board order, it is attracting  
9 interest at Manitoba Hydro's short-term borrowing rate.

10 MR. BOB PETERS: And has the interest  
11 plus the principal been credited to the general  
12 consumers line of addit -- of revenues at approved  
13 rates?

14 MR. VINCE WARDEN: Yes.

15 THE CHAIRPERSON: Mr. Peters, are you  
16 still on the same schedule? Are you moving on to  
17 something else?

18 MR. BOB PETERS: I think I'll be moving  
19 forward, yeah.

20 THE CHAIRPERSON: Do you mind if I ask  
21 a few questions at this point?

22 MR. BOB PETERS: Oh, please. Yeah,  
23 please.

24 THE CHAIRPERSON: I -- I'm just trying  
25 to understand how the numbers are behaving here in

1 relation to the document that Mr. Peters was examining,  
2 which is on page 21 of the book of documents, and now  
3 looking at the material that was submitted by Manitoba  
4 Hydro, Exhibit 16. And so it's similar question to  
5 what I asked yesterday. But what I find particularly  
6 bizarre a little bit is -- is the -- the behaviour of  
7 that -- of that line. We were talking about  
8 additional revenue. If you look at the -- if you look  
9 at the page 21, particularly looking out towards 21/22,  
10 we're seeing numbers that are very similar on both  
11 documents, which kind of surprises me.

12 I -- I understand that the top line on -  
13 - on the Exhibit 16 is increasing along with rates as  
14 the rates increase but -- I'm sorry, not because of  
15 rates in that case but because of -- of extra  
16 consumption and so on. But the next line -- the  
17 additional line is not behaving like I would think it  
18 would.

19 And I'm just wondering what's going on  
20 there? So, I -- it's just a general question, it's  
21 just a question of --

22 MR. VINCE WARDEN: Yes, well in the --  
23 on page 21 of the PUB book of documents, the only  
24 difference between the two (2) would be the mag -- the  
25 quantum of the rate changes, forecasted rate changes

1 that is, from 3.50 to 3.95 percent per year. So when  
2 you look at 2022, the comparable numbers are in 603  
3 million, 619 million. Of course, that's in that year  
4 only, so the cumulative amount --

5 THE CHAIRPERSON: Oh, I see.

6 MR. VINCE WARDEN: -- would be quite  
7 different if you add up all --

8 THE CHAIRPERSON: Okay, I see.

9 MR. VINCE WARDEN: -- the additional  
10 numbers.

11 THE CHAIRPERSON: Okay.

12 MR. RAYMOND LAFOND: And you have also  
13 assumed that the -- the consumption would go up in your  
14 IFF12 versus IFF11-2?

15 MR. VINCE WARDEN: That's right.

16 MR. RAYMOND LAFOND: Because --

17 MR. VINCE WARDEN: It's adjusted for  
18 the current load forecast.

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: If I might, Mr.  
22 Chairman, I'm just going to move down that IFF line to  
23 the extraprovincial line item. And this is the line  
24 item, Mr. Warden, in which Manitoba Hydro records the  
25 second major source of Manitoba Hydros revenue, and



1 that's from export revenues?

2 MR. VINCE WARDEN: Yes, that's right.

3 MR. BOB PETERS: And we've already  
4 heard those export revenues are either to Canada or the  
5 United States, but predominately the United States.

6 MR. VINCE WARDEN: That's right.

7 MR. BOB PETERS: And, Mr. Cormie, in  
8 terms of export sales, would it be correct for the  
9 Board to consider there to be two (2) major types of  
10 sales, one of them being dependable energy sales and  
11 the other being opportunity sales?

12 MR. DAVID CORMIE: Yes, Mr. Peters.

13 MR. BOB PETERS: And when we talk  
14 dependable energy sales, as we'll go through and look  
15 at on the -- on the power resource plan, that comes  
16 from Manitoba Hydro's dependable water flows?

17 MR. DAVID CORMIE: Yes.

18 MR. BOB PETERS: And dependable water  
19 flows are the water that Manitoba Hydro depends on to  
20 be there with as great a certainty as Manitoba Hydro  
21 can determine, because that water has been there for  
22 the last ninety-six (96) years?

23 MR. DAVID CORMIE: Yes, in -- in little  
24 bit broader terms we -- the energy that -- and the  
25 capacity that's sold under our dependable contracts is

1 equivalent to the energy and capacity that we sell to  
2 our domestic customers. It's -- it's an equivalent  
3 product.

4                   So the same standards for supply apply  
5 to those contracts because those customers are using it  
6 to serve their load in the same way Manitoba Hydro uses  
7 that supply to serve its own load. So it -- it is a  
8 very high quality product. It -- it's intended to be  
9 there all the time except for the exclusions that are  
10 provided for in the contract.

11                   MR. BOB PETERS: Can -- can you please,  
12 Mr. Cormie, remind the Board as to what year does  
13 Manitoba Hydro use as the dependable year in which the  
14 water flows were so low that it became the -- the  
15 dependable standard?

16                   MR. DAVID CORMIE: It's the -- the  
17 lowest flow year on record is the year that --  
18 1940/'41. But it's actually the -- it's actually a  
19 dependable flow period, Mr. Peters, that starts in 1939  
20 which creates the -- the design condition.

21                   MR. BOB PETERS: I'm sorry, could you  
22 repeat that last answer, sir?

23                   MR. DAVID CORMIE: It's not a -- the  
24 critical flow period is longer than one (1) year. It -  
25 - it's actually eighteen (18) months. It starts in

1 1939 and it goes through 1940 -- in -- into 1941. But  
2 the worst single year, you're right, is 1940/'41.

3 MR. BOB PETERS: And when Manitoba  
4 Hydro talks to the Board about dependable flows, that  
5 dependable flow is -- is approximately 15,000 gigawatt  
6 hours worth of energy. Would I have that right?

7 MR. DAVID CORMIE: That's the -- that's  
8 the amount of water that will flow down the rivers in  
9 that year.

10 MR. BOB PETERS: In addition to that,  
11 as part of your de -- part of Manitoba Hydro's  
12 dependable flows, Manitoba Hydro tries to have at least  
13 6,000 gigawatt hours of energy in storage.

14 MR. DAVID CORMIE: Yes, we can -- we  
15 can add to that water supply by starting the reservoirs  
16 high and drawing water out of storage during that  
17 critical flow year. So we can add to the inflows, the  
18 water that's taken from storage, to get a dependable  
19 hydro which comes from inflows and from storage.

20 MR. BOB PETERS: Does Manitoba Hydro  
21 start each year with full reservoirs?

22 MR. DAVID CORMIE: No, we don't because  
23 we only have to have a dependable supply -- we only  
24 have to have an amount necessary to serve the load. We  
25 don't need to have the gas tank full all the time. The

1 gas tank only needs to be as full as necessary to -- to  
2 meet the -- the needs in that year.

3 MR. BOB PETERS: And generally speaking  
4 under the -- under what you've just told the Board, if  
5 it is a -- the lowest flow year on record with 15,000  
6 gigawatt hours of equivalent energy that's going to  
7 flow in the water, Manitoba Hydro also wants to have a  
8 minimum of 6,000 gigawatt hours of energy in the gas  
9 tank.

10 MR. DAVID CORMIE: No, we don't need to  
11 have six thousand (6,000). The number will vary each  
12 year depending upon the firm demands on -- on the  
13 system. For example, if we were to bring Conawapa into  
14 service we could probably meet load requirements  
15 without having any water in storage at all. There  
16 would be enough surplus energy from just having  
17 Conawapa on that you could -- you could essentially  
18 have empty reservoirs and just run the system on  
19 inflows.

20 So we only -- we only support the  
21 reservoir system to the amount that's necessary given  
22 the -- the load that's available -- or is there in that  
23 -- in that current year.

24 MR. BOB PETERS: What you're telling  
25 the Board is that based on the generating capacity at

1 least that -- that exists today the dependable flow is  
2 approximately 20,700 gigawatt hours.

3 MR. DAVID CORMIE: Yes. If -- if --  
4 that's the capacity. The capability of the system. It  
5 can -- it can produce that amount if we -- if we start  
6 the reservoir full but it's not always necessary to  
7 start the reservoirs full. The reservoirs can be --  
8 only have to be as full as necessary.

9 MR. BOB PETERS: The point I'm -- I'm  
10 trying to clarify maybe not so well, Mr. Cormie, is  
11 that as full as necessary is entirely dependent on what  
12 the water flows in the river system is forecast to be.

13 MR. DAVID CORMIE: Yes, but we -- we  
14 protect against the worst case at all times, Mr.  
15 Peters. So we're not forecasting the -- the worst  
16 case. We just say, Should the worse case occur next  
17 year does Manitoba Hydro have enough water in its  
18 reservoir storage? If we don't then we need to put  
19 some more in.

20 And we as -- we as -- we operate the  
21 power system, not based on our ability to forecast, we  
22 make the assumption that it will -- we could have low -  
23 - the lowest flow on record next year and if that  
24 happens, do we have enough water in our reservoirs.  
25 And if we -- and -- and we make sure that we do have

1 enough so if that worst case event occurs, whether  
2 we're successful in forecasting it or not, we have that  
3 capability.

4 MR. BOB PETERS: How does Manitoba  
5 Hydro come up with its 20,700 gigawatt hours as its  
6 dependable hydraulic number?

7 MR. TERRY MILES: Okay. I'll -- I'll  
8 attend to that one, Mr. Peters. So in our system we  
9 use -- we use models to operate the system, to -- to  
10 model the system, and optimize operations. Those  
11 models do a -- a balancing or optimization of the  
12 storage and inflows into the system.

13 So in our -- in our model we look at the  
14 amount of energy required in any given year to meet the  
15 load in that year. And under the 1940/'41 flow year,  
16 given the inflows that we have, we basically determine  
17 the amount of storage that has to be in there to meet  
18 the dependable load with the resources that we have.  
19 And, in essence, that defines the reservoir levels that  
20 we -- that are required to -- to do that.

21 So it's a -- it's an exercise. It's a  
22 bit of an iterative exercise to -- to determine what  
23 the dependable flow is in -- in any given year.

24 MR. RAYMOND LAFOND: So we can conclude  
25 that you assume worst-case scenario in terms of water

1 flows, but the forecasting is in terms of the load  
2 requirements?

3

4 (BRIEF PAUSE)

5

6 MR. TERRY MILES: Yeah, I guess that's  
7 more or less -- more or less the case. I think -- can  
8 you add anything else to that?

9 MR. DAVID CORMIE: Yeah. Mr. Lafond,  
10 Mr. Miles indicated it was an iterative thing. And --  
11 and what we do is we -- we run the computer model with  
12 the Manitoba load. Let's say it's at -- at 20,000  
13 gigawatt hours and we run that through the power  
14 system. Is the system capable of serving that load?  
15 Yes. So let's try twenty-one thousand (21,000).

16 So you increase -- increase -- keep  
17 increasing the demand on the system until you get to  
18 the point where the system is no longer able to serve -  
19 - to -- to supply it. And as Mr. Miles said, this is a  
20 -- it's an optimization model that tries to move the  
21 water around in the reservoir system. And when it --  
22 when it's no longer able to store water and carry water  
23 over there'll be some months in -- in the -- in the  
24 year that the model runs where it's enable -- unable to  
25 -- to meet the power demand. Even though we're running

1 all our gas and all our coal and we're importing the  
2 maximum, the system is -- is -- has -- has been  
3 exhausted.

4                   And at that point that -- what -- that's  
5 what we think the cap -- that's what we say the  
6 capability is. And so that number is that number that  
7 -- that Mr. Peters was referring to, the -- the  
8 dependable capacity of -- or the dependable capability  
9 of the -- of the power system. It's the -- the maximum  
10 amount of electricity that -- that the power system can  
11 produce given that assumption of river flows and -- and  
12 all the other sources of supply.

13                   And so it's like filling your gas tank  
14 with -- in your car and saying, How far can I drive? I  
15 can go 900 miles on a tank of gas. So that's the --  
16 that -- that's what we call the capability of our  
17 system. Now, do you have to drive 900 miles this year  
18 in your car? No, I only have to go -- I'm only going  
19 to Brandon, so I only put half a tank of gas in the  
20 car.

21                   So the difference between the capacity  
22 of the -- of the power system and what's necessary to  
23 actually meet the load in a -- in a given year.

24                   THE CHAIRPERSON: But wouldn't there be  
25 an output bias on that? I know -- it seems to me I



1 would want to keep my tank full all the time. You  
2 know, if you can maximize the reserve, it's there, I  
3 don't need it, it doesn't cost you anything, right? I  
4 mean, once the rese -- once the water is in the tank  
5 does it cost you anything?

6 MR. DAVID CORMIE: Well, it -- it does,  
7 Mr. Chairman. If we were to keep the reservoirs full  
8 all the time, then we would have no ability to manage  
9 periods of higher flows. So if we're always assuming  
10 that the lowest flow is occurring, whenever higher  
11 flows came along the water would be spilled and be  
12 wasted.

13 So running -- operating the reservoirs  
14 full all the time is a very expensive way of -- of  
15 operating the power system, because it results in a  
16 huge amount of spill. So we operate the system to --  
17 in a manner that ensures that we have enough in -- in  
18 the -- in reservoirs, should a drought occur, but no  
19 more.

20 And because any water that you do hold  
21 back in reservoir storage ultimately, because of the  
22 variability in water supply, will be spilled. And we  
23 talked about it this last -- or, a few days ago about  
24 spilling last summer. And -- and so having water in  
25 storage is -- it's comforting from a reliability, but I

1 think I'd rather have the money in the bank than have  
2 the -- the water in -- in the reservoir. It...

3 THE CHAIRPERSON: So -- so looking at  
4 this spring, and I'm -- I'm thinking specifically of  
5 the -- the -- sort of the initial drought that we -- we  
6 had this -- this sort of summer into the fall. And so  
7 you would have had water to back up your power needs in  
8 the reserve for that particular situation, and you  
9 couldn't have predicted it would happen. But you at  
10 least had water to -- to cover your needs.

11 And I guess I'm trying to understand,  
12 you know, we -- we understood that your -- your  
13 revenues were going down because of the drought, and  
14 I'm trying to understand why that was if -- if we had  
15 power -- pardon me, if you had -- if you had water and  
16 reserves to address situations like that.

17 MR. DAVID CORMIE: Yes, in a -- in a  
18 low-flow year -- not -- not the worst-flow year, but in  
19 a low-flow year -- it makes sense to store water to --  
20 to serve the load into the future, rather than selling  
21 it at -- at a low value in the off peak now. It makes  
22 sense to store the water and -- and use it next -- you  
23 know, for the upcoming winter season.

24 So there's an economic choice that you  
25 can make: Should I release the water or store the water

1 today? And -- and that's an economic choice that --  
2 that Manitoba Hydro makes. And as the water supply  
3 deteriorates, we chose to -- to store more for future  
4 generation -- to -- to generate in -- in the future.  
5 And that's an economic calculation that we make.

6                   But we also do the calculation saying,  
7 If -- if our -- if our water supply becomes the -- the  
8 dependable inflows, should we be storing more. And if  
9 -- if that calculation says we need to store more,  
10 we're not then storing for economics anymore. We're  
11 now storing for reliability.

12                   So as we went through last spring and --  
13 or, last winter and last spring, we were storing for  
14 economic -- we never got to the point where we had to  
15 say, you know, this is a reliability issue and we need  
16 to make further reductions. And -- but had the dry  
17 conditions persisted, we would have got to the point  
18 where economically it would have said, release the  
19 water from storage; but from reliability, we would have  
20 had to -- to hold water -- more water back.

21

22 CONTINUED BY MR. BOB PETERS:

23                   MR. BOB PETERS: Mr. Cormie, let me  
24 continue. And I want to time travel with you back to  
25 1939/'40/'41. Would it be correct for the Board to

1 understand that in that year the minimum flows that the  
2 Corporation would have seen would have been the 15,000  
3 gigawatt hours in that year?

4 MR. DAVID CORMIE: The -- the 15,000  
5 gigawatt hours assumes that the water supply in  
6 '40/'41, historic water supply, has been adjusted for  
7 present use.

8 MR. BOB PETERS: And gone through the  
9 generating stations you have today --

10 MR. DAVID CORMIE: And then --

11 MR. BOB PETERS: -- that you didn't  
12 have at that time.

13 MR. DAVID CORMIE: And then -- and then  
14 given that -- that there is upstream regulation going  
15 on as if it were in service today. And if our  
16 generating system were in place -- or, is in place as  
17 of now those -- that water flow flowing through the  
18 system, what it would produce today, given those --  
19 those flow conditions of the past.

20 MR. BOB PETERS: All right. I think  
21 you've explained it, and -- and fifteen thousand  
22 (15,000) is the number.

23 MR. DAVID CORMIE: Well it's a little  
24 bit more now that we have Wuskwatim.

25 MR. BOB PETERS: Well, that's fair.

1 MR. DAVID CORMIE: It's probably  
2 sixteen-thousand-five hundred (16,500).

3 MR. BOB PETERS: The Wuskwatim  
4 dependable, I thought it was about twelve fifty  
5 (1,250), or am I making that up?

6 MR. DAVID CORMIE: Yes, you're right.  
7 It's -- it would be sixteen two (16.2) --

8 MR. BOB PETERS: All right. So with --  
9 with the addition of -- of Wuskwatim then what was  
10 15,000 gigawatt hours of dependable water flows would -  
11 - would, through today's generators, be closer to  
12 16,250 gigawatt hours?

13 MR. DAVID CORMIE: Yes, approximately.

14 MR. BOB PETERS: All right. And to  
15 meet the dependable level of Manitoba Hydro's  
16 requirements, Manitoba Hydro would have needed the  
17 equivalent, back in 1940/'41, of 6,000 gigawatt hours  
18 in storage.

19 MR. DAVID CORMIE: To get up to the  
20 twenty-one (21) --

21 MR. BOB PETERS: Yes.

22 MR. DAVID CORMIE: Yes, that -- so,  
23 that's the -- that's the effect if we started the  
24 reservoirs full in the fall of 1939 and we drew them  
25 down to the maximum amount through the fall of 1939,

1 through 1940 and -- and we got them as low as we  
2 possibly could in the -- in -- in 1941. That's -- that  
3 -- there would be 6,000 gigawatt hours of energy that  
4 came out of storage. You can add that to the -- six  
5 thousand (6,000) in that -- in that one (1) year, and  
6 you add that to the inflows of sixteen two (16.2),  
7 that's how you get the 21 billion kilowatt hours shown  
8 on that table.

9 MR. BOB PETERS: All right. Does  
10 Manitoba Hydro draw down the energy in storage down to  
11 zero?

12 MR. DAVID CORMIE: No, it's not  
13 physically possible.

14 MR. BOB PETERS: All right. And the  
15 example you gave of being able to meet Manitoba Hydro's  
16 dependable energy with Conawapa on stream, if that was  
17 the assumption, without any water in storage, what  
18 you're just telling the Board is that the river flows  
19 would provide sufficient water under dependable  
20 circumstances to meet today's dependable requirements?

21 MR. DAVID CORMIE: Yes, and I remember  
22 back in 1990, just prior to Limestone coming into  
23 service, we ran -- we -- we had essentially, just  
24 before Limestone came through, we ran the reservoirs  
25 flat. We didn't take any water out of storage, because

1 it wasn't necessary. Limestone was there, just -- the  
2 new -- the water going through the new generating  
3 station was sufficient without having to augment it  
4 with storage operations.

5 MR. BOB PETERS: If it's not physically  
6 possible to draw the storage wat -- energy in storage  
7 down to zero, how low can you go?

8 MR. DAVID CORMIE: The -- the licence -  
9 - there -- there -- licence limits allow us to take,  
10 for example, Lake Winnipeg down to seven eleven (7.11).  
11 But in that -- in that calculation of the 21 billion  
12 kilowatt hours, if we were to have Lake Winnipeg at  
13 seven eleven (7.11) at the end of that -- of that  
14 winter of 1940/'41, there would be insufficient flow  
15 going down -- down the Nelson River because of the ice  
16 restrictions out of Lake Winnipeg. So like, it has to  
17 -- it has to be higher than the minimum in order to  
18 pass the flows.

19 So -- so although theoretically, there's  
20 water in storage, it's not water that can be used to  
21 serve load, so the -- the reservoirs have to be higher  
22 than the minimum in order to meet the load  
23 requirements.

24 MR. BOB PETERS: Mr. Cormie, perhaps we  
25 can address some of the discussion you and the Chairman

1 just had by turning to Manitoba Hydro Exhibit 15, and  
2 turning to page 49. Let me know Sir, when you have  
3 that document in front of you.

4 MR. DAVID CORMIE: I have that.

5 MR. BOB PETERS: Now, just to take our  
6 discussion and the discussion you've had with the  
7 Chairman and Board member Lafond further, when Manitoba  
8 Hydro looks at their total energy in reservoir storage  
9 as depicted on this graph, there's a broad range from  
10 1977 to 2010 in the -- in the shaded beige area, I  
11 guess.

12 MR. DAVID CORMIE: Yes.

13 MR. BOB PETERS: And that's telling the  
14 Board that's approximately where energy in storage  
15 started in April of any given year?

16 MR. DAVID CORMIE: Ah, yes.

17 MR. BOB PETERS: And the average is the  
18 dark black line, and the reality for the year we're in  
19 is the red line?

20 MR. DAVID CORMIE: Yes.

21 MR. BOB PETERS: And so energy in  
22 storage, it shows that it appears that at some points  
23 in time, the energy in storage has been as low as 4,000  
24 gigawatt hours?

25 MR. DAVID CORMIE: Yes.



1 MR. BOB PETERS: The -- does that cause  
2 Manitoba Hydro alarm, if that situation occurs, or  
3 would you know at that point in time that you have  
4 enough precipitation that's fallen in the winter to  
5 protect your dependable requirements?

6 MR. DAVID CORMIE: In the -- in the  
7 situation that created the 4 terawatt hours we had  
8 sufficient other resources available to -- to -- so  
9 that we knew that we could meet the load requirements  
10 without having more water in storage at the time.

11 Mr. Peters, just to clarify, this is --  
12 this is not Manitoba Hydro's -- all Manitoba Hydro  
13 reservoirs. Only four (4) of these reservoirs are  
14 under our control. The other fourteen (14) reservoirs  
15 are operated by others. And so all we're doing is  
16 reflecting their operation and -- and assuming that --  
17 you know, they -- they have their constraints.

18 And there's no -- it's not -- it's not  
19 an indication of what Manitoba Hydro controls, it's  
20 just saying this is how much water is out in reservoirs  
21 across western Canada.

22 MR. BOB PETERS: Mr. Cormie, I didn't  
23 understand the -- the need for that qualification. The  
24 fact that Manitoba Hydro does or does not control the  
25 reservoir, how if -- how if at all is that reflected on

1 this chart on page 49?

2 MR. DAVID CORMIE: Well, it -- it --  
3 this -- this is an indicator of reservoir storage.  
4 It's not an indicator of what energy in storage is  
5 available to Manitoba Hydro because we don't control  
6 the majority of the reservoirs.

7 THE CHAIRPERSON: To that point, just  
8 for my edi -- edification, the -- the other reservoirs  
9 are controlled by which entities?

10 MR. DAVID CORMIE: They're controlled  
11 by -- in Ontario by the Lake of the Woods Control  
12 Board. They're controlled in Saskatchewan by the  
13 Saskatchewan Water Corporation. In Alberta by Electric  
14 Utilities.

15 So -- but Manitoba Hydro does control --  
16 of -- of this amount about 50 percent of the storage is  
17 -- is under Manitoba Hydro's control because Lake  
18 Winnipeg is the largest reservoir, and -- and we do  
19 control that but --

20 THE CHAIRPERSON: Do you have any say  
21 at all on -- on the -- on the decisions that are made  
22 by those other reservoir-controlling entities?

23 MR. DAVID CORMIE: No. We -- we don't  
24 have any decision authority, no.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Mr. Cormie, still  
3 looking at the chart on page 49, if the Board goes back  
4 to the most current drought situation faced by Manitoba  
5 back in 2003/'04, what was the approximate energy in  
6 storage at the beginning of that year?

7 MR. DAVID CORMIE: Four (4).

8 MR. BOB PETERS: So that's at the  
9 bottom of the chart?

10 MR. DAVID CORMIE: Yes, that -- that  
11 was the year that created that -- that limit.

12 MR. BOB PETERS: And then what was the  
13 flow situation that Manitoba Hydro had at that point in  
14 time in terms of river flows?

15 MR. DAVID CORMIE: I think if my memory  
16 serves me correctly we had inflows that year of  
17 approximately 18 terawatt hours. So 3 terawatt -- 3  
18 terawatt hours more than the fifteen (15) that you  
19 could expect in the lowest flow year.

20 MR. BOB PETERS: What was -- what do  
21 you recall hydraulic generation being that year? I  
22 can't make these numbers add up in my head.

23 MR. DAVID CORMIE: I think it was very  
24 close to eighteen (18).

25 MR. BOB PETERS: Okay. So even at

1 eighteen (18) it would have been below the required --  
2 or the indicated twenty thousand, seven hundred  
3 (20,700)?

4 MR. DAVID CORMIE: Yes, because it  
5 wasn't necessary to have more in storage to -- to  
6 ensure the supply of electricity to Manitobans.

7 MR. BOB PETERS: All right. So there  
8 was enough to supply Manitobans, and the export  
9 contracts were dealt with financially as opposed to  
10 physical supply.

11 MR. DAVID CORMIE: Yes. It was -- it  
12 was more economic for us to purchase the power than to  
13 generate it ourselves.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: I wrote down the flow  
18 number as approximately eighteen (18) -- 18,000  
19 gigawatt hours a year. Did I have that number right  
20 for back in the '03/'04 year?

21 MR. VINCE WARDEN: Yes, Mr. Peters,  
22 that's illustrated on page 50 of Manitoba Hydro's  
23 Exhibit number 15.

24 MR. DAVID CORMIE: Yes. And I remember  
25 planning for that drought, Mr. Peters, and we had

1 assumed that we would have the fifteen (15). In the --  
2 in -- in the spring of 2003, we didn't know how bad the  
3 drought was going to be. We assumed it was going to be  
4 a fifteen (15). It came in at eighteen (18), so we had  
5 a -- we ended up having enough, because we had made  
6 plans around the fifteen (15).

7 MR. BOB PETERS: Thank you, Mr. Cormie.  
8 Before I get to the power resource plan, the other side  
9 of the dependable water flows that we've been talking  
10 about for the last fifteen (15) minutes is the  
11 opportunity side of the business, correct?

12 MR. DAVID CORMIE: Yes.

13 MR. BOB PETERS: And these are sales  
14 that are available because Manitoba Hydro has surplus  
15 energy to what it needs for its domestic customers?

16 MR. DAVID CORMIE: Yes.

17 MR. BOB PETERS: And it follows that in  
18 high flow years, Manitoba Hydro has more energy to  
19 sell?

20 MR. DAVID CORMIE: Yes.

21 MR. BOB PETERS: If the market's -- if  
22 the market's receptive?

23 MR. DAVID CORMIE: Yes.

24 MR. BOB PETERS: And generally that  
25 opportunity market is approximately 7,000 gigawatt

1 hours per year in -- over and above dependable flows?

2 MR. DAVID CORMIE: Yes. In -- in the  
3 last -- at least the last five (5) or six (6) it's been  
4 up as much as 10 terawatt hours, Mr. Peters, the  
5 opportunity sales.

6 MR. BOB PETERS: All right. We'll come  
7 to that, sir. Mr. Miles, included in the book of  
8 documents at page 69 is a copy of a page pulled out of  
9 the power resource plan that you are familiar with,  
10 sir?

11 MR. TERRY MILES: Yes, I am.

12 MR. BOB PETERS: And for those lucky  
13 enough with --

14 MR. RAYMOND LAFOND: Page 69 of which  
15 Exhibit?

16 MR. BOB PETERS: Sixty-nine, sir, of  
17 Board counsel's book of documents, PUB Exhibit 14. I  
18 should indicate that a few of us will have enlarged  
19 copies if -- for ease of reference so we don't fight  
20 over the eyeglasses.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: Now, Mr. Miles, thank  
25 you. On page 69, at Tab 8 of Board counsel's book of

1 documents, the heading is important on this document  
2 because it's, "System Firm Energy Demand and Dependable  
3 Resources." Correct?

4 MR. TERRY MILES: That's correct.

5 MR. BOB PETERS: And when -- when  
6 Manitoba Hydro says "firm energy," what are you telling  
7 the Board?

8

9 (BRIEF PAUSE)

10

11 MR. TERRY MILES: Firm energy is energy  
12 that we have an obligation to serve.

13 MR. BOB PETERS: And when you say  
14 "dependable resources," these are the resources that  
15 Mr. Cormie has explained have an ex -- have been there,  
16 I'm going to say forever, but at least for --  
17 notionally have been there since the last ninety-six  
18 (96) years?

19 MR. TERRY MILES: Yeah, Mr. Cormie  
20 talked about Hydro resources, dependable. We have  
21 other dependable resources.

22 MR. BOB PETERS: And we're going to  
23 come to those.

24 MR. TERRY MILES: Okay.

25 MR. BOB PETERS: So let's -- let's

1 start with just making sure the Board is familiar and  
2 let's pick the two (2) test years, the 2012/2013  
3 column, sir. In that particular column we talk about  
4 existing Hydro plants at 20,720 gigawatt hours.

5 Has that been updated to include  
6 Wuskwatim?

7 MR. TERRY MILES: No, it is not.  
8 Wuskwatim is included later on in the table.

9 MR. BOB PETERS: Right. And it's --  
10 why is Wuskwatim no long -- not added to the top line?  
11 Is there any significance to that or is it just a  
12 matter of presentation?

13 MR. TERRY MILES: For this it's a  
14 matter of presentation. It was still under -- at that  
15 point in 2011/'12, Wuskwatim was still under -- under  
16 construction, hadn't been completed. When it is  
17 completed, it will end up in the existing Manitoba  
18 Hydro plants; so in the next power resource plan.

19 MR. BOB PETERS: So the Board members  
20 saw in our book of documents earlier, I think way back  
21 in Tab 5 we had some extracts from the corporate annual  
22 report about capacity of the different plants on the  
23 system.

24 What you're telling the Board in this  
25 power resource plan is under the dependable flows,



1 those facilities will hydraulically generate 20,720  
2 gigawatt hours in a year.

3 MR. TERRY MILES: That's correct.

4 MR. BOB PETERS: And can you explain  
5 the hydro adjustment that follows, the 340 gigawatt  
6 hours a year?

7 MR. TERRY MILES: Yes, I can do that.  
8 So I think previously, or in other proceedings or  
9 earlier in these proceedings, Mr. Cormie talked about -  
10 - I think about diversity, agreement diversity  
11 contracts, where we have a energy exchanges between a  
12 customer. And in the summer we provide energy to a  
13 customer in the summer, and they return the energy back  
14 to us in the winter.

15 MR. BOB PETERS: Let me just interrupt  
16 you on that, because we haven't spent a lot of time on  
17 that. But it would be helpful at this point, I think,  
18 if we did explain that. Manitoba Hydro calls those  
19 "diversity agreements" is what you're telling the  
20 Board?

21 MR. TERRY MILES: That's correct.

22 MR. BOB PETERS: And est -- what you're  
23 indicating is, We'll provide a counter-party with a  
24 certain amount of energy when we have a surplus -- when  
25 Manitoba Hydro has a surplus -- in exchange for them

1 reciprocating when they have a surplus.

2 MR. TERRY MILES: Yeah. And in  
3 addition, when they have their peak load requirements  
4 and when we have our peak load requirements, that's the  
5 -- another benefit to each of us.

6 MR. BOB PETERS: Right. You're --  
7 you're providing it to each other at their respective  
8 peaks, and that will eliminate the need for Manitoba  
9 Hydro to have as much resource necessarily available?

10 MR. TERRY MILES: That's correct.

11 MR. BOB PETERS: And so the counter-  
12 party with whom you want to enter into these  
13 agreements, you'd like to make sure that they're not  
14 peaking at the same time as Manitoba Hydro?

15 MR. TERRY MILES: If they are, I think  
16 it was -- if they are, there's not necessarily that  
17 reciprocating benefit, I guess.

18 MR. BOB PETERS: So Manitoba Hydro's  
19 peak -- I think Mr. Cormie warned us of so far the  
20 peak, but it's -- Manitoba Hydro has a winter peaking  
21 system?

22 MR. TERRY MILES: Yes.

23 MR. BOB PETERS: And Manitoba Hydro  
24 expects Manitobans to reach their peak during our --  
25 sometime in our winter months --

1 MR. TERRY MILES: That's correct.

2 MR. BOB PETERS: -- perhaps between  
3 December and February?

4 MR. TERRY MILES: That's correct.

5 MR. BOB PETERS: And so the counter-  
6 parties with whom you have these reciprocal agreements  
7 or diversity agreements, do they tend to be summer-  
8 peaking facilities?

9 MR. TERRY MILES: They do, yes.

10 MR. BOB PETERS: And so they would need  
11 Manitoba Hydro's energy for their air conditioning load  
12 as opposed to a heating load?

13 MR. TERRY MILES: Yes.

14 MR. BOB PETERS: All right. And so  
15 this Hydro adjustment number, can you can then -- is  
16 that related to the diversity agreements?

17 MR. TERRY MILES: It is. It's  
18 essentially related to the characteristic of -- of  
19 them. When we provide energy to -- to our counterparts  
20 in the summer, we do it under open-water conditions.  
21 We don't see the winter restrictions on our system. So  
22 our generation tends to be a little more efficient. We  
23 don't have reductions at our stations due to ice, ice  
24 restrictions, et cetera.

25 When they provide that energy back to

1 us, it is in the winter, when we have those  
2 restrictions that are there. If we had to generate it  
3 on our own, we would have to generate -- we could not  
4 use the water as efficiently to generate that -- that  
5 energy. So in essence, the hydro adjustment reflects  
6 that. In essence it's an increase in efficiency by  
7 them providing it to us as opposed to us having to  
8 generate it by ourselves.

9 MR. BOB PETERS: It doesn't represent,  
10 Mr. Miles, the total quantity of the diversity  
11 agreements, does it?

12 MR. TERRY MILES: No, it doesn't.

13 MR. BOB PETERS: You're telling the  
14 Board that it reflects an increase in Hydro's  
15 efficiency, which means that Manitoba Hydro can take  
16 additional resources that it would be otherwise using  
17 from Manitobans and sell them?

18 MR. TERRY MILES: Yeah, that would be  
19 correct. I think -- I mean, in essence it's -- given  
20 our resources that we have by doing this, we gain three  
21 hundred (300) and fo -- well we gain, in the -- in the  
22 particular table, it's 340 gigawatt hours of energy  
23 through that -- through that arrangements. There's a  
24 net gain to us because of efficiency improvements.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: And we talk also then  
4 of existing hydro on a net basis, there was some  
5 discussion with Board member Lafond yesterday about the  
6 -- the net versus the gross. This takes into account  
7 the -- the levels of the water from the inflow to the  
8 outflow of the generating stations and what the net  
9 generating capacity would be?

10 MR. TERRY MILES: It -- it does. This  
11 reflects winter peaking capability. It does, yes.

12 MR. BOB PETERS: And then you've --  
13 you've indicated new hydro as -- as an additional  
14 source of dependable energy. And you show Wuskwatim  
15 coming on. And I think Mr. Warden still has some  
16 homework outstanding on explaining to the Board how  
17 much of Wuskwatim came in at what point in time.

18 But for power resource plan purposes,  
19 Manitoba Hydro has assumed that in the current fiscal  
20 year Wuskwatim will have 1,205 gigawatt hours of  
21 dependable energy available?

22 MR. TERRY MILES: Yeah, that's as based  
23 on the 2011/'12 power resource plan. Yes.

24 MR. BOB PETERS: And that's updated in  
25 the more current one?

1 MR. TERRY MILES: It is, yes.

2 MR. BOB PETERS: All right. What's the  
3 -- the new number? Do you know it off -- I can go  
4 check that.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Eight -- eight ninety  
9 (890), is that the --

10 MR. TERRY MILES: Eight ninety (890),  
11 that's correct.

12 MR. BOB PETERS: -- the number that...

13 MR. TERRY MILES: Yeah.

14 MR. BOB PETERS: And by -- one of the  
15 points that I didn't mention when I was telling the  
16 Board members about the title of this document, this  
17 document contains what is known as Manitoba Hydro's  
18 recommended power resource plan?

19 MR. TERRY MILES: That's correct.

20 MR. BOB PETERS: And so what the Board  
21 will see is Manitoba Hydro's generation stack and  
22 sequencing, including Conawapa and Keeyask, as  
23 contained in this chart as well?

24 MR. TERRY MILES: That's correct.

25 MR. BOB PETERS: And following over

1 Keeyask coming in service in 2020, did that change in  
2 the updated power resource plan?

3 MR. TERRY MILES: No, I believe that's  
4 still the same.

5 MR. BOB PETERS: And what about  
6 Conawapa coming in, in 2025? Did that slip a year, or  
7 did that stay?

8 MR. TERRY MILES: That has slipped a  
9 year in the updated power resource plan.

10 MR. BOB PETERS: All right. So I  
11 should have photocopied a different document last  
12 night. But the -- what you're telling the Board is  
13 that from 2011 recommended development sequence to the  
14 most updated power resource plan, the in-service date  
15 of Conawapa has fallen back a calendar year?

16 MR. TERRY MILES: That's correct.

17 MR. BOB PETERS: And what's the reason  
18 for that?

19

20 (BRIEF PAUSE)

21

22 MR. TERRY MILES: Yeah, I think the --  
23 with the speed that we're working on Conawapa, in terms  
24 of the studies and other activities, that's what we  
25 believe is the earliest in-service date for Conawapa

1 now.

2 MR. BOB PETERS: So Manitoba Hydro has  
3 delayed it a year?

4 MR. TERRY MILES: Yes.

5 MR. BOB PETERS: And what about the  
6 counter-parties who were expecting energy to be  
7 delivered from that resource?

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: Have any of those  
12 dates changed?

13 MR. DAVID CORMIE: There's sufficient  
14 surplus already in the schedule, Mr. Peters. You'll  
15 notice at the bottom line for that year:

16 "A delay of one (1) year still can be  
17 accommodated with the existing  
18 surplus."

19 MR. BOB PETERS: I'll come back to you  
20 when we get to the bottom of the chart and you can  
21 explain that further then, Mr. Cormie. What you're  
22 saying, Mr. Cormie, is you didn't need to delay the --  
23 the contract delivery dates to -- just because Conawapa  
24 got pushed back a year?

25 MR. DAVID CORMIE: Not yet, yes.



1 MR. BOB PETERS: That didn't sound very  
2 hopeful.

3 MR. DAVID CORMIE: Well, it -- I don't  
4 want to jump ahead, but we are still working with WPS  
5 on -- on the ramp-up at the -- at the beginning of the  
6 contract. And so to the extent that we get to that  
7 point we will deal with the -- you know, the issue of  
8 the in-service date. And -- and just as we have with  
9 un -- with Minnesota Power under the existing sale with  
10 them we have the option -- or we -- we -- we've dealt  
11 with the contingencies if the station is delayed and  
12 how we will deal with that. So that will be part of  
13 the power purchase agreement with --

14 MR. BOB PETERS: All right. Then  
15 following down on the power resource plan under the  
16 2012/'13 year, the supply hu -- the supply side  
17 enhancement projects of Kelsey re-runnering and Pointe  
18 du Bois rebuild, those are matters that aren't shown in  
19 this plan, because they take place out past the  
20 planning horizon.

21 Would that be correct?

22 MR. TERRY MILES: No, that's -- that's  
23 not correct. For Kelsey Re-runnering, those are  
24 actually included in the -- they should be included now  
25 in the base estimate, I believe. In last year's power

1 resource plan -- do we have it in there?

2

3

(BRIEF PAUSE)

4

5 MR. TERRY MILES: No, I sit corrected  
6 on that. From an energy perspective, from the Kelsey  
7 Re-runnering Project we weren't expecting any  
8 dependable energy. It was a capacity increase that was  
9 there. Sorry. Yeah, there was an increase in average  
10 energy with -- with the Kelsey Re-runnering.

11 MR. BOB PETERS: We'll come to that  
12 chart next then, Mr. Miles, and if -- if you can recall  
13 you can point it out. But what you're telling the  
14 Board is that the Kelsey Project doesn't give -- it's  
15 not used for any dependable energy?

16 MR. TERRY MILES: It doesn't add any  
17 additional -- the Kelsey Re-runnering Project does not  
18 add any additional dependable energy --

19 MR. BOB PETERS: Okay. You've said it  
20 better than I did.

21 MR. TERRY MILES: Yes.

22 MR. BOB PETERS: So because this is the  
23 dependable energy chart there's no additional increment  
24 as a result of the -- the re-runnering for the project?

25 MR. TERRY MILES: That's correct.

1 MR. BOB PETERS: And does that same  
2 logic apply to Pointe du Bois?

3 MR. TERRY MILES: No, it doesn't apply  
4 to Pointe du Bois as well. I think if we...

5

6 (BRIEF PAUSE)

7

8 MR. TERRY MILES: Just to confirm, Mr.  
9 Peters, you -- we were using the 2011/'12 power  
10 resource plan. Have you switched to the 2012?

11 MR. BOB PETERS: I haven't, sir.

12 MR. TERRY MILES: Okay. I thought I  
13 heard you say that, sorry.

14 MR. BOB PETERS: I was still in my book  
15 of documents --

16 MR. TERRY MILES: Okay.

17 MR. BOB PETERS: -- using page 69. The  
18 changes, if they are significant, I would like you to  
19 bring them to the Board's attention, but I didn't think  
20 they were that significant.

21 MR. TERRY MILES: They aren't. I just  
22 was following another document. I'm sorry.

23 MR. BOB PETERS: I apologize, Mr.  
24 Miles.

25 MR. TERRY MILES: Okay.

1 MR. BOB PETERS: That was -- that was  
2 probably my --

3 MR. TERRY MILES: Okay.

4 MR. BOB PETERS: -- confusing you.

5 MR. TERRY MILES: Okay.

6 MR. BOB PETERS: All right. The --

7 MR. TERRY MILES: The -- the -- just as  
8 a note, for the Pointe du Bois, actually it -- it flips  
9 over to the -- the next page that wasn't copied in  
10 here. And in 2030/'31 you'd find that Pointe du Bois  
11 does have some additional -- the -- the rebuild does  
12 have some additional depen -- dependable energy  
13 associated with it.

14 MR. BOB PETERS: How much is -- how  
15 much dependable energy as a result of the rebuild?

16

17 (BRIEF PAUSE)

18

19 MR. TERRY MILES: I want to say about a  
20 hundred and forty (140).

21 MR. BOB PETERS: I think it's a hundred  
22 -- okay, a hundred and fifty (150), a hundred and forty  
23 (140) --

24 MR. TERRY MILES: A hundred and fifty  
25 (150), yeah.

1 MR. BOB PETERS: We'll take that --

2 MR. TERRY MILES: Okay.

3 MR. BOB PETERS: -- number. Would it  
4 be fair to say that the rebuild of Pointe du Bois,  
5 spending the amount of money that's planned for 150  
6 additional gigawatt hours doesn't on the face of it  
7 look like a very good return?

8 MR. TERRY MILES: Well, I think the  
9 rebuild of the plant is replacing all of the energy and  
10 capacity at the plant, not just the incremental.

11 MR. BOB PETERS: All right. And as a  
12 result of the rebuild there's some efficiencies and  
13 there's an extra 150 dependable --

14 MR. TERRY MILES: That's correct.

15 MR. BOB PETERS: -- gigawatt hours?

16 MR. TERRY MILES: That's correct, yeah.  
17 And I'd add that that -- the business case for that  
18 hasn't been carried out yet. That's in a -- that --  
19 the -- the Pointe du Bois rebuild is out as a -- as a  
20 placeholder right now, out in time. There hasn't been  
21 a decision to move forward with that.

22 MR. BOB PETERS: I was wondering who'd  
23 be the first person to use that word, the --

24 MR. TERRY MILES: Well --

25 MR. BOB PETERS: -- place marker --

1 MR. TERRY MILES: -- maybe -- maybe  
2 that's not quite the best word, but -- but it is. I  
3 mean, our -- our activities now around -- around Pointe  
4 du Bois are maintaining the facility. We've indicated  
5 that in the power resource plan, that the plans  
6 actually are to continue maintaining and operating the  
7 facility such that we can continue to basically keep  
8 the same operating capacity from the plant. And at  
9 some point a decision will be made to do that.

10 Given the maintenance and that that's  
11 carried out, I think it was deemed that sometime out in  
12 -- ten (10) to twenty (20) years out in time a decision  
13 might likely have to be made around that. It's not  
14 clear 100 percent when that might be. But that's --  
15 that's where it is in the plan. So from a planning  
16 perspective we put that in as a -- as that at that  
17 point.

18 MR. RAYMOND LAFOND: So the capability  
19 would have increased from seventy-five (75) to two  
20 hundred and twenty-five (225) with the rebuild at  
21 Pointe du Bois?

22 MR. TERRY MILES: No, it wouldn't. It  
23 would add -- it would go from about seventy-eight (78)  
24 plus 43 megawatts.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: I think Board member  
3 Lafond was looking at the energy, not the capacity, but  
4 --

5 MR. TERRY MILES: Yes, okay.

6 MR. BOB PETERS: -- you're telling him  
7 that it would go from a 78 megawatt plant, you would  
8 add approximately an additional 43 megawatts on that?

9 MR. TERRY MILES: Approximately, yeah.

10 MR. BOB PETERS: And the placeholder  
11 that Mr. Warden has introduced as two (2) years ago  
12 terminology, it's about a billion and a half dollars,  
13 right? It's -- it's a Wuskwatim investment.

14 MR. TERRY MILES: I believe that's  
15 what's in there for the current estimate, yeah.

16 MR. BOB PETERS: All right. And you're  
17 telling the Board that the business case to -- and I'm  
18 not talking about the -- the spillway at this point,  
19 but in terms of rebuilding the power house, that  
20 decision has not yet been made finally although it is  
21 in the planning purposes?

22 MR. TERRY MILES: From a resource  
23 perspective for planning we have to decide sort of what  
24 to do with resources from a long term planning  
25 perspective. And that's what we've done with the

1 Pointe du Bois plant right now in order to carry out  
2 our long-term planning, yeah.

3 MR. BOB PETERS: Without rebuilding  
4 Pointe du Bois, I suppose the dependable energy that  
5 comes from it is -- is exactly zero.

6 MR. TERRY MILES: If Pointe du Bois was  
7 not rebuilt or was not maintained beyond 2030/'31 then  
8 that would result in zero dependable energy, yes.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: I guess just a  
13 question while we're on the topic, Mr. Miles, and Mr.  
14 Warden might be perhaps able to assist too, if -- if a  
15 placeholder of -- of the magnitude that we've been  
16 talking about is in place for Pointe du Bois, is there  
17 also a placeholder amount for decommissioning the  
18 plant?

19

20 (BRIEF PAUSE)

21

22 MR. DAVID CORMIE: Mr. Peters, the --  
23 the spillway replacement project at Pointe du Bois is  
24 designed to maintain the water regime and to be a  
25 permanent facility. To decommission the powerhouse



1 would be a relatively minor undertaking. And so the --  
2 the -- it -- it's not -- it's not a significant amount  
3 of money.

4 MR. BOB PETERS: What you're telling  
5 the Board I think, Mr. Cormie, is that if the  
6 Corporation spends the \$500 million on the spillway to  
7 decommission the plant subsequently be -- for economic  
8 reasons wouldn't add significant cost to the  
9 Corporation.

10 MR. DAVID CORMIE: Yes.

11 MR. BOB PETERS: All right. Thank you.  
12 Let's keep moving. We look at Bipole 3 HVDC line, and  
13 in the test years there's nothing attributed to Bipole  
14 3 certainly because it's not in service. But out in  
15 the future the Board will note that there is some  
16 dependable energy attributed to a transmission line.

17 Can you explain that, Mr. Miles, to the  
18 Board?

19 MR. TERRY MILES: Yeah, I believe so.  
20 When we add the additional -- additional transmission  
21 line that's -- that's there we'll have essentially  
22 three (3) -- three (3) main pathways. There's a number  
23 of lines, but three (3) main pathways when we used to  
24 have two (2).

25 And the more that you load a

1 transmission line you tend to increase the losses along  
2 the transmission line. At higher -- there's higher --  
3 higher losses at higher loadings so by simply adding  
4 the line you add another path for the energy to flow  
5 through. So per line there's less energy flowing, in  
6 essence there is some loss savings. And this  
7 represents the -- the loss savings that are there.

8                   You'll see that the loss savings are  
9 decreased out in time. So as load grows in the system  
10 and additional energy is flowing on those lines and new  
11 stations actually come into place, there's additional  
12 energy flowing on those lines. So those loss savings  
13 diminish, if you will.

14                   MR. BOB PETERS: To the non-engineer at  
15 this side of the room it would be -- there's as not as  
16 much congestion on the two (2) lines, and it allows you  
17 to put the energy over three (3) lines, and that has  
18 some -- some energy gain in it. Less loss, I guess, is  
19 the words.

20                   MR. TERRY MILES: I -- I suppose that's  
21 a way to look at it, yeah. Okay.

22                   MR. BOB PETERS: No?

23                   MR. TERRY MILES: Sure, that's fine.

24                   MR. BOB PETERS: Let's turn to the  
25 thermal resources that you've talked to the Board about

1 already. Brandon unit 5 is the -- is the coal-fired  
2 unit. Have I got that right?

3 MR. TERRY MILES: That's correct.

4 MR. BOB PETERS: And how many units are  
5 there in the Brandon Generating Station?

6 MR. TERRY MILES: There's three (3).

7 MR. BOB PETERS: And are the other ones  
8 -- have they been converted to gas or have they been  
9 decommissioned?

10 MR. TERRY MILES: There's -- well,  
11 there's three (3) operating units at Brandon: the two  
12 (2) gas units and the coal -- the coal unit. Now,  
13 you're referring to at -- associated with the coal  
14 plant itself?

15 MR. BOB PETERS: I was at the time I  
16 asked my question, but I realize that the answer's  
17 going to change from what --

18 MR. TERRY MILES: No, there -- there  
19 were five (5) units there at one point. And four (4)  
20 units are not operating right now. Just one (1), the  
21 main unit.

22 MR. BOB PETERS: And it's that one (1)  
23 unit that's giving 811 gigawatt hours of dependable  
24 energy, if it's able to be used?

25 MR. TERRY MILES: That's correct.

1 MR. BOB PETERS: And the -- the other  
2 four (4) coal units, have they been decommissioned?

3 MR. DAVID CORMIE: Yes.

4 MR. TERRY MILES: Yes.

5 MR. BOB PETERS: When were they  
6 decommissioned, approximately?

7 MR. DAVID CORMIE: I don't have the  
8 exact dates, Mr. Peters. But it was several years ago.

9 MR. BOB PETERS: Okay. The Selkirk gas  
10 plant is -- is noted here as well as one (1) of the  
11 thermal resources. And these are the single-cycle  
12 combustion turbines?

13 MR. TERRY MILES: No, this is a -- the  
14 Selkirk plant --

15 MR. BOB PETERS: I'm sorry.

16 MR. TERRY MILES: --- is a -- is a gas  
17 boiler, so it's like steam -- steam-generated energy.  
18 So like, Brandon unit 5 was a coal-fired boiler, this  
19 is a gas-fired boiler, similar technology.

20 MR. BOB PETERS: And the one I was  
21 thinking of was the Brandon units 6 and 7, those are  
22 the new single-cycle gas turbines?

23 MR. TERRY MILES: That's correct.

24 MR. BOB PETERS: And so there's the  
25 approximate 4,200 gigawatt hours of dependable thermal

1 resources that Manitoba has?

2 MR. TERRY MILES: That's correct.

3 MR. BOB PETERS: And even if Manitoba  
4 Hydro is not able to run the coal turbine -- sorry,  
5 the -- the coal-generating station at Brandon, it can  
6 still be included as a dependable resource?

7 MR. TERRY MILES: That's correct. It's  
8 still permitted to operate under emergency conditions,  
9 which I guess an extreme drought or drought is that --  
10 falls under that category, or we assume that it falls  
11 under that category.

12 MR. RAYMOND LAFOND: But not after  
13 2020, from the chart?

14 MR. TERRY MILES: That's correct.  
15 Yeah, we're assuming that we're not relying on Brandon  
16 unit 5 generation as a coal plant after 2019/'20.

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: I did have some  
20 questions later on that I'll -- I'll slip in here in  
21 response to Board member Lafond's question to you. The  
22 legislation does not provide a sunset -- this might be  
23 a bit unfair, unless Ms. Ramage is going to -- or is  
24 Ms. Fernandes...?

25 I -- I just -- I -- I didn't want to --

1 I don't want you to interpret the legislation, but I  
2 want you to give me your understanding that -- and  
3 confirm that there's no mandatory sunset clause for the  
4 Brandon coal plant in the legislation. Is that your  
5 understanding? And if you don't have an understanding  
6 on that, we can -- we can defer that question.

7

8

(BRIEF PAUSE)

9

10 MR. TERRY MILES: You know, at this  
11 time I can't. I can't answer that.

12 MR. BOB PETERS: All right. The -- the  
13 point I want to get at for Board member Lafond, to  
14 respond to his last question, is that if the  
15 legislation doesn't require it to be out of service on  
16 a specific time horizon, I'd like to explore with you  
17 why Manitoba Hydro is taking it out of service, if  
18 that's in fact what's happening.

19

20

(BRIEF PAUSE)

21

22 MR. TERRY MILES: I -- I can add to  
23 that that, I guess, in general while the -- the  
24 provincial legislation doesn't necessarily require that  
25 Brandon not operate beyond that, there is a Federal

1 coal legislation that's recently come out that  
2 significantly restricts the operation of Brandon unit 5  
3 as is, beyond 2020.

4 MR. BOB PETERS: All right. We'll --  
5 we'll look at that further, and thank you. In terms of  
6 the wind production, Manitoba Hydro has already told  
7 the Board that it has some contracts with two (2) wind  
8 farms in Manitoba?

9 MR. TERRY MILES: That's correct.

10 MR. BOB PETERS: And the power resource  
11 plan shows the committed wind installed is about eight  
12 hundred and nineteen (819) hours of dependable energy?

13 MR. TERRY MILES: That's correct.

14 MR. BOB PETERS: The -- are there...

15

16 (BRIEF PAUSE)

17

18 MR. BOB PETERS: Just having a quick  
19 peek, Mr. Miles, at your updated power resource plan  
20 for 2012, the -- the dependable energy from the wind  
21 appears to have been downgraded?

22 MR. TERRY MILES: It hasn't been  
23 downgraded. It's just how it's considered in the supply  
24 and demand balance. Once the wind, as a southern  
25 system resource, comes on line, the losses associated

1 with it get factored into the load forecast, so that  
2 there's an offsetting load forecast versus supply. So,  
3 it's still the same net -- if you look at that, really,  
4 the net dependable energy after the -- after losses is  
5 -- is what's in the 2012. The -- I think it's 777  
6 gigawatt hours.

7                   So, once the new -- in -- in the numbers  
8 that were in 2011/'12, there was still wind farms that  
9 weren't in service, they came in service this past --  
10 this past year. And this additional capability that's  
11 there now, in the South, it's an accounting of the  
12 energies. When it's a new resource and we're planning  
13 for it, we -- in the power resource plan, to compare  
14 the supply versus demand, we move everything to the  
15 North, in essence. So it's similar capabilities, or  
16 has similar comparison to our -- our hydro generation.  
17 And then we can add up the -- the supply and demand of  
18 -- associated with that.

19                   When -- then a resource comes online,  
20 like the wind in the Southern Manitoba, then we don't  
21 have to factor those -- those in anymore; the load  
22 forecast takes it into account. So that's -- that's  
23 what you're seeing in the difference. So there's no  
24 net change in the wind farms; there's no net change in  
25 the production. It's an accounting of the dependable



1 energy that's there. So you would see a subsequent  
2 reduction in demand associated with that now.

3 MR. BOB PETERS: Does Manitoba Hydro,  
4 by depicting it as it does, indicate that there's no  
5 further wind resources envisioned in the planning  
6 horizon?

7 MR. TERRY MILES: In our current plans,  
8 there is no additional wind. That's correct.

9 MR. BOB PETERS: When it comes to  
10 demand-side management as a dependable resource, how  
11 does Manitoba Hydro quantify that?

12 MR. TERRY MILES: I'm not sure I  
13 understand the question, Mr. Peters.

14 MR. BOB PETERS: Manitoba Hydro  
15 considers DSM as a dependable resource?

16 MR. TERRY MILES: We do, yes.

17 MR. BOB PETERS: And how do you  
18 quantify the amount that you show in the -- in the 2012  
19 test year, '12/'13 test year?

20 MR. TERRY MILES: Well, those values  
21 come from the DSM program.

22 MR. BOB PETERS: All right. And we did  
23 talk with Ms. Morrison about -- about that yesterday,  
24 so....

25 MR. TERRY MILES: Yes.

1                   MR. BOB PETERS:    In terms of the  
2 imports, can you explain to the Board what contracted  
3 energy imports are?

4                   MR. TERRY MILES:    I will -- I will do  
5 my best, and then maybe Mr. Cormie can -- can chime in  
6 if I'm -- if I'm not going down the right road.  But  
7 from my understanding, the -- the contracted energy  
8 imports are those imports associated with contracts  
9 with customers that we -- there's -- they have a  
10 commitment for those to be delivered to us, if we  
11 require them or ask for them.

12                  MR. BOB PETERS:    I take from that  
13 answer, sir, that these are not the diversity contracts  
14 that we spoke of earlier?

15                  MR. TERRY MILES:    I believe some of  
16 them could be, yes.

17                  MR. BOB PETERS:    So, in a -- in  
18 addition, are you able to tell the Board how much of  
19 this is diversity and how much of this is energy that  
20 is available for purchase?

21                  MR. DAVID CORMIE:    Mr. Peters, under  
22 the diversity contracts that we have now in place with  
23 two (2) companies, the diversity portion represents a  
24 20 percent of the time we sell -- we're obligated to  
25 sell them in the summer and they return the 20 percent

1 to us in the winter time. But then there's adverse  
2 water clauses in those contracts that allow us the  
3 right to take additional energy beyond the 20 percent  
4 of the time. And so it's the combination of diversity  
5 energy and adverse water that is showing up under the  
6 contract, sir.

7

8

(BRIEF PAUSE)

9

10 MR. BOB PETERS: Is this a relatively  
11 new feature of the power resource plan, or has this  
12 been a long-standing feature?

13 MR. DAVID CORMIE: No, they've always  
14 been in there.

15 MR. BOB PETERS: And do they always  
16 relate to both diversity and the ability to -- to  
17 purchase over and above the diversity?

18 MR. DAVID CORMIE: Yes. Whenever our  
19 sales contracts provide for return energy, either as --  
20 as adverse water or others, those contract provisions  
21 are reflected in -- in the supply.

22 MR. BOB PETERS: Are you able to -- to  
23 provide the Board with quantification of how much of  
24 that is the diversity agreements with the two (2)  
25 counterparties and how much of that is additional

1 related to the adverse water, Mr. Cormie?

2 MR. DAVID CORMIE: Yes.

3 MR. BOB PETERS: You'll undertake to do  
4 that?

5 MR. DAVID CORMIE: Yes, I will.

6 MR. BOB PETERS: Okay. I appreciate  
7 that.

8

9 --- UNDERTAKING NO. 15: Manitoba Hydro to provide  
10 the Board with  
11 quantification of how much  
12 return energy provided for  
13 in sales contracts is  
14 related to the diversity  
15 agreements with the two (2)  
16 counterparties, and how  
17 much of that is additional  
18 related to the adverse  
19 water

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: And then in terms of  
23 proposed energy imports, this line item in the test  
24 years is empty and it doesn't really appear -- I could  
25 check on the -- the latest one. It seems to start

1 appearing earlier than on the -- page 69 in the book of  
2 documents, Mr. Miles.

3 Can you tell the Board what's happening  
4 with proposed energy imports?

5

6 (BRIEF PAUSE)

7

8 MR. TERRY MILES: By "earlier" -- so  
9 we're still -- now just to confirm here, we're still  
10 looking at the '11/'12 power resource plan compared to  
11 now the -- the 2012/'13 power resource plan?

12 MR. BOB PETERS: Yes. In the --

13 MR. TERRY MILES: Okay.

14 MR. BOB PETERS: -- 2011 power resource  
15 plan there's no purchased export im -- sorry, purchased  
16 energy imports, but -- until it gets way out until  
17 2026. But on the latest one that was filed this week  
18 there appears to be some proposed -- proposed imports  
19 starting as early as '15.

20

21 (BRIEF PAUSE)

22

23 MR. TERRY MILES: Yeah, I believe those  
24 are related to a -- the extension of the diversity  
25 contract that we have -- have... Yeah, with Great

1 River Energy. So in the 2011/'12 power resource plan  
2 that -- those discussions weren't at a point where we  
3 would include those in. They are a point in the  
4 discussions now where -- where it's appropriate to  
5 include them in the plan, and that's what the  
6 difference is between '11/'12 and '12/'13.

7 MR. BOB PETERS: You're telling the  
8 Board that Mr. Cormie was busy between when the one  
9 plan was prepared and when the other one was prepared?

10 MR. TERRY MILES: I think he'd say he's  
11 always busy.

12 MR. BOB PETERS: Yeah, but he went out  
13 and extended an arrangement he had with one (1) of your  
14 counterparties --

15 MR. TERRY MILES: That's correct.

16 MR. BOB PETERS: -- on the diversity  
17 side? All right. And can you indicate to the Board --  
18 I may have that coming up in the book of documents,  
19 but...

20

21 (BRIEF PAUSE)

22

23 MR. BOB PETERS: Is that the extension  
24 of the 150 megawatt arrangement? If you're able to  
25 tell the Board.

1 MR. DAVID CORMIE: Mr. Peters, just to  
2 clarify, the -- the additional import energy that's  
3 available in -- in '25/'26, we are assuming that the  
4 500 kV line will be uprated -- upgraded at that time  
5 and that we will now have more import capability and  
6 we'll have an energy supply agreement in place that  
7 will allow us to bring additional energy north in a --  
8 in a drought period.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: And the earlier  
13 indication of the 781 gigawatt hours of dependable  
14 energy that's coming in, in 2015 by proposed energy  
15 imports, Mr. Cormie and Mr. Miles, that's a result of  
16 an extension of the Great River Energy diversity  
17 agreement?

18 MR. DAVID CORMIE: Yes.

19 MR. BOB PETERS: And is the size of  
20 that 150 megawatts?

21 MR. DAVID CORMIE: The existing  
22 arrangement with Great River is a hundred and fifty  
23 (150). We are increasing it to two hundred (200) and  
24 extending it from 2015 to 2025 or thereabouts.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Where would the --  
4 where on the power resource plan would the existing  
5 arrangement with Great River Energy be shown, Mr.  
6 Miles?

7 MR. TERRY MILES: That would be in the  
8 contract at energy imports.

9 MR. BOB PETERS: Okay, thank you. So  
10 when we come to -- well, the last item was the non-  
11 contracted energy imports, so can you -- although  
12 they're not shown on page 69 as occurring in the test  
13 years, can you explain to the Board what -- what those  
14 are anticipated to be?

15 MR. TERRY MILES: Yeah. Those are --  
16 we -- we have firm import capability on our -- on the  
17 transmission system from -- from the US and our  
18 counterparties. And for those portions of the -- of  
19 the transmission line -- I guess of our transmission  
20 import capability that we currently do not have  
21 contracts for, that aren't -- or that aren't  
22 contracted, we believe that we can -- or we assume  
23 anyways that we can import additional energy at those  
24 times in the -- particular in the off-peak.

25 So there's enough capacity in the -- in



1 the -- the marketplace and there's enough firm  
2 transmission capacity, so there's enough secured  
3 transmission between the market and Manitoba Hydro that  
4 we can import additional energy in the off-peak. And  
5 we include that as dependable -- dependable energy in  
6 our system.

7 MR. BOB PETERS: And this is in  
8 addition to what you currently are proposing under  
9 contracted energy import arrangements, two (2) lines  
10 above that, on the power resource plan?

11 MR. TERRY MILES: That's correct.

12 MR. BOB PETERS: And as a result, this  
13 -- this new capability coincides with -- with the new  
14 arrangement with the counterparty that will provide  
15 access to transmission that you currently don't have?

16 MR. TERRY MILES: No, I think that  
17 would be over existing transmission that is there.  
18 That --

19 MR. BOB PETERS: I think we're saying  
20 the same thing so maybe I -- I mis-asked the question.  
21 But as a result of -- as a result of a new export  
22 arrangement or renewal of an export arrangement with  
23 different terms, Manitoba Hydro expects to have  
24 additional firm import capability on US transmission  
25 lines?

1 MR. DAVID CORMIE: Mr. Peters, can I  
2 ask you to look at the step down in contracted energy  
3 imports that occurs in 2015/'16? You'll notice it  
4 drops from twenty-seven hundred (2,700) to sixteen  
5 thirty-nine (1,639).

6 MR. BOB PETERS: Yes, sir.

7 MR. DAVID CORMIE: And you'll -- you'll  
8 see that -- and that coincides with the expiry of the  
9 existing agreement we have with NSP, the existing five  
10 hundred (500). On the -- the new sale we've acquired  
11 the northbound rights to the transmission. And we have  
12 -- we have firm transmission under that contract so  
13 we're not -- we don't need to buy the energy from NSP  
14 anymore as -- as we do under the existing contract.

15 And so we just put the offset in a -- in  
16 a lower line. The -- the capability of the line is the  
17 same. And we -- and we don't have a contract for it,  
18 and we don't need a contract because we have -- we now  
19 own the rights to the northbound transmission. And we  
20 take -- we're taking service as if we were a load in  
21 MISO and so we -- we consider that to be a firm supply.

22

23 So it -- the -- the total is essentially  
24 the same. If you add the eleven hundred (1,100) to the  
25 sixteen-thirty-nine (1,639) you get around twenty-seven

1 hundred (2,700) which is pretty well the capability  
2 that we had before. So we're just moving it from a --  
3 from a contract line where we have a contract with a  
4 counterparty to a -- to a line where it's coming from  
5 the market but it's -- but the market rules are such  
6 that we can consider it as a firm supply.

7 MR. BOB PETERS: Thank you for that  
8 explanation. And what you're telling the Board then is  
9 also that Manitoba Hydro can now buy from the market as  
10 opposed to a counterparty to bring some energy  
11 northbound?

12 MR. DAVID CORMIE: Yes. We've always  
13 been able to buy from the market. What's happening,  
14 though, in 2015, we're buying it on firm transmission  
15 that we -- that we control. And -- and that trans --  
16 that MISO treats our Manitoba load as if -- with the  
17 same firmness as it would treat its load in the United  
18 States. And so we consider that to be a firm supply  
19 now, and we don't need to have a cou -- a counterparty,  
20 or a -- a utility to back it.

21 MR. BOB PETERS: And that would be a  
22 firm supply during off-peak hours?

23 MR. DAVID CORMIE: We're assuming it's  
24 -- it's just in the off-peak hours.

25 MR. BOB PETERS: Okay. So our total

1 power resources for dependable energy, Mr. Miles, in  
2 the 2012/'13 test year, looking at page 69 in Tab 8 of  
3 the book of documents, comes out to 30,200 gigawatt  
4 hours in that year, correct?

5 MR. TERRY MILES: That's correct.

6 MR. BOB PETERS: And then the bottom  
7 part of the chart, if we can go there --

8 MR. RAYMOND LAFOND: Before we go to  
9 the bottom part of the chart --

10 MR. BOB PETERS: Yes.

11 MR. RAYMOND LAFOND: -- on the -- on  
12 the above portion. I have a few questions. The three  
13 hundred and forty (340) figure, in terms of hydro  
14 adjustments, which are energy exchanges, is that an  
15 ideal figure or is that limited by transmission lines  
16 or -- in other words, is it the ideal figure or the  
17 ideal amount for Manitoba? Or could we do -- if we  
18 could we would look for a -- an increased amount?

19 MR. DAVID CORMIE: As we increase -- if  
20 we were to increase the diversity arrangements we have  
21 with the United States the efficiencies would go up.  
22 It's more efficient for Manitoba Hydro to produce  
23 electricity hydraulically in the summer than in the  
24 winter. So this -- the -- the system is -- it can  
25 produce more energy when we have diversity arrangements

1 in place. And so this is one (1) of the -- the  
2 benefits of -- of those.

3 MR. RAYMOND LAFOND: Is that the ideal  
4 amount for us, or --

5 MR. DAVID CORMIE: No, that's just the  
6 amount that is available under the contracts. And we  
7 continue to explore diversity arrangements with other  
8 companies, and this is kind of a second-order benefit  
9 from those.

10 MR. RAYMOND LAFOND: So, ideally, that  
11 number could be increased to about how much?

12 MR. BOB PETERS: At the risk of  
13 interrupting the Board member, if we could turn to the  
14 2012 plan, I just noted that, Mr. Miles, that that  
15 very number that Board member Lafond is asking you  
16 about is increasing going forward. And maybe you can  
17 explain that in your response to his last question to  
18 you.

19

20 (BRIEF PAUSE)

21

22 MR. RAYMOND LAFOND: Thank you, because  
23 I was -- my next question was going to be why was it  
24 decreasing to two forty (240)? Now, it's rather  
25 increasing to eight forty-four (844).

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: Mr. Lafond, it -- it  
4 -- one (1) of the options we have for serving our  
5 export contracts is to financially settle under adverse  
6 water conditions. And so if Manitoba Hydro is not  
7 required to make physical delivery in -- in the winter  
8 time, we can just buy the energy we need in the market  
9 and -- and provide that to the customer, rather than  
10 having to have it go through our hydraulic generating  
11 stations.

12 That number goes from two forty (240) up  
13 to eight forty-four (844) because of that ability to  
14 serve the sale obligation from the market under drought  
15 conditions. And so we're just reflecting, in the  
16 supply and demand table, the effect of having that  
17 option to financially settle under adverse water  
18 conditions.

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: What you're saying, if  
22 I understand, Mr. Cormie, is that rather than deliver  
23 the electrons from Manitoba Hydro's resources, Manitoba  
24 Hydro will get out its chequebook and buy the energy  
25 for the counterparty in a different jurisdiction?

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: Yes, and in -- in  
4 addition it's the -- the new contracts also allow us to  
5 buy under adverse water all winter long, 100 percent of  
6 the hours. And so there's -- it's -- it's -- again  
7 it's reflecting the -- the new terms and conditions we  
8 have under adverse water conditions under the sea --  
9 under the new seasonal diversity agreement.

10 MR. BOB PETERS: And so you're telling  
11 the Board that there's a benefit to Manitoba Hydro's  
12 dependable energy because what you -- what you have to  
13 deliver on an export contract can be settled  
14 financially and you can keep those hydraulic resources  
15 for Manitobans.

16 MR. DAVID CORMIE: Or we can -- or we  
17 can -- we can physically buy the power and bring it  
18 north in the winter to serve our load. So again,  
19 buying the power doesn't involve the inefficiency of  
20 the hydraulic system in the wintertime. It -- it's  
21 purchased. It's -- and it's -- it comes into Southern  
22 Manitoba and it's used right there.

23 We're not having to operate the  
24 hydraulic system in order to serve the sale. So the --  
25 the new terms and conditions under the adverse water

1 conditions, both under the diversity and under the --  
2 the sale agreement, provide system benefits to Manitoba  
3 Hydro under adverse water conditions.

4 MR. BOB PETERS: Not to add a layer of  
5 complexity, Mr. Cormie, but there would be water  
6 rentals -- the arrangement that you're proposing in  
7 terms of buying it and bringing it north would be more  
8 expensive than the water rentals that would be  
9 available in Manitoba?

10

11 (BRIEF PAUSE)

12

13 MR. DAVID CORMIE: We're -- we're not -  
14 - I guess the additional capability is the capability  
15 associated with the contracts, and -- and, you know,  
16 the -- there is -- the water rentals will show up in  
17 that. It'll show up in the IFF. I'm -- I'm not sure  
18 whether that -- if I understand how to answer that  
19 question, Mr. Peters.

20

21 (BRIEF PAUSE)

22

23 MR. RAYMOND LAFOND: My next question  
24 was because we're flipping between the 2011 base load  
25 forecast and -- and the 2012 base load forecast, when I



1 look at the 2000 -- base load forecast, which we've  
2 just received about one-quarter (1/4) down the page,  
3 Keeyask disappears from the 2012 base load forecast.

4 Am I reading this right?

5 MR. TERRY MILES: I'm not sure which  
6 copy you're looking at.

7 MR. BOB PETERS: Mr. -- Board member  
8 Lafond, I'm wondering if you're on page 33 of the new  
9 power resource plan?

10 MR. RAYMOND LAFOND: No, I'm on page  
11 41.

12 MR. BOB PETERS: Because there was an  
13 alternative scenario presented in the document as well,  
14 and I -- it -- it may be, and I'll let the witnesses  
15 answer, as to whether you were looking at an alternate  
16 scenario.

17 MR. TERRY MILES: Yeah. If you're  
18 looking at page 41 that's an alternate scenario, yes.  
19 The recommended plan that we put forward has...

20 MR. RAYMOND LAFOND: Which page is it?

21 MR. TERRY MILES: The page that we  
22 should be look -- the page you should be looking at is  
23 page 33.

24 MR. RAYMOND LAFOND: Thank you.

25 MR. TERRY MILES: Yeah.

1 MR. RAYMOND LAFOND: Thank you. That  
2 helps.

3 MR. TERRY MILES: You're welcome.

4 MR. RAYMOND LAFOND: And takes care of  
5 my following question, in terms of the thermal -- new  
6 thermal plants.

7 MR. TERRY MILES: Okay. Thanks.

8

9 CONTINUED BY MR. BOB PETERS:

10 MR. BOB PETERS: Mr. Cormie, I'm not  
11 sure how much further we'll go on this at this time,  
12 but when -- when you look to quantify the hydro  
13 adjustment because of the ability to purchase in the  
14 market, that was also something Manitoba Hydro could  
15 have done, and actually did back in 2003/'04?

16

17 (BRIEF PAUSE)

18

19 MR. DAVID CORMIE: Yes. It's a -- it's  
20 something that -- that shows up -- we recognize the  
21 benefit of -- of not having to operate the power system  
22 to serve the sale. You can -- you can do it on the  
23 side and find a -- another source of power. And I  
24 don't think I ever considered it a hydro adjustment,  
25 although Mr. Gordon might have thought it was an

1 adjustment.

2 But that -- the -- that's right. The --  
3 it's more expensive for us to supply firm power in the  
4 winter than in the summertime. And in -- in our load  
5 shape, whether it's created from the Manitoba load or  
6 the export customers, to the extent that we have winter  
7 load, we have to -- that's more expensive to serve than  
8 summer load because of the in -- because of the ice  
9 effects of the -- on the hydro system.

10 And if we had of concentrated all the  
11 Manitoba demand and export demand in the summer, we  
12 would -- we would -- and not have to serve anything in  
13 the winter, we'd be financially way better off. But  
14 that's not how people use electricity.

15 MR. BOB PETERS: And what -- what the  
16 document, whether we're on page 33 of the 2012 power  
17 resource plan or page 69 of Board counsel's book of  
18 documents at Tab 8, what you don't have layered on top  
19 of this dependable resource plan are the very things  
20 that you mentioned Mr. Warden would be concerned about,  
21 would be the cost of it?

22 MR. DAVID CORMIE: Yes, the -- this  
23 power resource plan then becomes an input into the IFF  
24 and -- and we do all the financial calculations of, you  
25 know, what's the cost of serving the sales and what are

1 the revenues associated. Those are -- those are done  
2 outside the -- the supply and demand calculations.

3 MR. BOB PETERS: All right. Maybe I  
4 can continue with the bottom part of this chart before  
5 I seek a morning recess, sir. Under the 2012/'13,  
6 again page 69 at Tab 8 of Board counsel's book of  
7 documents, PUB Exhibit 14, the 2011 base load forecast  
8 of 25,173 gigawatt hours represents the load forecast  
9 that Ms. Morrison would have come up with.

10 Would that be correct?

11 MR. TERRY MILES: That's correct, yes.

12 MR. BOB PETERS: And that contains, Mr.  
13 Miles, both the residential customer, the commercial  
14 customers, and the industrial customers of Manitoba?

15 MR. TERRY MILES: That's my  
16 understanding, yes.

17 MR. BOB PETERS: And the non-committed  
18 construction power -- I'm not sure why this shows on  
19 the dependable resources, other than Manitoba Hydro  
20 itself is going to be using more station power than  
21 previously thought?

22 MR. TERRY MILES: Yeah, I think that's  
23 -- when we start building a facility -- I believe  
24 that's associated with Keeyask, I think -- as we go  
25 forward, we do need construction power and other

1 aspects. There might be -- I believe that's -- that's  
2 what it is.

3 But in essence, when a -- when we start  
4 building a resource, it actually takes power at the --  
5 at the site to -- to build and that's what this  
6 represents. So that's taken off of the -- of the load,  
7 yes.

8 MR. BOB PETERS: When we keep -- I'm  
9 sorry?

10 MR. TERRY MILES: It's added to the  
11 load, I guess, yeah.

12 MR. BOB PETERS: Yeah, it's -- it's an  
13 added consumption in Manitoba?

14 MR. TERRY MILES: That's correct.

15 MR. BOB PETERS: The Board will then  
16 see under exports, the current exports, and these are  
17 what we will call and discuss later today as the firm  
18 exports out of dependable energy.

19 MR. TERRY MILES: That's correct.

20 MR. BOB PETERS: And if I have it  
21 right, this -- these exports would be the highest-  
22 priced exports that Manitoba Hydro would on average  
23 expect to have?

24 MR. DAVID CORMIE: I think -- I think  
25 you're right. But really, Mr. Peters, they're -- they

1 are a fixed price. We know -- we know what they are,  
2 and -- and they are very attractive prices, yes.

3 MR. BOB PETERS: Mr. Cormie, would it  
4 not be correct for the Board to understand that the  
5 most valuable product that you can go on -- on the road  
6 to market would be your firm dependable export  
7 contracts?

8 MR. DAVID CORMIE: Yes, I guess I was  
9 just saying that -- that the portion of the contract  
10 that involves the dependable energy has that high  
11 price, but there are also other energy obligations that  
12 -- that may not have that same price in there. Like,  
13 if -- if there's a market price component to the -- it  
14 may not all be the highest price.

15 MR. BOB PETERS: Okay. That's a fair  
16 qualification, sir. You're telling the Board that the  
17 -- while it's dependable energy, the pricing mechanisms  
18 for it may vary under contractual arrangements?

19 MR. DAVID CORMIE: Yes.

20 MR. BOB PETERS: All right. And does  
21 this current export line item, Mr. Cormie and Mr.  
22 Miles, also include the diversity arrangements that  
23 you've spoken to the Board about in the last half hour?

24 MR. TERRY MILES: It does. It would  
25 include contracted. It's -- it's exports for which we

1 have contracts.

2 MR. BOB PETERS: And so the  
3 reciprocating portion of it, in terms of when the  
4 counterparty provides it back to Manitoba Hydro, would  
5 be under the contracted energy imports line found in  
6 the -- the top half of the chart?

7 MR. TERRY MILES: If that was in the  
8 contract, yes.

9 MR. BOB PETERS: And -- with di -- Mr.  
10 Miles, is -- do you have -- does Manitoba Hydro have  
11 any arrangements where you would provide diversity  
12 arrangements to a counterparty, but nothing in return?

13 MR. TERRY MILES: I -- I think -- I  
14 think the intent of the diversity is to have a return,  
15 otherwise it's just a sale.

16 MR. BOB PETERS: Right. And so you  
17 said, If it's in the contract it would be shown here.  
18 But wouldn't the contract always show that you are --  
19 you're agreeing to export on a diversity arrangement  
20 and also you will import on a diversity arrangement?

21 MR. TERRY MILES: I -- I understand  
22 that that would depend on the terms of the contract.  
23 And that some contracts don't necessarily require a --  
24 an import. They could just be a sale contract without  
25 a import with it, I believe. Unless Mr. Cormie would

1 like to correct that.

2 MR. DAVID CORMIE: Yeah, the -- the  
3 contracts provide the buyer the right to buy the power.  
4 And so the seller has the obligation. But there's no -  
5 - there may not be an obligation under a diversity  
6 contract for the buyer to buy. So we have to be  
7 prepared to supply it. And -- and so to the extent  
8 that -- that there's that optionality there, we have to  
9 reflect the worst-case scenario.

10 Normally, we would -- we sell the energy  
11 under the diversities in the summer time, and rarely do  
12 we buy it back, because we don't need it. But under  
13 this table of dependable resources, we have the right  
14 to buy it back and so we count on it being there. So  
15 there's a difference between what are obligations and  
16 what -- what we may do. And that will depend on the  
17 water conditions at the time and whether we need it and  
18 whether it's financially attractive.

19 MR. BOB PETERS: When Manitoba Hydro  
20 has a diversity obligation, Mr. Cormie, to -- to  
21 provide -- I'm going to make this up -- energy to  
22 Minneapolis in the heat of the summer, you're telling  
23 the Board that you -- you have to have that available?

24 MR. DAVID CORMIE: Yes.

25 MR. BOB PETERS: Is -- does that come



1 out of dependable resources?

2 MR. DAVID CORMIE: Yes.

3 MR. BOB PETERS: And let's suppose that  
4 Minneapolis doesn't need the energy because they have a  
5 -- a cooler summer than anticipated. You still have to  
6 plan that you would have to deliver it, but they don't  
7 have to buy it from you?

8 MR. DAVID CORMIE: That can be the  
9 case.

10 MR. BOB PETERS: And in that  
11 circumstance, does Manitoba Hydro get notice of that at  
12 a certain point in time so you can see if you can sell  
13 it elsewhere?

14 MR. DAVID CORMIE: Oh, yes. There are  
15 notice provisions on a seasonal basis and a day-ahead  
16 basis. If there -- if the customer doesn't schedule it  
17 the day -- the day ahead, then he loses the right to  
18 buy it. And we loo -- and -- and then we're relieved  
19 of our obligation to -- to supply it.

20 They can't -- having the day-ahead said,  
21 We don't need it, they can't show up in -- with five  
22 (5) minutes notice and say, By the way, we want our  
23 power now. They -- there are scheduling obligations in  
24 the contracts.

25 MR. RAYMOND LAFOND: These -- these

1 exchange agreements, if -- I mean, it entitles you to  
2 purchase or to have to deliver. But if not used  
3 because the water flows are higher than expected, et  
4 cetera, does it accumulate as sort of a receivable for  
5 the future year? In other words, you can go and get it  
6 in a future year?

7 MR. DAVID CORMIE: No.

8

9 (BRIEF PAUSE)

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Mr. Cormie, if you're  
13 able to respond to this, these diversity agreements  
14 that Board member Lafond just asked you about, they --  
15 this is the energy portion, the electrons that we're  
16 talking about that there's the obligation to provide if  
17 -- and -- and the buyer can decide whether to chose to  
18 -- to exercise that option. Have I got that right?

19 MR. DAVID CORMIE: Yes.

20 MR. BOB PETERS: And to serve that  
21 load, Manitoba Hydro has to dedicate some of its  
22 capacity to serve that load?

23 MR. DAVID CORMIE: Yes.

24 MR. BOB PETERS: Would it be correct to  
25 say that Manitoba Hydro just charges an energy price

1 for these diversity agreements, but does not charge a  
2 capacity component to those contracts?

3 MR. DAVID CORMIE: Yes, the capacity is  
4 exchanged at no charge. It wouldn't make sense for us  
5 to charge and then have them charge us the same thing  
6 in the winter. So we just -- it -- we refer it as a  
7 "capacity swap" with energy at -- if you want energy  
8 under the capacity then you pay for it at the -- at the  
9 contracted price at the time.

10 MR. BOB PETERS: And the contracted  
11 price at the time, I mean, it could range from setting  
12 a fixed price or an agreement as to a market -- pick a  
13 market pri -- pick the market price or perhaps some  
14 variation on the market price?

15 MR. DAVID CORMIE: Yes. We've had  
16 diversity agreements with all of those types of pricing  
17 in them.

18 MR. BOB PETERS: Mr. Cormie, when we  
19 take the baseline load forecast that Mr. Miles -- that  
20 Ms. Morrison would have given you, together with the  
21 current exports, we come up with a -- a dependable  
22 requirement of about 28,500 gigawatt hours.

23 You'd agree with that, subject to my  
24 rounding?

25 MR. DAVID CORMIE: That looks right for

1 '12/'13, yes.

2 MR. BOB PETERS: Yes. And I'm on page  
3 69 of Tab 8 still, Mr. Cormie, so thank you. And if  
4 that's the case then we look up to the total power  
5 resource line and we see the thirty thousand, two  
6 hundred (30,200) number of total power resources, so  
7 anything in addition is still available as system  
8 surplus that could be exported?

9 MR. DAVID CORMIE: No, that's just the  
10 surplus. It -- the exportable surplus is shown several  
11 lines down.

12 MR. BOB PETERS: Okay. Let's quickly  
13 get there if we can. The adverse water adjustment is a  
14 negative adjustment. Can you explain how that works,  
15 Mr. Miles?

16 MR. TERRY MILES: I'll do my best.  
17 Under the contracts, as I think Mr. Cormie required,  
18 there's adverse water clauses which, under low water  
19 conditions, we are not obligated to deliver the -- or  
20 we can decide -- or I guess we're not obligated under  
21 the contract to deliver a certain portion of the  
22 energy. And in this case it will be 91 gigawatt hours.

23 So that we subtract off the demand under  
24 this case, because under the dependable case we deem  
25 that to be an adverse water condition and that would

1 allow us to -- to do that. However, we aren't able to  
2 be -- because we're basically not serving that contract  
3 under that adverse water case, we can't take that power  
4 and then sell it to somebody else, that's not the point  
5 of that.

6                   So you'll see -- a little bit further  
7 down you'll see that that amount gets added back --  
8 back in again to net out so that that -- that energy  
9 doesn't end up back in our -- or back in the basket for  
10 -- for Mr. Cormie to sell again.

11                   MR. BOB PETERS: And I got a little bit  
12 ahead of Mr. Cormie. The -- the next adjustment then -  
13 - and we have a system surplus item that's just simply  
14 a mathematical subtraction of your total demand from  
15 your total power resources?

16                   MR. TERRY MILES: That's correct.

17                   MR. BOB PETERS: And then against that  
18 you've already explained that you have to take out  
19 again or -- or offset the -- the adverse water  
20 provision?

21                   MR. TERRY MILES: That's correct.

22                   MR. BOB PETERS: And then what we  
23 forgot -- I forgot to mention was that because Brandon  
24 coal unit 5 is under provincial regulation to be used  
25 only in a case of emergencies, it's not available to be

1 exported. You have to then subtract the Brandon coal  
2 from your surplus to arrive at an exportable surplus?

3 MR. TERRY MILES: That's correct.

4 MR. BOB PETERS: All right. All right.

5 I hope that's not too painful. At this time, Mr.

6 Chairman, I would suggest, subject to any questions of  
7 the Board, we could take a morning recess?

8 THE CHAIRPERSON: Okay. Let's do that  
9 and back in this room at eleven o'clock. Thank you.

10

11 --- Upon recessing at 10:49 a.m.

12 --- Upon resuming at 11:03 a.m.

13

14 THE CHAIRPERSON: Just a question that  
15 I had, and I guess this is -- Mr. Cormie is probably  
16 the most appropriate one to talk about this: In -- in  
17 the document we've just considered, I'm trying to  
18 assess the risks -- the risks would be -- the more  
19 significant risk that you see with respect to that  
20 particular document over the next couple of yea -- of  
21 years being considered for this application, the -- the  
22 next year and maybe a year after that would be -- would  
23 be what, Bipole? Is that -- is that -- Bipole 1 and 2,  
24 is that the biggest risk that -- if one (1) of those  
25 lines goes down that could upset the apple cart from --

1 from the perspective of that power resource plan.

2 MR. DAVID CORMIE: I -- I think -- I  
3 think that risk is there, and I think the more likely  
4 risk though is the risk of drought. I know next year -  
5 - you know, we do have favourable snow conditions but  
6 if it doesn't rain next spring we could be faced with a  
7 change in -- in the water supply up to 15 million  
8 megawatt hours. That's the range of -- of inflow  
9 conditions that can occur next year.

10 So I -- I think the -- the risk of  
11 drought is -- is a constant risk, and it's probably  
12 more likely than the risk of -- of a Bipole loss.  
13 However, the consequences of the -- of the loss in the  
14 DC to the Man -- to Manitobans would be way more  
15 drastic than the financial consequences of the drought.

16 THE CHAIRPERSON: I guess the -- what  
17 I've lost along the way is the definition of  
18 "dependable." I guess I was under the impression  
19 dependable was based on the sort of average flow  
20 conditions in -- could you -- could you reconfirm that  
21 to me, please, so that I understand what -- how we  
22 define "dependable"?

23 MR. DAVID CORMIE: The -- "dependable"  
24 is the capability of the system to serve the firm load.  
25 And -- and what Mr. Miles is trying to do through his

1 process of planning is to find out the point in time  
2 when the existing system is no longer capable of  
3 serving the load that's forecast. And as long as he's  
4 showing that there's a surplus at the bottom of the  
5 table no new resources are needed.

6                   Once we start to get into persistent  
7 deficits that's the signal that Mr. Miles uses to add  
8 new resources. And so -- and -- and he's making the  
9 assumption that -- that we will use all the existing  
10 resources to their maximum capability before we would  
11 build anything else.

12                   So he's -- he's making the assumption  
13 that -- that Manitoba Hydro will operate its -- its  
14 reservoirs in that last year before it needs to build  
15 them to the -- to the maximum possible. And so that's  
16 where the assumption is, Can you have your reservoirs  
17 full at the beginning of the drought, is important.

18                   But when you're five (5), or six (6), or  
19 ten (10) years before that point in time the system  
20 doesn't have to be operated with the reservoirs full  
21 because we're not short of other resources. And so  
22 it's -- it's -- the -- this is all about planning for  
23 the day when we have insufficient resources having  
24 maximized the use of all existing resources, and when  
25 we have to put in a new plant.



1 THE CHAIRPERSON: Now in terms of the -  
2 - of the -- the potential for Bipole 1 and 2 to have a  
3 sort of a catastrophic impact on nearby financial  
4 results, now in terms of probabilities are we -- are we  
5 taking a high probability, or are we talking of a  
6 relatively low probability?

7 MR. DAVID CORMIE: The -- the -- I've -  
8 - I've seen the probabilities and they're not as low as  
9 we would like them to be. They are -- they are  
10 relatively high given the consequences from -- from --  
11 for Manitoba. And I think we'll probably get into this  
12 when we -- if we -- we start talking about the Pointe  
13 du Bois dam failure.

14 We talk about, you know, with -- with  
15 infrastructure that affects society at large of  
16 protecting against the one (1) in a thousand (1,000)  
17 event, or the probable maximum event. You know, these  
18 are events that, you know, over the lifetime of the  
19 facility should -- you know, there should be a very  
20 rare probability of -- of occurring.

21 We -- we believe the risk with the DC is  
22 -- is high relative to where the -- the engineering  
23 standard would put -- where the -- where best practices  
24 would put the -- the acceptable levels of risk. And I  
25 -- I don't have the actual risk numbers available but -

1 - but for the Bipole, the loss of the DC system, and  
2 the loss of Dorsey, you know, we think that it's --  
3 it's way below the level that it would be -- it's  
4 prudent to -- to be at. And that's -- that's creating  
5 the urgency for getting the third line built as soon as  
6 possible.

7 MR. RAYMOND LAFOND: I want to  
8 understand this a bit more. This is losing Dorsey and  
9 the DC line? Is that a short-term problem or a long-  
10 term problem? In other words, an ice storm, yes, it's  
11 a huge problem. But it -- I mean, you can fix it up  
12 within a week or two (2), depending on the size of the  
13 storm, while a drought lasts a long time.

14 So I'm wondering what the issue here is.  
15 Is it a long-term issue, or a long -- or a short term?

16 MR. DAVID CORMIE: The -- the three (3)  
17 -- the risks that we've talked about are -- are  
18 drought. Drought can last as long as, you know, the --  
19 the historic record shows seven (7) years. The  
20 anecdotal record going back hundreds of years show them  
21 even longer than that.

22 And so the consequences of running out  
23 of energy for the -- for -- for Manitoba, it's -- it's  
24 not an emergency, it's -- it would -- it would happen  
25 gradually over time and we could probably adapt to

1 that.

2                   The loss of the -- of the DC system, is  
3 -- it would be an emergency event. It would surprise  
4 everyone. If it was the line to go down, the line --  
5 we could probably bring the line back in a couple of  
6 weeks, because we would -- we have spare towers  
7 available and we'd mobilize the forces. And depending  
8 on the location, if it was in Northern Manitoba, it  
9 would take longer than in Southern Manitoba.

10                   The -- the converter station at Dorsey,  
11 though, is something that would take years to repair.  
12 And because, as Mr. Warden said, it -- it brings --  
13 it's -- it's the source of 80 percent of our -- our  
14 power. Having Dorsey out of service for three (3),  
15 four (4), or five (5) years as we tried to rebuild the  
16 system would be completely catastrophic for Manitobans  
17 and -- and our way of life. We -- we just do not have  
18 enough import capability or thermal generation. There  
19 would be widespread, long lasting, rotating load sheds  
20 across the province. And it would be -- it would be  
21 catastrophic.

22                   So it's really the loss of the Dorsey  
23 facility that -- that we're mostly concerned about.  
24 And the risk of having a severe weather event take that  
25 facility out, or an aeroplane flying into that

1 facility, we have too many assets in one (1) location.  
2 And -- and our -- our Riel station that we're building  
3 east of Winnipeg is just -- is -- is designed to start  
4 splitting up the system in order to make the system  
5 more robust.

6                   So you're -- you're right. The -- these  
7 are all very significant events, but the -- it is the  
8 loss of the Dorsey facility. Fortunately, in the North  
9 we have two (2) converter stations instead of having  
10 one (1). They're -- and they're many miles apart, so  
11 it's -- it's less likely that we would lose both of  
12 those at the same time. But having all the 3,800  
13 megawatts of capacity in -- at -- at Dorsey is -- is a  
14 -- is our Achilles's heel right now.

15                   MR. RAYMOND LAFOND: Thank you.

16                   MR. VINCE WARDEN: I may just -- just  
17 add to that. Although we like to think the probability  
18 is very low, and -- and we do believe it is. We did  
19 experience, as you may recall, a tornado at Elie. If  
20 that -- if that tornado had been a few kilometres  
21 north, it -- it could have very well struck Dorsey and  
22 we would have a major catastrophe there.

23                   THE CHAIRPERSON: So hardening that --  
24 that facility, is that an option? I mean, in terms of  
25 hardening to deal with the kind of adverse situations

1 you just described, tornados.

2 Is that something that you're doing or  
3 considering?

4 MR. DAVID CORMIE: Yes, and we -- and  
5 we have gone through, for the critical infrastructure  
6 there, we have put buildings on top of buildings to  
7 harden them, you know, the control buildings. And --  
8 and so we have been investing in that facility. But we  
9 still have -- there's still a threat to the overall  
10 facility that hardening one (1) particular building  
11 won't solve.

12 MR. VINCE WARDEN: And just to add  
13 further, no amount of hardening would have withstood  
14 the tornado that was -- was experienced at Elie.

15

16 CONTINUED BY MR. BOB PETERS:

17 MR. BOB PETERS: Mr. Cormie, I too had  
18 a difficulty understanding one of your answers to the  
19 Chairman about drought risk relative to the power  
20 resource plan that we had just gone through.

21 Would it be correct, sir, with Mr.  
22 Miles's assistance if needed, on Tab 8 of the book of  
23 documents, page 69, that the Board have looked at,  
24 which was the power resource plan, the 2011 plan,  
25 that's based on dependable resources which has

1 withstood every drought in the last ninety-six (96)  
2 years, correct?

3 MR. DAVID CORMIE: Yes, this plan is --  
4 has been tested against all river flows including all  
5 the drought river flows.

6 MR. BOB PETERS: So, when you say the  
7 risk of drought, I'm not sure if you said  
8 "significant", but relative to this power resource  
9 plan, the risk of drought is very minimal because it  
10 would have to be a worse drought than in the last  
11 ninety-six (96) years of historical record?

12 MR. DAVID CORMIE: Yes, there is --  
13 there is a residual risk. We are -- we are only  
14 protecting against the flow record that we have  
15 available. And as we went through in the previous  
16 hearing with Dr. Kubursi's and Magee, they indicated  
17 there is uncertainty associated with how bad the  
18 drought -- the next drought could be. And we can't  
19 rely on historic record to say that's the worst on  
20 record; that's just the worst in the recorded record  
21 and the next drought could be even more worse.

22 So, we -- Manitoba Hydro does have  
23 residual risk when it comes to the water supply, but  
24 the Corporation is comfortable that this -- this  
25 historic record is -- and the assumptions that we make

1 around planning our resources gives us enous -- enough  
2 robustness when combined with our export contracts to  
3 deal with risk of a greater severity.

4 MR. BOB PETERS: And did I then  
5 understand you to be telling the Chairman that the risk  
6 of drought, relative to this power resource plan at  
7 page 69 of Tab 8 of the book of documents, is greater  
8 than the risk of Bipoles 1 and 2 failures?

9 MR. DAVID CORMIE: What -- only -- only  
10 framed from a financial perspective, Mr. Peters, that -  
11 - we know that half the time we're going to be in bel -  
12 - ave -- below average water conditions and then once  
13 in a hundred years, we'll probably be in a -- in a  
14 drought indicated by the historical record.

15 But just like we had a one (1) in three  
16 hundred (300) year flood on the Assiniboine River two  
17 (2) years ago, those -- droughts of that severity can  
18 occur. There's no protect for those and we have to --  
19 we have to be prepared for them to occur, but we -- and  
20 we believe that our -- our power resource plan is  
21 robust enough so that if something like that can  
22 happen, we can probably accommodate it to some extent.

23 MR. BOB PETERS: Okay. I have your  
24 point. And I want to turn to Mr. Warden because he  
25 talked about a wind event at Elie, Manitoba. Mr.

1 Warden, in the mid to late '90s there was a wind event  
2 that brought down Bipoles 1 and 2, just north of the  
3 City of Winnipeg?

4 MR. VINCE WARDEN: Yes, I believe that  
5 was in 1996.

6 MR. BOB PETERS: And that wind event  
7 took down both lines?

8 MR. VINCE WARDEN: Yes, it did.

9 MR. BOB PETERS: For -- for what  
10 duration do you recall?

11 MR. DAVID CORMIE: It was one (1) week  
12 for the first line and two (2) weeks for the second  
13 line.

14 MR. BOB PETERS: And Mr. Warden, while  
15 you may not remember the calendar, do you remember the  
16 financial impact it had on the Corporation. What was  
17 the -- what was the impact to the corporation from  
18 having lost Bipole 1 and 2 in that wind event back in  
19 1996 that you mentioned?

20

21 (BRIEF PAUSE)

22

23 MR. VINCE WARDEN: Mr. Peters, I do not  
24 recall the financial impact. I know there was no inter  
25 -- interruption of service because of the lines being



1 down. I -- I can't recall the amount that we  
2 quantified that to be though, in terms of lost revenue.  
3 It would be a loss of export revenue during that period  
4 of time because the Manitoba load continued to be  
5 served, but the -- the number isn't coming to me as to  
6 what it -- what that lost revenue was.

7 THE CHAIRPERSON: I guess the follow-up  
8 question is, how did you manage to serve the load if  
9 the two (2) poles were down -- the two (2) lines were  
10 down?

11 MR. VINCE WARDEN: Well, it really  
12 demonstrated the -- the value of our interconnections  
13 with neighbouring utilities.

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: You brought most of  
17 the power in from the United States that you needed?

18 MR. VINCE WARDEN: Yes.

19 MR. BOB PETERS: And that was enough to  
20 serve the Manitoba load?

21 MR. VINCE WARDEN: It was. And,  
22 fortunately, it occurred at a time of the year when  
23 that was possible. Had it happened during the winter  
24 or peak periods, we would not have been able to do  
25 that.

1 MR. BOB PETERS: Perhaps, for the  
2 completeness of the record, Mr. Warden, if you do find  
3 the approximate quantification of the loss occ -- that  
4 Manitoba Hydro suffered through loss of export revenues  
5 back -- due to the 1996 event, that would be helpful to  
6 complete the record for the Board.

7 MR. VINCE WARDEN: Yes, we can find  
8 that for sure.

9 MR. BOB PETERS: You'll take that as an  
10 undertaking?

11 MR. VINCE WARDEN: We will.

12 MR. BOB PETERS: Okay. I thank you for  
13 that.

14

15 --- UNDERTAKING NO. 16: Manitoba Hydro to quantify  
16 the lost revenue associated  
17 with the loss of Bipoles 1  
18 and 2 as a result of the  
19 1996 incident, as well as  
20 the incident that occurred  
21 in January of 2011;  
22 together with the capital  
23 costs that were necessary  
24 to restore facilities  
25 during both of those

1 instances

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: In more recent memory,  
5 Mr. Warden, perhaps there was a tower failure, I'm  
6 going to say on both Bipoles 1 and 2, back in January  
7 of 2011. Is that correct?

8 MR. VINCE WARDEN: Well, there was a  
9 near failure. There wasn't actually a failure -- what  
10 we would have called a failure. There was -- through  
11 inspection we discovered towers that were at point of -  
12 - point of collapse but we were able to divert that  
13 disaster.

14 MR. BOB PETERS: And as a result of  
15 that discovery there was no -- no loss of service to  
16 either export or domestic customers?

17 MR. DAVID CORMIE: We did have to  
18 reduce the loading on the lines, so that if the towers  
19 did go down, Mr. Peters, we would be able to  
20 accommodate it. So there was -- there were loss to  
21 export opportunities because of that risk.

22 MR. BOB PETERS: Do you recall what --  
23 what then was the financial consequence of that?

24 MR. DAVID CORMIE: I don't remember the  
25 -- the numbers, Mr. Peters.

1 MR. BOB PETERS: Could that be added to  
2 the undertaking that Mr. Warden had agreed to  
3 previously to quantify?

4 MR. VINCE WARDEN: We'll do that.

5 MR. BOB PETERS: And do you also know,  
6 Mr. Warden, as a result of the near failure as we've  
7 now called it in January of 2011 what upgrades were  
8 undertaken and what capital costs were incurred as a  
9 result of that?

10 MR. VINCE WARDEN: We will include that  
11 in the undertaking, as well. The undertaking is for  
12 Manitoba Hydro to quantify the lost revenue associated  
13 with the loss of Bipoles 1 and 2 as a result of the  
14 2000 -- or 1996 incident, as well as the incident that  
15 occurred in January of 2011; together with the capital  
16 costs that were necessary to restore service -- or to -  
17 - to restore facilities during -- during both of those  
18 instances.

19 MR. BOB PETERS: Mr. Miles, before the  
20 morning recess you took the Board through the power  
21 resource plan of Manitoba Hydro's recommended plan at  
22 Tab 8, page 69, of the book of documents, from the 2011  
23 power resource plan. Also in that book of documents at  
24 Tab -- at page 70 in Tab 8 is a system supply and  
25 demand balance sheet.

1                   Likewise, Mr. Chairman and Board  
2 members, there were in large copies, but I don't want  
3 to spend much time on this, but the -- the page 70 of  
4 the Tab 8, Mr. Miles, deals with the supply and ener --  
5 as -- supply and demand balance of energy under average  
6 flow conditions.

7                   Would that be correct?

8                   MR. TERRY MILES:    You said under  
9 average flow conditions?

10                  MR. BOB PETERS:    I did.  Am I correct?

11                  MR. TERRY MILES:    Not -- not quite, but  
12 -- but very close.  What this table depicts, and I  
13 think -- I think Mr. Cormie tried to explain it earlier  
14 this week, is how the revenues and -- and demands are -  
15 - are calculated for sort of year 3 and -- and beyond.  
16 There's, sort of, year 1 and year 2 that's there.

17                  And what we do when we calculate these  
18 values, or what is -- what is done for those years, is  
19 that in every load year out in time we run each flow  
20 year of the ninety-six (96) flow years through our  
21 model and determine what the -- what the various  
22 generation is from the various resources that we have,  
23 or that we require.  And it goes from the -- from the  
24 lowest of flows where you potentially require thermal  
25 generation and imports to the highest of flows where we

1 may not require thermal generation and imports that's  
2 there.

3                   After doing that for each of the years,  
4 we take the average of the hydro-generation that was  
5 produced, the average of the thermal-generation that  
6 was required, the average of the imports that were  
7 required, and that's what this table represents for  
8 each one of these years out in time.

9                   So, in essence, each number on this  
10 table, if you go to 2013/'14 in the first row under  
11 "hydro-generation," that value, thirty thousand seven  
12 hundred and forty-four (30,744), reflects the average  
13 generation that -- that was obtained over the full  
14 range of flow conditions that -- that we've  
15 historically experienced.

16                   So that's what each one of these numbers  
17 represents. Hopefully that help to...

18                   MR. BOB PETERS: I think I was close.

19                   MR. TERRY MILES: Right. You -- you  
20 were. You were.

21                   MR. BOB PETERS: All right.

22                   MR. TERRY MILES: But I think it's -- I  
23 -- we don't want to -- I'm always concerned when we  
24 assign it just to the river flows --

25                   MR. BOB PETERS: That -- that's

1 correct, and thank you. What you then are telling the  
2 Board is that the assumptions that are on this sheet  
3 were then used in Mr. Rainkie's IFF11-2?

4 MR. TERRY MILES: That's correct.

5 MR. BOB PETERS: And so when we go down  
6 also to exportable systems surplus, and that's in  
7 approximately the middle of the page, and under the  
8 first year depicted of 2013/'14, you're telling the  
9 Board that there's approximately 4,600 gigawatt hours  
10 of energy available under the averl -- average of all  
11 flow conditions that could be exported?

12 MR. TERRY MILES: Yeah, I think it says  
13 -- forty-five thirty (4,530), I think is the number I  
14 have. Is that right?

15 MR. BOB PETERS: Close enough. And --

16 MR. TERRY MILES: Yeah.

17 MR. BOB PETERS: -- forty-four forty-  
18 two (4,442) for the next year?

19 MR. TERRY MILES: Excellent, yes.

20 MR. BOB PETERS: Okay.

21 MR. TERRY MILES: Okay.

22 MR. BOB PETERS: And the point to  
23 clarify is that that exportable system surplus is over  
24 and above the current exports that have been listed a  
25 couple of lines above that?

1 MR. TERRY MILES: That's correct.

2 MR. BOB PETERS: And the current  
3 exports that are listed above that are the exports of  
4 the dependable energy that's available.

5 Would that also be correct?

6 MR. TERRY MILES: That's correct.

7 MR. BOB PETERS: At page 85 in Tab 8 of  
8 the book of documents, Mr. Chairman and Board members,  
9 is a listing of -- of some of Manitoba Hydro's export  
10 contracts. And, Mr. Cormie, the listing that's  
11 provided in CAC/Manitoba Hydro First Round 115A  
12 contains the current status of the arrangements that  
13 Manitoba Hydro has, with perhaps the noted exception of  
14 the Great Energy River renegotiation that you mentioned  
15 before the recess this morning?

16 MR. DAVID CORMIE: That's correct.

17 MR. BOB PETERS: And so on page 85 at  
18 Tab 8 of Board counsel's book of documents, the  
19 Northern States Power Agreement is shown as expiring in  
20 April of 2015, but then being renewed at lower  
21 quantities for a further ten (10) years?

22 MR. DAVID CORMIE: That's correct.

23 MR. BOB PETERS: And, Mr. Cormie, the  
24 extra 125 megawatts shown on that chart, that is  
25 contingent on -- I'm sorry, you said it quite well the



1 other day, it -- Manitoba Hydro has a condition  
2 precedent on that that they can waive, and that is that  
3 they would build additional generation to serve that?

4 MR. DAVID CORMIE: Yes, we -- we have  
5 this arrangement with Northern States Power where, at  
6 our option, we can require them to purchase the 125  
7 megawatts, or we can -- or we can choose not to and the  
8 condition precedent is whether we build new hydraulic  
9 generation.

10 But Manitoba Hydro may have en -- enough  
11 surplus depending on what the load is forecast at that  
12 time, whether we build new generation or not, to be  
13 able to serve the sale. So it's -- it -- in effect we  
14 have a put on -- we can -- we can require Xcel to -- to  
15 NSP to buy that power if we choose to.

16 MR. BOB PETERS: And it would be served  
17 out of dependable energy?

18 MR. DAVID CORMIE: Yes. And it's --  
19 we're -- we're -- we -- it would be served out of  
20 dependable energy.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: Mr. Cormie, if you're  
25 able to respond to this, sir; is there a positive

1 obligation on Manitoba Hydro to -- to do everything it  
2 can to get Keeyask in place to serve that 125 megawatt  
3 load? Or is that entirely within Manitoba Hydro's  
4 decision making?

5 MR. DAVID CORMIE: It's at Manitoba  
6 Hydro's sole discretion.

7 MR. BOB PETERS: And is the extension  
8 on the 125 megawatts, that would be for -- for winter  
9 and summer, sir?

10 MR. DAVID CORMIE: Yes.

11 MR. BOB PETERS: And is the -- is the  
12 term of five (5) years only to line it up with the --  
13 with the balance of the contract, or why is that  
14 limited to only a five (5) year arrangement?

15 MR. DAVID CORMIE: It takes it to the  
16 end of the -- to -- to align with the end of the three  
17 seventy-five (375), three twenty-five (325) contract.

18 MR. BOB PETERS: All right. And the  
19 Great energy capacity arrangement that you have in  
20 place that expires April of '15, at 150 megawatts has  
21 been -- has been revised, or renegotiated, I think is  
22 what we've -- we've said earlier?

23 MR. DAVID CORMIE: Not yet. We are in  
24 discussions with Great River Energy and we're at the  
25 point where we believe that it -- it's -- can be

1 included in the power resource plan. But we -- we  
2 haven't formally signed any contracts yet.

3 MR. BOB PETERS: It's still the subject  
4 of what we've called "term sheets"?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: And is it a -- is it  
7 an energy sale in -- in addition to a diversity  
8 arrangement? Or is it only a diversity arrangement?  
9 If you're able to respond.

10 MR. DAVID CORMIE: Are you talking  
11 about the extension?

12 MR. BOB PETERS: No. Well --

13 MR. DAVID CORMIE: The existing  
14 contract?

15 MR. BOB PETERS: No, I'm talking the  
16 extension.

17 MR. DAVID CORMIE: The extension, it's  
18 a -- it continues to be a capacity swap with ener --  
19 with -- with no dependable energy obligation.

20 MR. BOB PETERS: The existing Minnesota  
21 Power arrangement is at -- shown here is 50 megawatts  
22 to expire also in April of '15. But Manitoba Hydro has  
23 renegotiated with that counterparty and has a 250-  
24 megawatt sale to begin on June of 2020, is that  
25 correct?

1 MR. DAVID CORMIE: That's correct.

2 MR. BOB PETERS: That hasn't changed in  
3 date?

4 MR. DAVID CORMIE: No, those -- that --  
5 that contract has been signed and it's -- we're not  
6 expecting to make any changes.

7 MR. BOB PETERS: All right. The  
8 Southern Minnesota Municipal Power Agency, is that also  
9 a diversity arrangement?

10 MR. DAVID CORMIE: No, it wasn't. No.

11 MR. BOB PETERS: It's still in effect?

12 MR. DAVID CORMIE: Till March of '13.

13 MR. BOB PETERS: All right. The  
14 Wisconsin Public Service Company, this is the -- the  
15 transaction that was of a -- as much as 500 megawatts a  
16 year ago, and it's been downgraded?

17 MR. DAVID CORMIE: The -- the term  
18 sheet with Wisconsin Public Service is for up to 500  
19 megawatts. And it's still in effect. The -- there are  
20 two (2) types of transactions. One (1) was the hundred  
21 megawatts that would flow over existing transmission.  
22 And that's this agreement, and we were able to come to  
23 a conclusion with WPS on that.

24 The balance of the 400 megawatts, it's  
25 still under negotiation, Mr. Peters. And that's

1 subject to the construction of the new transmission  
2 line. And both parties would have liked to have signed  
3 the power purchase agreement by now.

4 But we're still -- because the -- the  
5 cost and the routing of the line is still unknown,  
6 we're still working on the -- on those things. And it  
7 -- and it's only once both parties know that the cost  
8 of the transmission and -- and how the arrangements in  
9 the United States will be made, will we be able to  
10 conclude that -- that next transaction.

11 So it's -- it's not that the five  
12 hundred (500) went down to one hundred (100). The five  
13 hundred (500) -- or, the -- the one hundred (100) was  
14 the first tranche. And the balance, we're still  
15 working on the balance and -- and negotiations are  
16 still ongoing.

17 MR. BOB PETERS: In the back of my --  
18 my mind, Mr. Cormie, I recall reading somewhere that  
19 perhaps that 400 megawatt tranche has been downgraded  
20 to -- to 300 megawatts?

21 MR. DAVID CORMIE: Yes, and that's  
22 what's in the -- in the power resource plan. But the  
23 term sheet is still for up to five hundred (500). And  
24 conditions are -- are in flux, Mr. Peters and we're  
25 confident that two hun -- at least two hundred (200)

1 will be sold but we are having discussions with --  
2 still in the -- in the context of up to five hundred  
3 (500). And I'm not sure if you were aware of the  
4 Kewaunee nuclear plant and -- and the effect on  
5 Wisconsin Public Service but potentially that could  
6 affect their need for new resources and -- and we would  
7 be glad to move the bar from another two hundred (200)  
8 up to -- up to -- up to the total four hundred (400).

9                   So, we're still -- we're still working  
10 on -- on that and the power resource plan does reflect  
11 the additional two hundred (200) on top of the hundred,  
12 and that two hundred (200) would require two hundred  
13 (200) megawatts of transmission.

14                   MR. BOB PETERS: Let's assume I hadn't  
15 heard of the Kewaunee nuclear plant issue for  
16 Wisconsin, can you just briefly explain that to the  
17 Board?

18                   MR. DAVID CORMIE: Wisconsin Public  
19 Service had a power purchase agreement with the  
20 operator of the nuclear plant Dominion. And Dominion  
21 has decided to shut that station down as of March of  
22 2013. And Minnesota -- or Wisconsin Public Service  
23 had a power purchase agreement based on that, the out -  
24 - output of that plant. And that could affect their  
25 need for resources down the road.

1 MR. BOB PETERS: How large of a sale  
2 did they get excluded from as a result of the shutdown?

3 MR. DAVID CORMIE: Well the -- the  
4 plant had a capability of 600 megawatts.

5 MR. BOB PETERS: Was that all for WPS?

6 MR. DAVID CORMIE: I'm not familiar, I  
7 don't know.

8 MR. BOB PETERS: I was wondering what  
9 the -- if WPS had a -- had a sale that is going to be  
10 terminated, what -- what size of load are they looking  
11 to replace, is what I guess I'm getting at.

12 MR. DAVID CORMIE: I'm -- I'm -- I'm  
13 not aware of that yet.

14 MR. BOB PETERS: All right. And  
15 Manitoba Hydro still has the issue about needing new  
16 transmission to go above it's 100-megawatt-capacity  
17 sale to Wisconsin Public Service?

18 MR. DAVID CORMIE: Yes, and that's been  
19 the fly in the ointment.

20 MR. BOB PETERS: I had some questions  
21 further on when we got to some capital projects, Mr.  
22 Cormie, but we talked a little bit about transmission.  
23 And it was Manitoba Hydro wanting this to be dedicated  
24 transmission from the purchaser but that's a sticking  
25 point right now in the -- in the United States.

1 MR. DAVID CORMIE: I'm -- I'm -- I don't  
2 know what your question was Mr. Peters.

3 MR. BOB PETERS: Rather than having a  
4 MISO-sponsored transmission project, this was going to  
5 be a utility-sponsored transmission project?

6 MR. DAVID CORMIE: Yes, I think as we -  
7 - as we spoke about at the hearing last time, we were  
8 exploring whether the cost of -- the US cost of the  
9 line could be regionalized as a multi valued project in  
10 the United States under the MISO tariff.

11 Our discussions with MISO have led us to  
12 believe that that is a possibility but it would come at  
13 such a late date that it wouldn't -- we would have no  
14 certainty on those -- how the cost for that line would  
15 be paid for, what the cost that Wisconsin Public  
16 Service would have to pay or Minnesota Power.

17 And -- and Manitoba Hydro has to proceed  
18 with it's development plan. And we can't proceed  
19 without certainty on whether that line is actually  
20 going to get built and who's going to pay for it. So,  
21 the parties have concluded that the only way to get  
22 that certainty is to do it as a participant-funded  
23 line.

24 And that give us the certainty and  
25 allows us to proceed. If we were to wait for a third



1 party to decide whether to build that line and have to  
2 compete for money in -- across the MISO footprint  
3 there's a lot of risks associated with getting that  
4 line in service by the required date of 2020. So, in  
5 order to bring certainty and bring closure to the  
6 contracting process we've -- we've -- we're now  
7 proceeding with Minnesota Power and Wisconsin Public  
8 Service on a participant-funded line.

9 MR. BOB PETERS: And if I understood  
10 previously the participant funding would be the  
11 American utilities funding it as opposed to Manitoba  
12 Hydro.

13 MR. DAVID CORMIE: The American  
14 utilities will participate in the funding. Manitoba  
15 Hydro may have to participate in the funding until all  
16 the capacity of the line is contracted.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: I'm sorry, the last  
21 part, Mr. Cormie? Manitoba Hydro will participate  
22 until...?

23 MR. DAVID CORMIE: The -- the line has  
24 a capability of -- initially will have the capability  
25 of 750 megawatts. We have contracts -- we're working

1 on contracts for four hundred and fifty (450) so  
2 there's 300 megawatts of the capacity of the line that  
3 have yet to -- been allocated to a customer. And so  
4 Manitoba Hydro will have to carry the cost of that 300  
5 megawatts until the line is fully contracted for in the  
6 United States.

7 THE CHAIRPERSON: I -- I understood  
8 yest -- from previous answers that you were only paying  
9 the portion up to the border and then the other parties  
10 were paying beyond that. Is that...?

11 MR. DAVID CORMIE: Manitoba Hydro will  
12 be responsible for all the costs in Canada. And -- and  
13 because we haven't fully subscribed the -- the line on  
14 the US side there will be additional costs for Manitoba  
15 Hydro on the US side.

16

17 CONTINUED BY MR. BOB PETERS:

18 MR. BOB PETERS: Is that a -- is that a  
19 done deal, Mr. Cormie, or is that a negotiated matter  
20 right now -- being negotiated?

21 MR. DAVID CORMIE: It's not a done  
22 deal. It -- the business arrangements were -- are  
23 being worked on but I believe that -- that there will  
24 be some cost. Until we have enough capacity -- until  
25 we have enough export contracts Manitoba Hydro will

1 have to bridge the cost of that line.

2 MR. BOB PETERS: And not wanting to --  
3 to get into disclosing anything that is confidential,  
4 Mr. Cormie, but if the transmission line envisioned is  
5 750 megawatts, as I understood your evidence -- that's  
6 correct?

7 MR. DAVID CORMIE: Yes.

8 MR. BOB PETERS: And the sale -- the  
9 amount that WPS is interested in using on that line is  
10 about 450 megawatts?

11 MR. DAVID CORMIE: No. They're  
12 interested in -- four-fifty (450) is the combined total  
13 between Minnesota Power and Wisconsin Public Service.

14 MR. BOB PETERS: All right. So there  
15 are two (2) American utilities that want to subscribe  
16 for about 450 megawatts of the 750 megawatt total  
17 capacity?

18 MR. DAVID CORMIE: That's correct.

19 MR. BOB PETERS: And you would expect  
20 that they would end up being responsible for their  
21 proportionate share based on their subscription level.

22 MR. DAVID CORMIE: That's correct.

23 MR. BOB PETERS: And who has made the  
24 decision that the line would be 750 megawatts as  
25 opposed to let's say 450 megawatts?

1 MR. DAVID CORMIE: Transmission lines  
2 come in chunks, Mr. Peters. You get -- you can buy a  
3 250-megawatt line, you can buy a three hundred and  
4 seventy-five (375). Or you can buy a seven-hundred and  
5 fifty (750) line. Ultimately Conawapa requires a 500  
6 kV line. A two-thirty (230) line doesn't work for  
7 Manitoba Hydro, or a combination of two-thirty (230)  
8 lines.

9 We need a large line. And the 450  
10 megawatts of anchor tenants that we have require a 500-  
11 megawatt line. The alternative is two (2) 375 kV lines  
12 but they provide the equivalent capacity but cost more.  
13 So we've chosen to go to the 500 kV voltage.

14 MR. BOB PETERS: And when would this  
15 transmission line have to be in service to -- to  
16 consummate the sales that you're envisioning?

17 MR. DAVID CORMIE: The -- the line has  
18 to be in service, under contract, June the 1st, 2020.

19 MR. BOB PETERS: And does Manitoba  
20 Hydro have to -- I think your words were that you have  
21 to -- you have to bridge -- is it bridge-finance the  
22 line, or do you have to pay for the line and seek  
23 recovery afterwards from whoever else subscribes for  
24 the remaining 300 megawatts?

25 MR. DAVID CORMIE: There's several

1 mechanisms for funding the -- the unsubscribed portion.

2 And we haven't landed on one (1) yet, Mr. Peters.

3

4 (BRIEF PAUSE)

5

6 MR. BOB PETERS: When -- when you talk  
7 about needing a larger line for Conawapa, Mr. Cormie,  
8 you're indicating to the Board that even if 450  
9 megawatts is subscribed June 1st of 2020, Manitoba  
10 Hydro wants to have additional capacity on the line  
11 available to Manitoba Hydro to make the sales of the  
12 Conawapa energy?

13 MR. DAVID CORMIE: Yes. Ultimately we  
14 -- we believe we have the potential of supplying 1,100  
15 megawatts of firm contracts once Conawapa comes into  
16 service. In the -- once Conawapa comes into service  
17 potentially we can have 27,000 gigawatt hours of  
18 surplus energy a year. Today, without Keeyask and  
19 Conawapa online, our maximum surplus is around thirteen  
20 thousand (13,000). So we're going to be doubling the  
21 amount of surplus that potentially can be avail -- made  
22 available to the market.

23 We can't push -- we can't get that  
24 energy to market over the existing transmission system.  
25 We need -- we need a large major interconnection to

1 make Conawapa successful. And we've been -- we see  
2 this as a -- a strategic move on behalf of Manitoba  
3 Hydro, taking advantage of the willingness of a US  
4 utility to build the transmission at this time that  
5 gives us the certainty that we require so that we can  
6 make the investment decision in Conawapa without having  
7 to say, We're ready to make the investment decision in  
8 Conawapa, but we don't have any certainty on whether a  
9 line will be available to -- to get the energy to  
10 market.

11                   And so as a re -- as a result of that we  
12 are -- are working with our US partners to build the  
13 required line now and potentially we will subscribe  
14 that line, but we don't have those -- we don't have  
15 those -- we haven't -- we haven't yet fully subscribed.

16                   MR. BOB PETERS: I may -- I'm not quite  
17 understanding what you mean by subscribing the line.  
18 You're really saying that Manitoba Hydro needs all that  
19 capacity for its own sales, but until you do you'll let  
20 other people have access to it?

21                   MR. DAVID CORMIE: The -- the firm  
22 sales only last as long as there's surplus dependable  
23 energy available in Manitoba. Ultimately, when those  
24 contracts expire in 2035, that capacity that's coming  
25 with -- with Keeyask and Conawapa will -- will be used

1 for Manitobans. But in a high flow year we will still  
2 have up to 27,000 gigawatt hours of surplus energy.  
3 It's not dependable energy. It's just in a high water  
4 year that energy needs to go to market.

5                   And so in order to be able to generate  
6 the revenue from that we need to have market access.  
7 The price of -- of achieving that is to enter into a  
8 firm contract that allows the US company to rate-base  
9 the cost of the transmission and -- for the period of  
10 the contract. And -- so they will pay their share.  
11 But ultimately when those contracts are over the -- the  
12 line is available for Manitoba Hydro to use in  
13 perpetuity. So we're investing upfront for the period  
14 of the contract, in the contract, and in our  
15 relationship, but ultimately the transmission line will  
16 be there in perpetuity to deal with the surplus that  
17 will -- Manitoba Hydro will always have given the  
18 nature of our -- our hydro system.

19                   MR. BOB PETERS: Manitoba Hydro won't  
20 end up owning the transmission line, will it?

21                   MR. DAVID CORMIE: That is one (1)  
22 option. We haven't decided whether we will be a part  
23 owner of that line, but that potentially could happen.

24                   THE CHAIRPERSON: When we look at the  
25 US interconnection costs that show up in the preferred

1 option -- preferred development plan, those embody the  
2 costs to bring that line south of the border as well?

3 MR. DAVID CORMIE: In the capital  
4 expenditure forecasts now I believe it's -- it's just  
5 showing the Canadian portion of the costs. And we have  
6 yet to put the -- the -- what potentially could be some  
7 US costs for the bridging period in there.

8 Ultimately Manitoba Hydro does not want  
9 to own the transmission assets on the US side, but for  
10 the bridging period until we have subscribed and -- and  
11 with full subscription of the line would -- would we  
12 transfer the ownership of the US portion of the line to  
13 the US utility. But we may have to pay the costs  
14 upfront until the -- the line is fully subscribed.

15 THE CHAIRPERSON: Are there costs being  
16 incurred now as we speak, with respect to the efforts  
17 to develop that US interconnection? And -- and, I  
18 guess, if they are costs, I guess my expectation would  
19 be that those are deferred costs. Is that...?

20 MR. DAVID CORMIE: All the costs that  
21 are being incurred on the US side are being borne by --  
22 being borne to date by our US partners. The only costs  
23 that are being incurred in -- by Manitoba Hydro are my  
24 staff costs and my own costs. So we are not -- we are  
25 not funding any of the -- the work in the United



1 States. It's being done by Minnesota Power.

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: When Manitoba Hydro,  
5 if -- if it does develop that Manitoba Hydro provides  
6 monies to construct the transmission line of the size  
7 that you've indicated, of 750 megawatts, does Manitoba  
8 Hydro expect to be repaid by the US utilities that  
9 subscribe for the additional 300 megawatts of currently  
10 unsubscribed capacity?

11 MR. DAVID CORMIE: One (1) of the  
12 options is for Manitoba Hydro to own a portion of the  
13 transmission. And we would -- we would then own the  
14 asset. There would be -- there would be -- we would --  
15 we would put the asset on our books as well. And at  
16 the time we transferred the asset to the US entity, we  
17 would then -- we would sell that asset to them and  
18 there would be an offsetting -- the money would come  
19 back to Manitoba Hydro.

20 MR. BOB PETERS: That's under one (1)  
21 possible business model going forward?

22 MR. DAVID CORMIE: Yes. And this --  
23 this arrangement is not unusual, Mr. Peters. When we  
24 built the first 500 kV line in 1976, with Northern  
25 States Power, we entered into a thirteen (13) year

1 arrangement where we gave them 13 billion kilowatt  
2 hours at ten dollars (\$10) a megawatt hour for the --  
3 for that -- in order to help finance the line. So it  
4 wasn't done through a capital contribution, it was done  
5 through a discount to the energy price.

6                   So we've -- this -- you know, we only  
7 have to build a hundred miles to get -- of line to get  
8 it to the border on the US side. There's, you know, 5,  
9 600 miles of line. And so there's a disproportionate  
10 cost, and the benefits are disproportionate. And so in  
11 order to make the transaction -- or make -- get the  
12 line built, you know, we've -- we've entered into  
13 arrangements that have made it economical on the US  
14 side to happen.

15                   And -- and we're -- we're -- those are  
16 the things that we're studying today, how -- how do we  
17 make this happen? Because ultimately this line will  
18 result in increased export revenues and will be to the  
19 benefit of our customers in perpetuity through having  
20 lower rates than they would otherwise have.

21                   MR. BOB PETERS:    Mr. Cormie, what is  
22 the -- the timeline that Manitoba Hydro is working on  
23 to determine whether it -- such an arrangement will be  
24 consummated?

25                   MR. DAVID CORMIE:    The -- the timeline

1 with Wisconsin Public Service is such that we will be -  
2 - be able to go to the NFAAT with these arrangements in  
3 place.

4 MR. BOB PETERS: All right. Let me  
5 explore that answer, sir. You're telling the Board  
6 that at the time Manitoba Hydro attends at a needs-for  
7 and alternatives-to review hearing, there will be a  
8 contract signed related to this arrangement for  
9 transmission into the United States?

10 MR. DAVID CORMIE: That's our  
11 expectation.

12 MR. BOB PETERS: And, without putting  
13 too many legal clauses in it, this contract would have  
14 a condition requiring the necessary and required  
15 approvals and regulatory approvals on behalf of  
16 Manitoba Hydro?

17 MR. DAVID CORMIE: Yes, in the same way  
18 that the Minnesota Power contract has conditions that -  
19 - that require orders in council, National Energy Board  
20 permits, Manitoba Hydro approval, decisions by the  
21 Manitoba Hydro Board to build Keeyask, all those  
22 similar conditions will be part of this other  
23 arrangement.

24 MR. BOB PETERS: And to ballpark, did  
25 you indicate this line would need to be in the -- in

1 the neighbourhood of a -- six hundred (600) miles in  
2 the United States?

3 MR. DAVID CORMIE: I -- I don't have  
4 the exact number but I just know that their -- their  
5 line is much longer than our line.

6 MR. BOB PETERS: And so in terms of  
7 expected cost to be incurred south of the border do you  
8 have any -- any placeholder for that?

9 MR. DAVID CORMIE: I think that's part  
10 of the new power resource plan. I -- I don't know what  
11 that number is, no.

12 MR. BOB PETERS: It's not in the IFF  
13 though, is it?

14 MR. VINCE WARDEN: No, it's not.

15 MR. DAVID CORMIE: And the back row  
16 says, No. I haven't told Mr. Warden yet.

17 MR. BOB PETERS: I appreciate your  
18 humour.

19 MR. DAVID CORMIE: I'm leaving it for  
20 the next guy or gal.

21 MR. BOB PETERS: When you say it's in  
22 the power resource plan you're saying the cost of it is  
23 in the power resource plan?

24 MR. DAVID CORMIE: The cost, yeah

25 MR. BOB PETERS: All right. Then I'll

1 -- I'll have some lunch hour reading to do.

2 MR. RAYMOND LAFOND: Excuse me, but it  
3 is not included in the capital expense forecast?

4 MR. DAVID CORMIE: No, not yet. But --  
5 and that's because we have yet to -- we have yet to  
6 decide the route, we have yet to decide on the business  
7 arrangement. And -- and we are just receiving now the  
8 engineering estimates for the cost of building the line  
9 on a proxy route. And we will have -- we hope to have  
10 enough information so that at the next go round that --  
11 that will be available.

12

13 CONTINUED BY MR. BOB PETERS:

14 MR. BOB PETERS: Mr. Cormie, just  
15 before perhaps I request a lunch recess, the pow -- the  
16 capital expenditure forecast -- and maybe Mr. Rainkie  
17 and Mr. Warden are more conversant, shows an  
18 approximate \$200 million of costs to get additional  
19 interconnection to the United States in the province of  
20 Manitoba.

21 MR. VINCE WARDEN: Yes, that's right.

22 MR. BOB PETERS: And that, Mr. Warden,  
23 is in conjunction with what Mr. Cormie is telling us  
24 about getting more interconnection into the States?

25 MR. VINCE WARDEN: Yes, it is but it's

1 to the border only.

2 MR. BOB PETERS: Right. And if it's  
3 \$200 million to go sixty (60) miles in Manitoba is it  
4 ten (10) times that for the new line in the United  
5 States? And I'm -- I'm not sure where in the capital -  
6 - sorry, where in the power resource plan I'll find the  
7 quantification but --

8 MR. DAVID CORMIE: Mr. Peters, if -- if  
9 Manitoba Hydro intended to own the line in perpetuity  
10 those costs would be there but really all we -- the --  
11 the additional costs would be the carrying costs  
12 associated with the capital in -- incremental capital  
13 for the bridging period. So that would be five (5)  
14 years of carrying costs, and we would then sell the  
15 asset and recover our investment.

16 And so, you know, the -- we're -- we're  
17 talking about investing \$10 billion in Conawapa. We --  
18 we feel this is a small insurance premium that if we --  
19 if we commit to this that will give us the certainty to  
20 proceed with our business arrangements with -- or to  
21 investment in Conawapa.

22 And in -- in absolute dollar amounts it  
23 -- it sounds like a lot of -- a lot of money but it's  
24 for a short period of time. And in effect it would be  
25 the -- the cost that Manitoba Hydro will incur will be

1 the carrying costs for the bridging period. And we  
2 have no intention of holding that investment in  
3 perpetuity.

4 We just need to -- we need to be able to  
5 take advantage of the -- of the opportunity we have now  
6 to build the big line that we need. And all these  
7 costs will be part of the analysis that we present  
8 through the NFAAT.

9 MR. BOB PETERS: Yeah, I -- I  
10 appreciate that. Can you quantify the capital costs of  
11 the US transmission project at all? Have you got --  
12 have you got that information for the Board related to  
13 what you've already told us?

14

15 (BRIEF PAUSE)

16

17 MR. DAVID CORMIE: I -- I think, Mr.  
18 Peters, when we -- we were talk -- the line in total  
19 was a billion dollars. I -- I think that's -- and  
20 maybe I exaggerated when I said six hundred (600) miles  
21 but it -- we're -- we're -- the -- the proposed line  
22 now goes from Winnipeg to Duluth. And it's not six  
23 hundred (600) miles to -- to Duluth, so.

24 MR. BOB PETERS: And that billion  
25 dollars is on the -- on the US side of the border?

1 MR. DAVID CORMIE: No, I think that's  
2 the cost -- total cost of the whole line.

3 MR. BOB PETERS: All right. So that  
4 includes 200 million of the Canadian side?

5 MR. DAVID CORMIE: Yeah.

6 MR. BOB PETERS: Okay. And the  
7 carrying costs for the bridging period that you  
8 mentioned, Mr. Cormie, will that -- is that information  
9 to your knowledge in IFF12?

10 MR. DAVID CORMIE: No, no.

11 MR. BOB PETERS: It's not. It wouldn't  
12 be put in there until you sign a contract?

13 MR. DAVID CORMIE: Yes. Well, no, it  
14 will be put in there when we're confident that -- that  
15 we will sign the contract and that will happen later  
16 this -- this year.

17 MR. BOB PETERS: Mr. Warden, can you do  
18 quick math on the microphone as to what the carrying  
19 costs for Manitoba Hydro's share, which I understand to  
20 be 300 megawatts, out of a total of 750 megawatt  
21 transmission, would be, that would cost a billion  
22 dollars total? And the -- the bridging period is five  
23 (5) years?

24 MR. VINCE WARDEN: Mr. Peters, I'd --  
25 I'd rather not, I think we're talking numbers that are



1 somewhat preliminary, maybe even speculative at this  
2 point in time so I would rather not put that on the  
3 record.

4 MR. BOB PETERS: All right, thank you.  
5 With that answer Mr. Chairman, I'll turn over to the  
6 Board and suggest after any Board questions it might be  
7 an appropriate time for lunch recess.

8 THE CHAIRPERSON: I want to assure the  
9 witnesses from Manitoba Hydro, it's not our intention  
10 to hear the NFAAT at the present time. We're not --  
11 it's really about, for us, a new panel, to understand  
12 where Manitoba Hydro is going in the context in which  
13 we're called upon to decide on the rate applications  
14 before us. So, it's really about getting us to know a  
15 little bit more about where Manitoba Hydro is going.  
16 So, we're not -- we're not intending to -- to discuss  
17 the merits or otherwise of that prefer -- preferred  
18 development plan.

19 I have some questions before we adjourn  
20 and just really -- just again, information. I'm  
21 looking at Tab 8, page 70 of the -- of the book of  
22 documents. And specifically, Mr. Miles talked about  
23 the significance of this table and mentioned that this  
24 was the document that -- that drives the IFF, the  
25 values that show up in the IFF on the revenue side.

1 Did I get that right?

2 MR. TERRY MILES: It's the -- I mean,  
3 the quantities in this table are what drive -- what --  
4 what come out of the evaluation, the subsequent  
5 revenues and that associated with these -- with these  
6 values are what ends up in the -- in the --

7 THE CHAIRPERSON: Okay, and now that  
8 would be true as well for the -- the test year over the  
9 year '13/'14, is that right?

10 MR. TERRY MILES: That would be correct  
11 -- that would be correct, yeah.

12 THE CHAIRPERSON: Okay.

13 MR. TERRY MILES: I guess so. Yeah,  
14 that's correct.

15 THE CHAIRPERSON: Now, I guess the  
16 other -- the follow-up question to that is that, I -- I  
17 notice it's the average of all flow conditions. So the  
18 mean -- would the mean be -- would the mean be higher  
19 than the average? In other words, if the mean is  
20 higher in terms of the potential power resources than  
21 the average, it means revenues would -- would  
22 potentially be higher if you were at the mean than the  
23 average. Did I get that right? So it's a relatively  
24 conservative estimate?

25 MR. DAVID CORMIE: The mean and the

1 median, or the mean and the average are the same. The  
2 -- the --

3 THE CHAIRPERSON: I misspoke. I meant  
4 the median.

5 MR. DAVID CORMIE: The average is -- is  
6 below the median, it's -- it's -- the average is at the  
7 40 percentile approximately because it's skewed.

8 THE CHAIRPERSON: Right.

9 MR. DAVID CORMIE: So --

10 THE CHAIRPERSON: Okay, so it's skewed  
11 towards the --

12 MR. DAVID CORMIE: The -- to the low  
13 side, to the --

14 THE CHAIRPERSON: So we're getting a  
15 conservative estimate or conservative picture.

16 MR. DAVID CORMIE: But one (1) -- on a  
17 probability basis, yes. But on an expected value  
18 basis, the cost of drought can tend to weight the --  
19 the cost side because the upside of the -- of the water  
20 flow is cut off because our generating stations can't  
21 capture all the water, you know, the upside of the  
22 water flows.

23 THE CHAIRPERSON: So, from a revenue  
24 perspective, looking at -- looking at this '13/'14 in  
25 particular, even though you know that -- that

1 conditions are promising from a water perspective right  
2 now, you -- you wouldn't be adjusting the nearby IFF  
3 values to reflect -- at least, nearby net income values  
4 to reflect what seem to be promising conditions right  
5 now?

6 MR. DAVID CORMIE: We -- we -- the  
7 nearby years we assume median inflows, not that there's  
8 no -- and in median inflows there's no cost of drought  
9 associated with that. So the first year of the IFF is  
10 -- is current conditions. The second year of the IFF  
11 is based on median inflows. The third year and  
12 subsequent years are the average of all flows, which  
13 tend to -- it assumes that -- it assumes that there's  
14 some thermal costs in -- in that year and there may not  
15 be any.

16

17 (BRIEF PAUSE)

18

19 MR. LARRY SOLDIER: In relation to the  
20 Bipole 3, if you build Keeyask, can you -- do you only  
21 need Bipole 1 and 2? And if you build Conawapa do you  
22 need to build Bipole 3, or what is the relationship?

23 MR. DAVID CORMIE: Bipole 3 is needed  
24 to improve the reliability of the existing transmission  
25 for the existing generating stations. Whether we build

1 Keeyask or Conawapa or not, we need to build Bipole 3,  
2 because we don't have the reliability in the existing  
3 transmission system.

4                   Having built Bipole 3 there is enough  
5 capacity there to bring additional energy from Keeyask  
6 and Conawapa on Bi -- on -- on Bipole 3. But Bipole 3  
7 is not being built for Keeyask and Conawapa, but it  
8 makes building Keeyask and Conawapa possible.

9                   THE CHAIRPERSON: I think we're ready  
10 to adjourn. We -- does fifty (50) minutes do it or do  
11 we need to -- to go a full hour? I know you have some  
12 reading material for us.

13                   MS. PATTI RAMAGE: Unfortunately, I  
14 perhaps underestimated the volume of the material.  
15 It's over in our print services still. There -- it's  
16 actually, just to give you an idea of the pre-asks, I  
17 understand it's being put into a 3-inch binder to be  
18 able to respond to it. So I think it's just taking a  
19 little longer to run than I may -- I've been a little  
20 overoptimistic this morning that it would be ready.

21                   THE CHAIRPERSON: So I suggest we  
22 adjourn and resume proceedings at one o'clock.

23

24 --- Upon recessing at 12:06 p.m.

25 --- Upon resuming at 1:00 p.m.

1 THE CHAIRPERSON: Are we ready to  
2 resume, or should we wait for Mr. Rainkie?

3 MS. PATTI RAMAGE: No, we should just  
4 proceed.

5 THE CHAIRPERSON: Ready to -- okay.

6 MR. BOB PETERS: Thank you, Mr.  
7 Chairman, Board members.

8

9 CONTINUED BY MR. BOB PETERS:

10 MR. BOB PETERS: I'd like to turn with  
11 this panel and their assistance to talk, still under  
12 extra-provincial revenues, but dependable versus  
13 opportunity sales. And we have I think a good head-  
14 start on it, but we could perhaps turn to Board  
15 counsel's book of documents to Tab 8 and page 74.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Mr. Cormie and Mr.  
20 Miles, I'll start with you. The -- the document on  
21 page 74 of Board counsel's book of documents, which is  
22 PUB Exhibit 14, contains a list of what's called total  
23 sales. These are the total export sales, both into  
24 Canada and the United States?

25 MR. DAVID CORMIE: That's correct.

1 MR. BOB PETERS: And when we say  
2 "Canada", would it be simply our interconnected sales  
3 to Ontario and Saskatchewan in accordance with the  
4 inter-ties that were in your presentation through Ms.  
5 Ramage, Mr. Cormie?

6 MR. DAVID CORMIE: And Alberta.

7 MR. BOB PETERS: I was going to ask you  
8 about that. Is -- we -- Manitoba Hydro has access to  
9 some Alberta sales by wheeling it through Saskatchewan?

10 MR. DAVID CORMIE: Yes, we -- we  
11 purchase transmission service across Saskatchewan and  
12 sell into the Alberta market.

13 MR. BOB PETERS: Are you still  
14 restricted by the transmission interconnection with --  
15 with Saskatchewan?

16 MR. DAVID CORMIE: There's very limited  
17 transmission available across Saskatchewan, so that is  
18 a -- a barrier. And just to put those sales in  
19 context, it's a -- it's a very small fraction of our  
20 total revenues.

21 MR. BOB PETERS: I was going to get  
22 there, but in -- in terms -- let's just start with  
23 Saskatchewan, Ontario, and Alberta. Amongst the three  
24 (3) of those, which one is getting the bulk of the  
25 attention through Manitoba Hydro's exports?

1 MR. DAVID CORMIE: The -- the --  
2 currently, it will be Ontario, with Saskatchewan coming  
3 in behind.

4 MR. BOB PETERS: We'll get to some  
5 volumes perhaps shortly. In this chart on page --

6 MR. DAVID CORMIE: Mr. Peters, just to  
7 clarify --

8 MR. BOB PETERS: Yes, sir?

9 MR. DAVID CORMIE: -- those are the  
10 markets, but there are market participants beyond  
11 those, but those aren't necessarily the customers.  
12 There are other customers who -- when we talk about  
13 Saskatchewan, there's other -- other market  
14 participants who buy from Manitoba Hydro at the  
15 Saskatchewan border, and it's not necessarily  
16 SaskPower. So, you know, I think we -- there are other  
17 customers to Manitoba Hydro beyond just those -- those  
18 three (3), but that's where the electricity is going.

19 MR. BOB PETERS: Thank -- thank you,  
20 Mr. Cormie. I'll try to digest that.

21 And, Mr. Miles, I think I have to  
22 apologize to you and your counsel. At the -- at -- at  
23 the end of your testimony this morning, I think I had  
24 you jumping between Power Resource Plan 2011 and Power  
25 Resource Plan 2012, and, depending on which one you



1 were in the second and third years of the IFF would be  
2 calculated differently.

3 And did you want an opportunity just to  
4 try to run through that, or would I -- should I come  
5 back at a later time?

6

7 (BRIEF PAUSE)

8

9 MR. DARREN RAINKIE: Mr. Peters, I'm  
10 hesitant to jump in here because I wasn't really part  
11 of the fray, but there was one (1) thing that I wasn't  
12 sure that was clear right towards the end in that -- in  
13 that IFF12 for the second test year, 2013/'14 year, is  
14 based on median flows, and that's -- that's what I kind  
15 of left with a puzzled look on my face. I wasn't sure  
16 if that was clear in the exchange between Mr. Cormie  
17 and -- and the Chairman.

18 So there was a difference in -- between  
19 IFF11-2 and IFF12. Now, IFF12 is the most current  
20 information, so '13/'14 would be based on median flows  
21 in that forecast. I think it's important that that's -  
22 - that's clear. But I'm not sure if that's what you're  
23 eluding to, Mr. Peters, because that's what I took  
24 away, but...

25 MR. BOB PETERS: All right. Well,

1 thank you. If it was unclear it is now clear. And the  
2 reason you mention that, Mr. Rainkie, is that in IFF12  
3 the '13/'14 test year that we're under is actually the  
4 second year out of the forecast as opposed to the third  
5 year out under the 2011-2IFF.

6 MR. DARREN RAINKIE: I think that's  
7 right, Mr. Peters. I'm starting to loose what 11-02  
8 was based on. I think in -- in IFF11-2 that the  
9 2011/'12 year was pretty much actual as we discussed  
10 the other day. The 2012/'13 year was based on expected  
11 flows, if I remember correctly. And the 2013/'14 year  
12 was based on average flows. And I hope I'm -- I'm  
13 correct here.

14 Now, 2013/'14 and IFF12 will be based on  
15 median flows, and we're back to our normal process of  
16 doing the IFF in November. So the second year, as you  
17 indicate, is a -- is a median flow year. Hopefully  
18 that's clear.

19 MR. BOB PETERS: I offered you the day  
20 off. Thank you for coming, Mr. Rainkie.

21 MR. DARREN RAINKIE: Mr. Peters, you  
22 know, no matter what position I've had in the last  
23 twenty (20) years I've always spent time talking with  
24 you about revenue requirements, so it wouldn't be the  
25 same.

1 MR. BOB PETERS: 'Tis the season, and  
2 thank you, Mr. Rainkie.

3 I want to get back to the dependable  
4 export sales, or the total sales that we are talking  
5 about in terms of exports. And we've had Mr. Cormie  
6 explain that in addition -- in addition to our  
7 immediate neighbours, Ontario and Saskatchewan,  
8 Manitoba Hydro also transacts business with  
9 counterparties in the province of Alberta. And I also  
10 took, Mr. Cormie, that some of the counterparties that  
11 Manitoba Hydro transacts with in Saskatchewan are --  
12 are in addition to SaskPower?

13 MR. DAVID CORMIE: That's correct.

14 MR. BOB PETERS: And I take it from  
15 those answers that -- that you've given, Mr. Cormie,  
16 that the province of Saskatchewan does allow parties to  
17 make wholesale energy purposes other than the SaskPower  
18 utility?

19 MR. DAVID CORMIE: Yes, they have an  
20 open access tariff.

21 MR. BOB PETERS: Well, it's not just so  
22 much -- Manitoba Hydro has an open access tariff in  
23 Manitoba, as well?

24 MR. DAVID CORMIE: That's correct.

25 MR. BOB PETERS: But in Manitoba no one

1 is permitted to sell retain other than Manitoba Hydro.

2 Have I got that right?

3 MR. DAVID CORMIE: That's correct.

4 MR. BOB PETERS: Are you suggesting in  
5 your answers -- and you may not know the answer to this  
6 -- but does Saskatchewan allow retail sales of energy  
7 other than by the utility?

8 MR. DAVID CORMIE: I -- I don't know  
9 that, Mr. Peters. But I -- there -- a third party  
10 could buy from Manitoba Hydro at the  
11 Manitoba/Saskatchewan border. They could take service  
12 across Saskatchewan and they could then take it into  
13 Alberta. Or they could buy power from Manitoba Hydro  
14 at the Saskatchewan border, and then wheel it back  
15 through Manitoba into the United States.

16 So because there's open access tariff --  
17 open access in Manitoba and in Saskatchewan, the  
18 purchaser at the Saskatchewan border may be bringing  
19 the energy back into Manitoba and taking it to another  
20 market, or they may be taking it through Saskatchewan  
21 into Alberta.

22 MR. BOB PETERS: Okay. And do you know  
23 if Ontario allows the same type of arrangement where a  
24 third party could purchase at the Ontario/Manitoba  
25 border and either wheel it into Ontario for use, or

1 sale, or into the United States, or back into Manitoba?

2 MR. DAVID CORMIE: No, the Ontario  
3 market doesn't work that way, Mr. Peters. It's a --  
4 it's an essentially dispatched market and you don't  
5 arrange for transmission service in Ontario, and most  
6 transactions in Ontario are -- are just financial;  
7 there is no physical delivery involved.

8 THE CHAIRPERSON: Could you explain  
9 that one? You kind of lost me there. And so most  
10 transactions in Ontario are financial, they're not  
11 physical. Could you explain that, please?

12 MR. DAVID CORMIE: The -- the  
13 independent electricity system operator in Ontario  
14 manages the -- the actual physical supply of  
15 electricity, and there's no -- the -- a customer in --  
16 in Ontario doesn't contract with a supplier outside of  
17 Ontario and -- and bring their -- bring electricity in  
18 from Manitoba to serve the Ontario load. They buy --  
19 you by from the market.

20 Manitoba Hydro participates in the  
21 market and there's -- and -- and the actual physical  
22 flow across the border is not something that either  
23 market participant is involved in, it's controlled by  
24 the -- by the IESO. Whereas, when we're talking about  
25 the transactions to Alberta, Manitoba Hydro will buy

1 transmission service; we'll supply the electricity;  
2 we'll physically deliver the electrons into Alberta,  
3 and you can trac -- the contract path and the physical  
4 path are -- are exactly the same.

5                   In Ontario it's all about just  
6 exchanging money and taking risk on the -- on the  
7 price. The physical delivery is -- is whatever the  
8 market operator wants to do at the time. And an  
9 example, we get pay -- we can get paid for electricity  
10 that never actually goes to delivery in Ontario. Just  
11 -- just some of the market rules are such that they  
12 deem that we've made delivery, but they -- they don't -  
13 - they don't take delivery.

14                   And so it's -- Ontario is -- it's --  
15 it's not a good example of bilateral transactions.

16                   MR. RAYMOND LAFOND: I'm sorry, I'd  
17 like you to expand a wee about the -- I mean, deemed  
18 delivery? They don't get it, but they pay for it?

19                   MR. DAVID CORMIE: Yes, the Ontario  
20 market is -- is one (1) where they would -- and -- and  
21 the rules are -- are -- have just been changed, but for  
22 -- since the market opened Ontario would take offers  
23 from all their generators including those external, and  
24 they would create their offer curve, or they're --  
25 they're -- they'd -- they'd sort those offers in order

1 and that would determine the market clearing price.

2                   But then the -- they -- they may have --  
3 those taking deliveries from Manitoba may result in a -  
4 - in a generator in Ontario being shut down, so they  
5 would say to Manitoba Hydro, Please -- thank you for  
6 your offer, we'll pay you for it, but please keep your  
7 electricity. And -- because we -- we -- the benefit of  
8 us participating in the market lowers the price of  
9 electricity and they're willing to keep us whole if  
10 they choose not -- if they choose not to take delivery,  
11 rather they'd take delivery from a local supplier.

12                   And there's a -- a way of keeping  
13 Manitoba Hydro whole as if we had made delivery. We --  
14 we still -- we still are capable of -- of keeping our  
15 profits, but we never -- we -- we'd never take deliver  
16 -- we never actually send them a megawatt.

17                   THE CHAIRPERSON:    So your ability to  
18 transact powers to Saskatchewan -- or via Saskatchewan  
19 to Alberta is limited by the inter-ties that are  
20 available in that -- in that province?

21                   MR. DAVID CORMIE:    There's limitations  
22 on the inter-ties into Saskatchewan and there's the  
23 limitations within Saskatchewan to move power across  
24 Saskatchewan.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Mr. Cormie, if we  
3 follow up on the Chairman and Board member Lafond's  
4 questions, at Tab 72 of the book of documents is the  
5 average price calculations that underpin IFF11-2 and I  
6 recall Mr. Rainkie reminding the Board yesterday that  
7 this is an output document, not an input document, just  
8 to put it in that context.

9 You have that, sir?

10 MR. DAVID CORMIE: I do.

11 MR. BOB PETERS: And perhaps it would  
12 also assist the Board if they could locate Manitoba  
13 Hydro's Exhibit 17. Manitoba Hydro Exhibit 17 was a  
14 document provided by Ms. Ramage yesterday that  
15 contained average unit revenue cost calculations for  
16 IFF12.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: And, Mr. Cormie, I  
21 prefer to work off of page 72 out of the book of  
22 documents, but if you feel it's important to update the  
23 Board on the latest material, please do so.

24 To help quantify the exports that you've  
25 been talking to the Chairman and the Board members



1 about respecting sales in Canada, I note on the top of  
2 page 72, in the left-hand column, about the third line  
3 down is, "Firm and Opportunity Export Sales to Canada".

4 Have you located that, sir?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: And I would just  
7 indicate for the Board members edification, they may  
8 have an enlarged copy of page 72 somewhere in the  
9 materials that have been -- been provided.

10 But we're looking then, Mr. Cormie, at  
11 the firm and opportunity export sales to Canada, and we  
12 go across -- let's start with the first test here of  
13 2012/'13. It appears that there's about 915 gigawatt  
14 hours of energy that have been exported into Canada,  
15 right --

16 MR. DAVID CORMIE: Yes.

17 MR. BOB PETERS: -- extraprovincial.

18 Of that 915 gigawatt hours, are you able to provide the  
19 Board with quantification as to approximately how much  
20 is Ontario, how much is Saskatchewan, and how much  
21 would be into Alberta?

22

23 (BRIEF PAUSE)

24

25 MR. DAVID CORMIE: We don't usually

1 break it down, Mr. Peters, but I can tell you that the  
2 majority is to Saskatchewan of that amount.

3 MR. BOB PETERS: I had understood the  
4 majority was the Ontario, or did I -- am I of a  
5 misunderstanding?

6 MR. DAVID CORMIE: No, for -- you --  
7 you asked about '12/'13, nine-fifteen (915)? And --

8 MR. BOB PETERS: All right --

9 MR. DAVID CORMIE: -- the majority is to  
10 Saskatchewan.

11 MR. BOB PETERS: All right. And in  
12 that particular year, your quantification of Ontario at  
13 the top of the pack, was added just on a -- on a  
14 average basis?

15 MR. DAVID CORMIE: Well, that's been  
16 our recent history.

17 MR. BOB PETERS: Okay,

18 MR. DAVID CORMIE: And been quite a bit  
19 more interest in the last while from Saskatchewan, and  
20 so -- and -- and because of the change in market rules  
21 in Ontario where they've decided that they won't pay us  
22 for not delivering, we're seeing a shift in the -- in  
23 Canadian activity to the west rather than to the east.

24 MR. BOB PETERS: And while you don't  
25 normally track it that way, if your number -- if you

1 said the vast majority, you're talking 800 gigawatt  
2 hours of that is into Ontario and the balance between  
3 the other western provinces?

4

5 (BRIEF PAUSE)

6

7 MR. DAVID CORMIE: I think it's about  
8 60 percent to Saskatchewan, Mr. Peters.

9 MR. BOB PETERS: And you'll let me  
10 assume that 20 percent to Ontario and 20 percent  
11 through Ontar -- Alberta?

12 MR. DAVID CORMIE: Don't assume  
13 anything for Alberta.

14 MR. BOB PETERS: All right.

15 MR. DAVID CORMIE: There will be some,  
16 but it's not -- it's not material.

17 MR. BOB PETERS: All right. So that's  
18 as far as I think I'm going to push you so thank you  
19 for -- for your cooperation on that.

20 The -- the line below that talks about  
21 firm and opportunity sales into the United States, on  
22 page 72 of Board counsel's book of documents, Tab 8,  
23 and that will -- that shows, you know, 6,337 gigawatt  
24 hours in '12/'13, into the United States, correct?

25 MR. DAVID CORMIE: Yes.

1 MR. BOB PETERS: And so there's the  
2 order of magnitude that you were talking to the Board  
3 about in terms of how much was in Canada, how much is  
4 to the -- to the States --

5 MR. DAVID CORMIE: That's correct.

6 MR. BOB PETERS: -- and the relative  
7 positions between those lines will provide the Board  
8 with some indication of that.

9 MR. DAVID CORMIE: That's correct.

10 MR. BOB PETERS: All right, turning  
11 back to my page 74, at the same tab, 8 --

12 MR. RAYMOND LAFOND: Mr. Peters, before  
13 we turn --

14 MR. BOB PETERS: Yes? Yes, sir?

15 MR. RAYMOND LAFOND: -- back, unless  
16 you plan to come back to this page, why does the -- why  
17 does the firm and opportunity export sales to Canada,  
18 decrease from nine-fifteen (915) to the low -- to the  
19 high five hundreds in the following few years, while it  
20 was close to nine hundred (900) for the previous four  
21 (4) years?

22

23 (BRIEF PAUSE)

24

25 MR. DAVID CORMIE: There's -- there's

1 two (2) factors there, Mr. Lafond. The -- one (1) is  
2 we have some short-term contracts with Saskatchewan  
3 that will flow -- go into that year, that -- that, at  
4 the time of preparation, we had an indication that we  
5 were going to continue them on into the subsequent  
6 year. And the second factor is that the -- the  
7 following year, we moved from the operating time  
8 horizon into the planning time horizon, where we use a  
9 -- a market model that recognizes Canadian activity in  
10 -- not in the detail that -- that is represented in the  
11 -- in the first two (2) years. So there's different  
12 assumptions about how much of the surplus will go into  
13 -- to the Canadian markets versus the US markets.

14                   But, ultimately, that's the combined  
15 amount of electricity, and we will move that  
16 electricity to wherever the price is -- is the highest.  
17 And so we're -- we're showing that the number goes down  
18 to five eighty-nine (589) because there's a more  
19 lucrative market in the US in that year, and -- and  
20 it's choose -- the model is choosing to go to the  
21 market that has the highest price, and there's just a -  
22 - there'll be a shift in the destination. The revenue  
23 would probably make no difference.

24                   MR. RAYMOND LAFOND:     And for both these  
25 figures, nine fifteen (915) and six thousand three

1 thirty-seven (6,337), the decrease -- well, the six  
2 three three seven (6,337) -- the decrease from the  
3 previous year is mostly prices rather than volume? And  
4 next year for Saskatchewan and other Canadian  
5 provinces, it's also mostly prices rather than volume?

6 MR. DAVID CORMIE: We're -- we're  
7 looking at -- that's -- that's all the volume effect,  
8 and it's based around the assumption of water supply  
9 and -- and the -- and the effect of the increasing  
10 Manitoba load. So if Manitoba load is going up,  
11 there's less surplus.

12 And -- and in the -- in the first year  
13 of the forecast '11/'12, that's rec -- reflects current  
14 conditions, and '12/'13 would reflect the median flow  
15 condition, and '13/'14 would -- would represent the  
16 average of all flow conditions. So there's the varying  
17 flow conditions occurring over time there, and -- and  
18 they're producing different amounts of surplus.

19 MR. RAYMOND LAFOND: So if I combine  
20 both numbers, Canadian and US exports, and move from  
21 2011/'12 down to 2013/'14, what I'm hearing is that the  
22 decrease is mostly due to volume rather than prices?

23 MR. DAVID CORMIE: Yes. We are --  
24 we're -- we're a price-taker, and -- and it's  
25 attractive regardless of, you know, if -- whether it's

1 twenty dollars (\$20) or thirty-five dollars (\$35)  
2 that's coming from hydro, it's an attractive sale.

3 MR. RAYMOND LAFOND: I'm not sure that  
4 was my question -- the answer to my -- my question was  
5 in regards to the decrease in these numbers, which is  
6 substantial; is the majority of the decrease due to  
7 decreased volumes or decreased prices? And I know  
8 there's a factor --

9 MR. DAVID CORMIE: It's -- it's all  
10 volume --

11 MR. RAYMOND LAFOND: -- of both, but --

12 MR. DAVID CORMIE: It's all volume.

13 MR. RAYMOND LAFOND: It's all volume.

14 Thank you.

15

16 CONTINUED BY MR. BOB PETERS:

17 MR. BOB PETERS: And, Mr. Cormie, it's  
18 all volume because the IFF that you prepare that --  
19 that's -- from which this information was derived  
20 assumes lower volumes in the third year out of the IFF,  
21 as opposed to the second year, correct?

22 MR. DAVID CORMIE: Yeah. In the third  
23 year, that's the average of -- of the surpluses under -  
24 - for each -- for the low-flow cases.

25 MR. BOB PETERS: Right. And I -- I'm

1 not sure I fully follow, but you and the Chairman were  
2 talking about that before lunch, and you -- you  
3 indicated that the average flow was less than the  
4 median flow for the Corporation, if I remember  
5 correctly.

6 MR. DAVID CORMIE: That's correct.

7 MR. BOB PETERS: And then you went on  
8 to say that the average flow was in the 40th percent --  
9 or the 40th percentile, or have I -- am I making that  
10 up?

11 MR. DAVID CORMIE: It's -- it's around  
12 there, yeah.

13 MR. BOB PETERS: And -- and where do --  
14 where would the Board find the -- the median flows?  
15 What -- what percentile would that be, approximately?

16 MR. DAVID CORMIE: Well, the median  
17 flow will be the 50 percentile. Yeah.

18 MR. BOB PETERS: All right. So...

19

20 (BRIEF PAUSE)

21

22 MR. BOB PETERS: Thank you. Back to...

23 THE CHAIRPERSON: But that would  
24 explain the stab -- the stability. Like, I'm looking  
25 at the total demand volumes going out towards 1920. I



1 mean, the -- that would explain the fact they're using  
2 imme -- average values would explain the relative  
3 stability of that -- that number, right?

4 I mean, we -- we -- it's not changing --  
5 we would deal thirty-three (33) people all along the  
6 line. The only thing that's changing is, is just  
7 variations within the components of that -- that  
8 summary -- of that total. So -- and -- and those are  
9 value judgments, I guess, that go into that --

10 MR. DAVID CORMIE: That's correct.

11 THE CHAIRPERSON: Yeah.

12 MR. DAVID CORMIE: If -- if -- as long  
13 as we don't change the generation capability of the  
14 plant, and the -- and we're -- and the river flows are  
15 the same, there should be lots of stability in that  
16 total demand volume. It's just being shifted from --  
17 if it's not needed for domestic load it will go to the  
18 export market, and then whether it goes to Canada or  
19 the US it's -- it's a matter of -- of where we think  
20 the prices are favourable for -- in particular times in  
21 the year.

22 MR. RAYMOND LAFOND: Mr. Cormie, I'm  
23 sorry but I -- I think I need to get back to my  
24 previous question. When -- when we go from 2007/2008  
25 to 2011/'12 there are one (1), two (2) -- there are six

1 (6) years of data there. It's always well above 10,000  
2 gigawatt hours per year, and the following years we  
3 fall around -- to -- to around seven thousand (7,000).  
4 That's a decrease of well over 30 percent, and it's  
5 consistent over all the pre -- the following years.

6           If it's all volumes that would indicate  
7 to me that we've had much -- the volume of water flows  
8 and -- and therefore generation thereby has been  
9 terrific for the last five (5) years, as opposed to  
10 what we're forecasting for the next five (5) years.

11           MR. DAVID CORMIE: That's correct, Mr.  
12 Lafond. Remember, and I -- I -- when I was going  
13 through the presentation of the waters I indicated for  
14 the last nine (9) years water conditions have been  
15 average, or they were -- they were average only in one  
16 (1) year and above average for the other eight (8).  
17 And as a result, our hydraulic generation has been  
18 above average for the last nine (9) years.

19           And -- you know, so we've been very  
20 fortunate. And -- and that's reflected in these actual  
21 surpluses that are available to go to the export  
22 market. And then once you get out into the future and  
23 you look at say 2013/'14, when you have around 7,000  
24 gigawatt hours because we've brought Wuskwatim in -- in  
25 line, so you -- Wuskwatim is boosting up the surplus a

1 little bit, but -- but now you're down in the 7,000  
2 gigawatt hour range rather than being in the -- in the  
3 10,400 or 10,500 gigawatt range that we experienced in  
4 the actuals back to 2007/'08.

5                   So, yes, we've -- we've been in an  
6 unprecedented period of high water, and when you look  
7 at the history you wonder how long that's going to  
8 sustain itself.

9                   MR. RAYMOND LAFOND: Thank you. And --  
10 and I guess that explains, to a large extent, the risk  
11 factor in regards to drought, or -- or low water lev --  
12 flows. Now, can I also assume that these were very  
13 good years, the previous five (5) years? If ever we  
14 had five (5) bad years these numbers would -- would go  
15 down by 30 or 40 or 50 percent?

16                   MR. DAVID CORMIE: Yes. And if -- if  
17 not more. The five (5) drought years of the --  
18 starting in 1987 going to 1992 was the drought years  
19 that Manitoba Hydro has quantified as the cost of  
20 drought. I think it's one (1) -- is it \$1.6 billion?

21                   So a portion -- a portion of that -- the  
22 cost of drought is the lost export sales, the revenue  
23 that we have built into the forecast because of  
24 favourable -- or of average water conditions, and so  
25 you lose those sales. And then in addition to that,

1 you have the costs associated with having to buy  
2 replacement energy, so you lose the exports and you  
3 have then increased costs because of purchased power  
4 and thermal-generation.

5 MR. RAYMOND LAFOND: Thank you very  
6 much.

7

8 CONTINUED BY MR. BOB PETERS:

9 MR. BOB PETERS: And, Mr. Cormie, and -  
10 - and, perhaps, Mr. Warden and Rainkie, when the Board  
11 looked at the previous year's history on Manitoba  
12 Hydro's IFF forecasts for different years compared to  
13 actuals, as I think was contained back in Tab 2 or 4 of  
14 the Board counsel book of documents.

15 The forecast compared to the actual  
16 would show either additional export revenues or lower  
17 export revenues, and that would simply be a -- a  
18 function of time elapsing to get current and accurate  
19 data based on the forecast?

20 MR. DARREN RAINKIE: Yes, Mr. Peters, I  
21 would agree with that. Particularly, if you were  
22 looking back to IFF9 which was a number of years ago.

23 MR. BOB PETERS: Yes. And -- and so,  
24 as Board Member Lafond looks forward with -- with page  
25 72 of Board counsel's book of documents, if the water

1 flows are above average, which has been -- I think Mr.  
2 Cormie said for the last nine (9) years, then there  
3 could be expectations of revenues on the IFF higher  
4 than what is presently on there because the water  
5 levels would be higher?

6 MR. VINCE WARDEN: The actuals would be  
7 higher than the forecast for that reason, yes.

8 MR. BOB PETERS: Yes. And we wont know  
9 that until we get to that ac -- that test year?

10 MR. VINCE WARDEN: I'm sorry, you were  
11 referring --

12 MR. BOB PETERS: Well --

13 MR. VINCE WARDEN: -- to the test year  
14 of --

15 MR. BOB PETERS: Well, the Board won't  
16 know for certainty until we -- we get to the actual  
17 year in which the forecast pertains to?

18 MR. VINCE WARDEN: Yes, that's right.  
19 We -- we won't know for sure until we can look  
20 backwards at that. Yes, I -- you're absolutely right.

21 MR. BOB PETERS: But the forward-  
22 looking forecasts are using, depending on how far out  
23 they are, are using statistically derived numbers in  
24 terms of the median and average numbers compared to --  
25 because you don't know what the actuals going to be?

1 MR. VINCE WARDEN: We don't, we only  
2 know what has occurred in history, which is being used  
3 for projecting the future.

4 MR. BOB PETERS: All right. Thank you  
5 for that. I want to keep going with you, Mr. Cormie,  
6 on the page 74 of Board counsel's book of documents,  
7 and under the "dependable sales" third of the chart,  
8 the -- the dependable sales are usually, I think you've  
9 told us, fixed price and usually for defined energy and  
10 capacity amounts?

11 MR. DAVID CORMIE: Yes, the majority of  
12 the energy sold under the dependable-sales contracts is  
13 fixed price. But there are some dependable-sale  
14 contracts that have -- like the diversity contracts  
15 that are market price.

16 MR. BOB PETERS: Right. And I'm -- I'm  
17 understanding your qualifications from this morning,  
18 sir. At least since 2004/'05 on that chart, would the  
19 dependable sales -- would those sales be a hundred  
20 percent to the United States?

21 MR. DAVID CORMIE: Since which year,  
22 Mr. Peters?

23 MR. BOB PETERS: I was picking '04/'05,  
24 Mr. Cormie, but...

25 MR. DAVID CORMIE: I believe that's

1 correct.

2 MR. BOB PETERS: To remind the Board,  
3 these dependable export sales that occurred are coming  
4 out of dependable resources that we reviewed with Mr.  
5 Miles on the power resource plan, correct?

6 MR. DAVID CORMIE: That's correct.

7 MR. BOB PETERS: And would it also be  
8 correct to say that Manitoba Hydro can count on this  
9 revenue year after year after year, so long as the  
10 contract is in existence?

11 MR. DAVID CORMIE: Yes. It's not  
12 subject to water risk, for example. Whereas, the  
13 opportunity sales, if we don't have the water, we don't  
14 have -- this revenue will show up regardless of what it  
15 costs Manitoba Hydro to supply it.

16 MR. BOB PETERS: Right. And we see  
17 Canadian dollars in the middle column and we see the  
18 average price in terms of dollars per megawatt hour,  
19 that may fluctuate based on, as you said, some parts of  
20 the contract may have some market-based pricing in it  
21 and -- and others may be by a fixed negotiated amount?

22 MR. DAVID CORMIE: Yes. And -- and  
23 some contracts -- because it's the average of -- of all  
24 the contracts, some contracts end dur -- have ended  
25 during this period, and they -- so the average will

1 move because a contract is now, no longer, in -- in the  
2 contract. And it -- then because we are expressing  
3 this in terms of Canadian dollars, the exchange rate  
4 effects is showing up here, as well.

5 MR. BOB PETERS: Fair enough. If we  
6 turn over to the middle column, the "opportunity  
7 sales", these again are opportunity sales both to  
8 Canada and the United States?

9 MR. DAVID CORMIE: Yes.

10 MR. BOB PETERS: And this is made from  
11 -- these sales are made from non-dependable Manitoba  
12 Hydro resources?

13 MR. DAVID CORMIE: Yes.

14 MR. BOB PETERS: But some of these  
15 sales could also be made from the surplus -- the  
16 exportable surplus that we saw in the power resource  
17 plan?

18 MR. DAVID CORMIE: That's correct. If  
19 there's unsold dependable energy available in the  
20 system that's not sold, then it -- then it's available  
21 to sell on a -- on an opportunity basis.

22 MR. BOB PETERS: Try to get the highest  
23 price for it?

24 MR. DAVID CORMIE: Yes, but you'll  
25 notice, Mr. Peters, that in the dependable supply



1 there's -- there is a -- a large portion of the  
2 dependable supply is thermal resources. And so to the  
3 extent that there's a -- a surplus shown in that  
4 exportable surplus line from dependable resources, that  
5 surplus is mainly thermal. And Manitoba Hydro does not  
6 have any competitive thermal resources.

7                   So generally the opportunity sales are  
8 made from surplus hydro sales, not from surplus thermal  
9 resources. No one wants to buy the power off our  
10 combustion turbines, it's too expensive.

11                   MR. BOB PETERS: The opportunity sales  
12 that are in the middle of page 74 at Tab 8, Mr. Cormie,  
13 they generally have no defined price in advance is what  
14 you're telling the Board? They're sold at a market  
15 price?

16                   MR. DAVID CORMIE: Yes, they're --  
17 they're market-based, but they may be sold in advance  
18 at a -- at a market -- at a for -- as a forward  
19 contract. So we may choose in -- let's say we're in --  
20 in Dec -- in December now, we may choose to sell for  
21 March delivery at a forward price. And Manitoba Hydro  
22 would entertain that transaction if that forward price  
23 looked attractive compared to what we forecast for the  
24 spot market price at that time.

25                   And so we would sign a contract, fix the

1 price, and -- and that would end up showing up as a --  
2 a term sale in the opportunity, that sales  
3 classification.

4 MR. BOB PETERS: And Manitoba Hydro  
5 would have to satisfy itself that if it did forward-  
6 price some energy for sale, it has that energy in the  
7 system? It has it in your reservoir storage or it's  
8 confident it has it?

9 MR. DAVID CORMIE: Yes. All our -- all  
10 our sales are backed by system resources.

11 MR. BOB PETERS: What you're telling  
12 the Board is you won't speculate and attempt to  
13 purchase energy to meet a forward sale?

14 MR. DAVID CORMIE: Not for the  
15 opportunity sales or the dependable sales, no.

16 MR. BOB PETERS: The opportunity sales  
17 that are made are either of a -- sold in peak hours or  
18 sold in off-peak hours.

19 Would that be correct, Mr. Cormie?

20 MR. DAVID CORMIE: Yes, or it could be  
21 a -- a twenty-four (24) hour sale, Mr. Peters, it's the  
22 combination of both.

23

24

25

(BRIEF PAUSE)

1 MR. BOB PETERS: Just thinking of a --  
2 the second-last question I asked you, Mr. Cormie, is it  
3 not possible that Manitoba Hydro would purchase energy  
4 and sell it on the opportunity market?

5 MR. DAVID CORMIE: Yes, the -- the  
6 energy may come from the market, but Manitoba Hydro has  
7 to have the capacity, if that purchase is not there, to  
8 deliv -- to deliver the power. So we need a -- we need  
9 a -- we need to have the capacity resources in the  
10 system. We have to be able to point to a generator  
11 even though the electricity may not ultimately come  
12 from that generator it could be purchased, because it's  
13 cheaper to purchase it than to deliver it off the  
14 generator.

15 MR. BOB PETERS: All right. So your  
16 thermal resources still come into play in that  
17 calculation?

18 MR. DAVID CORMIE: Absolutely.

19 MR. BOB PETERS: All right. So if  
20 worst-case scenario and you had to, you would use your  
21 thermal resources, but that's only if the market had --  
22 had made those attractive?

23 MR. DAVID CORMIE: That's correct.

24 MR. BOB PETERS: On the right-hand side  
25 of page 74 we have "System Merchant Sales," Mr. Cormie.

1 These are sales where no Manitoba assets are used to  
2 gain the revenue.

3 Would that be correct?

4 MR. DAVID CORMIE: Yes, these are sales  
5 where Manitoba Hydro is -- is selling into the Ontario  
6 market, Manitoba Hydro is selling into the MISO market,  
7 we're market participants in both markets and we see  
8 there's an opportunity to buy out of one (1) of those  
9 markets and sell into the other market.

10 Generally, they're -- they're -- they  
11 occur in the same day that the transaction is made.  
12 They're not forward sales, they're essentially real-  
13 time sales. And we're -- we're buying out of one (1)  
14 market and selling into -- into the other market to  
15 capture the price spread.

16 Some days the powers may flow north into  
17 Ontario from MISO, and some days it may flow south from  
18 Ontario back into MISO. So they -- they can go either  
19 way. And we enter into those transactions because  
20 we're already present in those markets.

21 MR. BOB PETERS: Mr. Cormie, thank you  
22 for that. What I understood from your answer is that  
23 Manitoba Hydro will purchase energy in the United  
24 States and then resell that energy into Ontario. That  
25 would be an example of a merchant transaction?

1 MR. DAVID CORMIE: Yes.

2 MR. BOB PETERS: Did I also understand  
3 that you would -- would you ever go the other way?  
4 Would you ever buy it in Ontario and sell it into MISO?

5

6 (BRIEF PAUSE)

7

8 MR. DAVID CORMIE: Yes, in the same way  
9 we would buy out of Ontario at the Manitoba-Ontario  
10 border and sell it through Manitoba into the MISO  
11 through the Manitoba MISO interface. So the arbitrage  
12 works both ways.

13 MR. BOB PETERS: And that's what these  
14 are, these are arbitrage opportunities?

15 MR. DAVID CORMIE: That's correct.

16 MR. BOB PETERS: And it's also -- these  
17 -- the -- the dollars listed above those would be gross  
18 revenues, not net revenues, would that be correct, Mr.  
19 Rainkie -- sorry, Mr. Cormie?

20 MR. DAVID CORMIE: Yes. Those -- those  
21 aren't the -- those aren't the profits. Those are the  
22 sale revenues. There -- there's costs associated with  
23 those.

24 MR. BOB PETERS: And the costs  
25 generally are the associated power purchases, or fuel

1 that's purchased to transact those merchant sales.

2 MR. DAVID CORMIE: Yes. And in  
3 addition to the -- the cost of buying the transmission  
4 service is -- is in addition to the fuel -- to the  
5 energy cost.

6 MR. BOB PETERS: And to transport  
7 electricity that is purchased in the MISO market into  
8 Ontario, Manitoba Hydro has to also purchase  
9 transmission access.

10 MR. DAVID CORMIE: That's correct.

11 MR. BOB PETERS: Does Manitoba Hydro  
12 own any transmission access from the MISO into Ontario?

13

14 (BRIEF PAUSE)

15

16 MR. DAVID CORMIE: We have no long-term  
17 transmission reservations, no.

18 MR. BOB PETERS: In what duration are  
19 the short-term arrangements?

20 MR. DAVID CORMIE: I'm not familiar  
21 with what we actually have on the books right now but  
22 they can be -- they -- we could take a month position.  
23 We -- we would buy it monthly now rather than taking a  
24 five (5) year position.

25 MR. BOB PETERS: And prices are -- are

1 generally better on the dependable sales than they  
2 would be under the merchant sale category with maybe  
3 the odd exception?

4 MR. DAVID CORMIE: Yes, because the --  
5 the -- there's more value in the dependable product  
6 from the customer's perspective, the customer's buying  
7 capacity attributes, price stability, predictability,  
8 all the other things that I talked about the other day.

9 MR. BOB PETERS: And if I turn now to  
10 page 75 at Tab 8 of the book of documents, and we look  
11 at the total US sales, this is an attempt to segment  
12 out just the -- the sales to the United States, Mr.  
13 Cormie?

14 MR. DAVID CORMIE: Yes.

15 MR. BOB PETERS: And if we just stay on  
16 that merchant sales function side, the table looks a  
17 lot less populated. Does that signal to the Board that  
18 most of the merchant sales that are seen on page 74 are  
19 -- are Canadian merchant sales?

20 MR. DAVID CORMIE: Yes, they were  
21 destined to go into Canada.

22 MR. BOB PETERS: Which means that they  
23 would have been -- they could have been purchased in  
24 the United States and then sold into Canada.

25 MR. DAVID CORMIE: Right, whereas this

1 table shows those ones that are purchased in -- in  
2 Ontario and sold into the -- into the US.

3 MR. BOB PETERS: All right. Thank you  
4 for that, sir. While we're still on that table, again  
5 the...

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: These dependable  
10 sales, sir, would the Board be correct in understanding  
11 them to be sales to counterparties at the US-Canada  
12 Border?

13 MR. DAVID CORMIE: Yes, title changes  
14 at the border.

15 MR. BOB PETERS: But it's a dependable  
16 sale which means you -- you didn't sell it into the  
17 MISO market? You sold it to a counterparty?

18 MR. DAVID CORMIE: Yes. They would be  
19 sold on a bilateral basis to a -- to a counterparty,  
20 yes.

21 MR. BOB PETERS: And the -- and if the  
22 title changed at the border, then it would be the  
23 counterparty's responsibility to -- to transmit them to  
24 their destination?

25 MR. DAVID CORMIE: Yes. With the



1 change in title, all risk associated with delivery in  
2 the US is a customer risk.

3 MR. BOB PETERS: And in terms of  
4 Manitoba owning transmission rights to take this  
5 further into the States, that -- there's very little  
6 transmission access that Manitoba owns at this point in  
7 time?

8 MR. DAVID CORMIE: No, Mr. Peters. We  
9 hold 600 megawatts -- I think it's 600 megawatts,  
10 approximately 600 megawatts -- of firm transmission in  
11 the US. We hold the transmission reservations for  
12 that.

13 MR. BOB PETERS: Is that only south --  
14 south going north?

15 MR. DAVID CORMIE: Both ways.

16 MR. BOB PETERS: And that's as a result  
17 of one (1) of your contractual arrangements with --

18 MR. DAVID CORMIE: We --

19 MR. BOB PETERS: -- with a counterparty  
20 on a sale of electricity?

21 MR. DAVID CORMIE: We've been acquiring  
22 US transmission rights over the last few years in order  
23 to ensure market access. So although the title changes  
24 at the border, Manitoba Hydro may still be using its  
25 transmission service to get the -- to get the

1 electricity into Minneapolis.

2                   So the elec -- the -- the transportation  
3 is separate from the -- who owns the electrons, and for  
4 -- we use the -- the transmission service so that when  
5 we're making a market sale it goes to the market on  
6 firm transmission and then it reduces the risk of it  
7 being curtailed.

8                   So there's not a -- not necessarily a  
9 counterparty associated with that, but the title will  
10 change from Manitoba Hydro's name into -- I'm assuming  
11 it's the market, MISO market takes ownership of the  
12 electricity at that point.

13                   MR. BOB PETERS:   And for providing any  
14 transmission in the United States upon Manitoba Hydro's  
15 US transmission rights, the cost of that is netted  
16 against the -- the revenues from any sales?

17                   MR. DAVID CORMIE:   No, it's -- it's --  
18 the revenues are shown as revenues in the IFF, and the  
19 costs are shown as in the costs. So the costs of the  
20 transmission reservations are -- are shown not netted  
21 against the revenues.

22                   MR. BOB PETERS:   All right, but  
23 Manitoba Hydro is paying the cost of transmission?

24                   MR. DAVID CORMIE:   For the point-to-  
25 point transmission, firm transmission that we hold in

1 the United States, yes.

2 MR. BOB PETERS: Just looking over at  
3 the opportunity sales column in the middle of page 75  
4 of Tab 8, Mr. Cormie, the opportunity sales price for  
5 approximately the last seven (7) years is lower than  
6 the fixed price of dependable energy, correct?

7 MR. DAVID CORMIE: That's correct.

8 MR. BOB PETERS: And in terms of  
9 historical matters, would -- would that be the norm?

10 MR. DAVID CORMIE: Yes.

11 MR. BOB PETERS: And how long has there  
12 been a MISO market in existence?

13 MR. DAVID CORMIE: April 1st, 2005.

14 MR. BOB PETERS: And before that, what  
15 was the US market situation?

16 MR. DAVID CORMIE: It was a bilater --  
17 a bilateral market. One (1) thing that -- to note in  
18 comparing those two (2) types of sales, Mr. Peters,  
19 that the dependable sales tend to be the five (5) by  
20 sixteen (16) sales, where the opportunity sales are a -  
21 - are a mix of the five (5) by sixteen (16) sales and  
22 the off-peak sales.

23 So the -- and -- and the off-peak sales  
24 tend to di -- tend to dilute the -- the average price.  
25 And so you could further split down those opportunity

1 sales between the on-peak and the off-peak and -- and  
2 you'd -- you'd see a drop in both recently. But a lot  
3 of the -- the collapse in the average price has been  
4 due to volume effect of having off-peak -- high off-  
5 peak volumes that's -- that's pushing the average down.

6 MR. BOB PETERS: Since you -- Mr.  
7 Cormie, since you raised it, maybe we can take the  
8 Board to page 76 of Tab 8 of Board counsel's book of  
9 documents and just spend a few minutes then on -- on  
10 the off-peak/on-peak opportunity exports.

11

12 (BRIEF PAUSE)

13

14 MR. BOB PETERS: The point you wanted  
15 to make, Mr. Cormie, was that the -- while both of the  
16 prices may be falling in -- in general terms, it's the  
17 off-peak that's fallen the -- the most?

18 MR. DAVID CORMIE: No, I was just --  
19 the point I wanted to make was to compare the  
20 dependable sales, the -- the fifty-five dollar (\$55) --  
21 you should compare those to the on-peak average price,  
22 which is -- you know, although it's fallen  
23 significantly, that's the -- that's the comparison  
24 because you're comparing comparable products there.

25 It's -- it's pretty -- it's -- I don't

1 think it's a fair comparison to compare dependable  
2 rates to off-peak rates, because they're different  
3 hours of delivery. But as you -- as you can see prices  
4 have dropped by -- from, you know, the mid-30s for the  
5 off-peak price five (5) years ago to twenty dollars  
6 (\$20), whereas the on-peak prices have dropped from the  
7 mid-60s to thirty dollars (\$30). So, yeah, I think in  
8 proportional terms the on-peak has price has dropped  
9 more than the off-peak price.

10 MR. BOB PETERS: All right. Then I --  
11 I have your point and thank you.

12 THE CHAIRPERSON: But clearly the  
13 spread between on-peak versus off-peak is narrowing,  
14 not just the prices generally, but the -- the spread,  
15 which is probably as critical -- it's critical for  
16 Manitoba Hydro given your strategy to -- to sell on-  
17 peak and buy back off-peak?

18 MR. DAVID CORMIE: Yes, the -- the on-  
19 peak/off-peak arbitrage opportunities are not nearly as  
20 lucrative now as they were in the past.

21 THE CHAIRPERSON: Yeah.

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: Mr. Cormie, while  
25 we're still on page 76 at Tab 8, book of documents, the

1 -- the peak energy that you talk about, that's the five  
2 (5) days a week, sixteen (16) hours a day, starting at  
3 7:00 in the morning?

4 MR. DAVID CORMIE: Yes. I think, Mr.  
5 Peters, I should have added, it's our ending 7:00. So  
6 it starts at 6:00, ends at seven o'clock, so we call it  
7 our ending 7:00. But the on-peak period starts at -- at  
8 six o'clock in -- in the morning. I wanted to clarify  
9 that from my answer yesterday.

10 MR. BOB PETERS: So it starts at 6:00  
11 a.m. for the next sixteen (16) hours?

12 MR. DAVID CORMIE: That's correct.

13 MR. BOB PETERS: Okay.

14 MR. DAVID CORMIE: And that may not be  
15 when the peak use in Manitoba is, but because we're in  
16 an eastern market -- so you do the hour adjustment for  
17 time, you know, that's where that -- where that  
18 definition came from.

19 MR. BOB PETERS: When -- when the Board  
20 looks at the on-peak average prices, Mr. Cormie, and  
21 then compares then to the dependable contract sales  
22 that you were mentioning, more around the five and a  
23 half (5 1/2) cents a kilowatt hour, the off-peak prices  
24 were higher back in 2008/2009 than the -- than the  
25 contract sales of dependable energy?

1 MR. DAVID CORMIE: Now which year are  
2 you comparing?

3 MR. BOB PETERS: I picked '08/'09.

4 MR. DAVID CORMIE: '08/'09 and you're  
5 comparing the on-peak average price?

6 MR. BOB PETERS: Of -- yeah, seventy-  
7 one dollars and 78 cents (\$71.78) to -- comparing it  
8 over to the chart of information on page 75 --

9 MR. DAVID CORMIE: Yes.

10 MR. BOB PETERS: -- at fifty (50) --  
11 fifty-seven dollars (\$57) or five point seven (5.7)  
12 cents.

13 MR. DAVID CORMIE: Yes, and -- and this  
14 is the -- this is the effect of the -- the term sales.  
15 The spot market sales would not have averaged seventy-  
16 one dollars (\$71). But if you -- I don't know if you  
17 remember that year, Mr. Peters, but oil was soaring in  
18 price, Manitoba Hydro was fortunate enough to enter  
19 into some very lucrative forward contracts through the  
20 fall of 2008, and those contracts carried over all  
21 through the winter.

22 So even though the spot market had  
23 collapsed, we had locked in at extremely high  
24 favourable prices. And so these prices reflect those  
25 forward contracts that we entered into. They don't

1 reflect the spot market price.

2                   And so our customers were trying to  
3 hedge against the risk of that -- the -- the market was  
4 just exploding during the fall of 2008. And -- and  
5 they wanted to lock in and we -- we locked in.

6                   Ultimately, the spot market price  
7 cleared way below that and -- and it's -- and so it --  
8 even though the -- the spot market collapsed in the  
9 fall of 2008, Manitoba Hydro didn't see the effects  
10 until the end of the winter when all those opportunity  
11 contracts that we had sold forward under had -- were --  
12 were over. So we -- we kind of were protected for a --  
13 for a -- a few extra months, but as we went into the  
14 following year we were fully exposed to the spot -- to  
15 the changed market conditions.

16                   MR. BOB PETERS:    And would it be an  
17 expectation going forward that the on peak opportunity  
18 would still be -- will be lower than the dependable  
19 sales' prices?

20                   MR. DAVID CORMIE:    The -- for -- for  
21 spot market and there's day-ahead and real-time energy,  
22 yes.

23                   MR. BOB PETERS:    Whether that's on peak  
24 -- I'm talking specifically on peak.

25                   MR. DAVID CORMIE:    Yes.



1

2

(BRIEF PAUSE)

3

4

THE CHAIRPERSON: Could I go back to  
Table 74 and 75 from the counsel's book of documents.  
And we talked about system merchant sales and I guess I  
was working under the impression that these -- the  
majority of system merchant sales involve US sales  
because you were talking about -- you had firm  
transmission rights. So, what I'm noticing here is  
that the -- the US system merchant sales are actually a  
small part of -- of the overall merchant sales.

13

So when you were talking about firm  
transmission rights, are we talking -- we're not  
talking US market, obviously? We're...

16

MR. DAVID CORMIE: The firm  
transmission rights don't apply to the system merchant  
sales.

19

THE CHAIRPERSON: But the system  
merchant sales are -- are sales involving Canadian  
counterparties?

22

MR. DAVID CORMIE: Yes, that's where  
Manitoba Hydro would buy MI -- energy out of MISO, sell  
it to the IESO in Ontario over for -- the Michigan  
interface between Ontario and Michigan.

1 THE CHAIRPERSON: But that would be  
2 booked then as a Canadian -- as a Canadian sales, as  
3 opposed to a US sale because --

4 MR. DAVID CORMIE: Yes, it's a Canadian  
5 sale because the counterparty who purchased energy  
6 would be the Ontario market.

7 THE CHAIRPERSON: Now, you -- you  
8 mentioned that -- you know, I'm trying to assess the  
9 risks here. I guess the -- you mentioned the fact that  
10 you have tran -- firm transmission rights limits the  
11 risk; you're only using that portion to address the  
12 sales. Are there other risks there?

13 I mean, are you -- what are the risks?  
14 Are you -- I guess, one (1) of the risks would be the -  
15 - the counterparty to whom you're selling doesn't pay  
16 the bill, I guess.

17 MR. DAVID CORMIE: On the merchant  
18 sales?

19 THE CHAIRPERSON: Yes.

20 MR. DAVID CORMIE: Generally, sales are  
21 to the market operator and there's a -- it -- the  
22 credit rating of the market operator is extremely high,  
23 so I don't believe that there's a -- a credit risk  
24 there. There is the risk that -- that Manitoba Hydro  
25 can purchase the energy at the -- at a fixed price

1 based on the expectation that it'll sell at a -- at a  
2 profit. And at the point of actually making the sale,  
3 the -- the -- there's a dip in price and we end up  
4 selling at loss.

5                   And so there are -- there are  
6 transactions where we have lost money, but over 90  
7 percent of the transactions we make money. And if we -  
8 - it's just the nature of that market that's there --  
9 even at the last minute there's some uncertainty in  
10 what the real time price will be that you can achieve.

11                   MR. RAYMOND LAFOND: While we're still  
12 on revenues -- I'm sorry, but I have to go back to page  
13 72 of the book of documents. And I would like to  
14 relate that to the IFF12. And essentially -- and I'll  
15 be coming back with this on different lines on the IFF.

16                   Yesterday when I said there were numbers  
17 but I could not see the justification behind them, I  
18 did go and read the few pages on assumptions. What I  
19 was looking for, and in this instance more  
20 particularly, when you look at -- when I look at the  
21 first line, "the general consumers at approved rates,"  
22 I go down and I do see what the in -- percent increases  
23 are.

24                   Now, I would have liked on the  
25 additional, for instance, to see a few lines, and,

1 namely, one (1) indicating the forecasted volume over  
2 the period and the forecasted increases in prices. I  
3 agree it's not necessarily that simple because you have  
4 opportunity sales versus firm sales.

5                   But -- and the reason for this is, when  
6 I look at page 72 and I look at the volumes, the demand  
7 volumes, for instance for the year 2011 -- I'm sorry,  
8 2012/'13, in terms of sales to the US, and that applies  
9 to Canada also, but just taking the sales to the US,  
10 we're looking at 6.3 megawatts -- gigawatts plus six  
11 hundred and twenty-five (625).

12                   And when I go further to 2019/'20, on  
13 these same two (2) lines, I see a decrease in volumes  
14 of 10 percent. When I go down several lines and I go  
15 to the sales amount for the same related lines, well,  
16 there I -- and I'm on the numbers in column '12/'13 --  
17 total export sales to Canada in millions, 33 million  
18 720, and then the ex -- US sales, 221 million 81.

19                   When I -- when I move further on these  
20 two (2) lines, to, for instance 2019/2020, this is a  
21 hundred percent plus increase. So volumes decrease by  
22 about 10 percent, but prices increase by over a hundred  
23 percent, which is an equivalent of 10 percent per year  
24 compounded. And I'd like to understand the -- the  
25 reasoning behind this.

1                   So -- and this is why, when I was  
2 talking about assumptions, when it's -- it's indicating  
3 the price increases and the justification for these  
4 price increases, so that we can form a judgment onto --  
5 as to whether or not we think they're -- I'm sure  
6 they're okay, but how you've arrived at it, we can have  
7 that understanding.

8                   MR. VINCE WARDEN:    Mr. Lafond, maybe  
9 I'll just start it off.  If I -- if I followed your  
10 question correctly, the additional -- the line  
11 "additional" that's in the integrated financial  
12 forecast at page 37 -- so that's the electric  
13 operations financial forecast -- the "additional" line  
14 that's referenced there pertains only to the rate  
15 increases that --

16                  MR. RAYMOND LAFOND:    I'm sorry, I meant  
17 -- I meant extra-provincial, sorry.  That's the line  
18 I'm trying to compare to the other two (2) lines.

19

20   (BRIEF PAUSE)

21

22                  MR. DAVID CORMIE:    Mr. Lafond, the --  
23 the -- if we look at the US export sales, the -- the  
24 row that has the underline under it, "total sales to  
25 the US," and I -- that is the -- the revenue line, in

1 2012/'13 it's showing \$221 million. That -- that  
2 number carries on until 2014/'15. There's an increase  
3 occurring there because we are making assumptions about  
4 -- the average opportunity export rate is increasing,  
5 and so the rate for the non-firm sales is going up.

6                   And then, in 2015/'16, the new Xcel sale  
7 contract, the NSP sale contract starts in, and so we  
8 lose the legacy pricing and we go to a new price. And  
9 so there's a -- new additional revenue generated by  
10 that sale because of -- the rate is increasing.

11                   And that continues on until -- it's a  
12 combination now of increasing opportunity rates and  
13 then -- and the additional revenues from the firm sales  
14 until we get out to 2019/'20 when the volume goes up  
15 again, because Keeyask comes in and we're -- and we're  
16 seeing, in addition to that, increased opportunity sale  
17 prices.

18                   So the only major change in -- in  
19 revenue associated with the contract is their -- is the  
20 new Xcel contract, and then all -- I believe the  
21 additional revenue is associated with a forecast of  
22 increasing market prices for opportunity energy.

23                   MR. RAYMOND LAFOND:   And -- and the  
24 portion with the Xcel contract, we already know the  
25 current prices? I mean, this has been negotiated and

1 this is firm?

2 MR. DAVID CORMIE: Yes. The Xcel  
3 contract, there is very little unknown about what those  
4 prices will be all the way to 2025. They wanted a  
5 fixed escalator. They wanted to know precisely what  
6 they were going to pay, and we -- we have those values  
7 nailed down today all the way to 2025.

8 MR. RAYMOND LAFOND: And -- and I'm not  
9 sure what the percentage of the total is in terms of  
10 opportunity sales, but why do you expect prices to go  
11 up substantially? I mean, much more than the inflation  
12 rates.

13 MR. DAVID CORMIE: You know, although  
14 gas prices are low, we are forecasting some real  
15 increase in the price of natural gas. And then on nom  
16 -- in nominal terms when you adjust for inflation,  
17 there is additional -- the prices are going up just  
18 with in -- with inflation.

19

20 (BRIEF PAUSE)

21

22 MR. DAVID CORMIE: In -- in addition to  
23 that, our forecasters are anticipating that the surplus  
24 capacity situation that's in the market today will  
25 drastically diminish as a large portion of the coal

1 fleet in the United States is taken out of service due  
2 to the EPA restrictions. And -- and so there -- the --  
3 there'll be just less -- less reserve -- less surplus  
4 generation available in the market which drives up  
5 prices.

6 MR. RAYMOND LAFOND: It just seems to  
7 me that increases of well over a hundred percent when  
8 we're looking at a volume decreases of about 10  
9 percent, which means compounding increases of over 10  
10 percent per year, seems to be aggressive. And I'm just  
11 trying to -- to understand whether or not it is  
12 aggressive, or if you think they're actually  
13 conservative.

14 MR. DAVID CORMIE: I -- I think in our  
15 IFF12 you'll see a significant reduction from what we  
16 had in IFF11 in those prices, and so there is -- is a  
17 lowering expectation of what those revenues will be.  
18 But we still think that there are fundamental drivers  
19 that will raise the value of our surplus electricity  
20 over time.

21 MR. RAYMOND LAFOND: Thank you.

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: And, Mr. Cormie, to --  
25 to bring to Board Member Lafond's attention, Manitoba



1 Hydro Exhibit 17 is the document that was handed out  
2 yesterday that had the average unit revenue prices on  
3 it in respect of IFF12, sir.

4 Is that correct?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: And you indicated in  
7 your second last answer that the Board would see that  
8 Manitoba Hydro's forecast of future export price  
9 opportunities has been reduced. Where will -- where  
10 will he -- where will we see that on this Exhibit 17,  
11 sir?

12

13 (BRIEF PAUSE)

14

15 MR. DAVID CORMIE: Yeah, if you look at  
16 -- in Manitoba Hydro Exhibit 17 the column titled,  
17 "2019/'20," and if you come down that column to the  
18 price associated with total export sales, we're now  
19 showing an average of sixty-six dollars and fifty-two  
20 cents (\$66.52).

21 Do you see that, Monsieur Lafond?

22 MR. RAYMOND LAFOND: Yes.

23 MR. DAVID CORMIE: If you -- and you  
24 can go back to page 72 for the similar table associated  
25 with IFF11-2, and you can compare that to eighty-eight

1 dollars and fourteen cents (\$88.14), which was the  
2 price that we were showing in the -- in the IFF. So  
3 our -- the consensus forecast of the price forecasters  
4 that Manitoba Hydro uses has shown, on average, a -- a  
5 reduction in -- in these years, and that's showing up  
6 now in our forecasts.

7                   What -- what's not happening though is  
8 our long-term sale contracts. Our customers are still  
9 seeing increases in the cost of construction to build  
10 new facilities. And so, in spite of the cost of -- of  
11 the inputs, like natural gas going down, being offset  
12 by expected increase in cost and construction of  
13 facilities, so we're not seeing a weakening in -- in  
14 demand for Manitoba Hydro's long-term product.

15                   And so there's -- we're -- our -- our  
16 firm sales to customers are based on the cost of their  
17 alternative, and -- and then that's remaining  
18 essentially unchanged over time. They still see  
19 Manitoba Hydro as an attractive alternative to building  
20 their own supply, especially given the risk of what  
21 natural gas prices could be, and the -- and the risk of  
22 emission regulation.

23                   MR. RAYMOND LAFOND: I understand that.  
24 However, for Manitoba Hydro, the cost of the building  
25 Conawapa is also much more expensive than it was to

1 build Limestone, for example.

2 MR. DAVID CORMIE: Oh, absolutely. And  
3 to go back in history, right back to Kettle, a  
4 generating station that we built for a few hundred  
5 million dollars, now is -- equivalent is costing  
6 billions and billions and billions of dollars. So  
7 inflation has -- has affected our -- our costs and --  
8 and will continue to affect our costs.

9 MR. RAYMOND LAFOND: So, therefore, the  
10 -- the problem of our customers in the US, in terms of  
11 alter -- costs of alternatives, is also counter-  
12 balanced by us as a vendor in terms of our cost of  
13 producing the additional amount of electricity?

14 MR. DAVID CORMIE: Yes. And -- and I -  
15 - I don't know if this is the forum to go in. This is  
16 probably an NFAAT issue. But, in effect, we're  
17 advancing generation and -- and even -- if you look at  
18 the alternative development plans, other than the one  
19 (1) that we're proposing, Conawapa is still in there.

20 So it -- we -- we still see building  
21 Conawapa; we may be advancing it. So it's not -- we're  
22 -- it's the -- is there enough advantage to making  
23 these sales and advancing it? We -- if we're still  
24 going to build it there seems to be an advantage there.

25 MR. RAYMOND LAFOND: Thank you.

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Mr. Cormie, still on  
3 that point that you and Board member Lafond were  
4 discussing, the fact that your American counterparties'  
5 cost of construction is increasing is an important  
6 factor for Manitoba Hydro to know, because it is based  
7 on that information that Manitoba Hydro will negotiate  
8 what price will be in your fixed-term contracts?

9 MR. DAVID CORMIE: Yes, that's right.  
10 And as I mentioned this morning, we still have some  
11 unsold long-term dependable power that -- that we are  
12 negotiating for and seeking customers for. And so  
13 we're not seeing a lower appetite from -- we're still  
14 confident that we will be able to -- to sell all the  
15 product that we have available on that basis.

16 MR. BOB PETERS: And would it be  
17 correct that in negotiating these firm-fixed contracts,  
18 you don't so much look at initially what Manitoba  
19 Hydro's costs are to produce the energy, but you look  
20 to see what the counterparty's alternative is in  
21 getting that energy? If not from Manitoba Hydro, what  
22 other source would they look to?

23 MR. DAVID CORMIE: That's part of the  
24 determination of what our price will be.

25 MR. BOB PETERS: Manitoba Hydro looks

1 to see what alternative the counterparty would resort  
2 to if they didn't buy from Manitoba Hydro to help you  
3 price your product?

4 MR. DAVID CORMIE: Absolutely.

5 MR. BOB PETERS: Not to diminish it,  
6 but the cost in Manitoba would be something that would  
7 have to be looked at once you came home with your term  
8 sheet, I suppose, to see if Mr. Rainkie and Mr. Warden  
9 found merit in your -- in your term sheet?

10 MR. DAVID CORMIE: Yes. And my job is  
11 to bring home the best contract possible. I turn it  
12 over to others to evaluate whether that's in Manitoba  
13 Hydros' best interest.

14 MR. BOB PETERS: Good. Thank you for  
15 that explanation, sir. I'd like to -- subject to any  
16 questions, I'd like to turn to the last, I think it's  
17 page 78, in Board counsel's...

18

19 (BRIEF PAUSE)

20

21 MR. BOB PETERS: I guess it was so nice  
22 I put it in twice, it's also at page 84. But it's a --  
23 I apologize for that confusion, but I'm looking at page  
24 78, sir, and what I'm looking at here are export  
25 revenues -- this is only on the opportunity side, Mr.

1 Cormie; you'd understand that to be correct?

2 MR. DAVID CORMIE: Yes.

3 MR. BOB PETERS: And a number of years  
4 have been depicted, based on information, but  
5 opportunity bilateral is what you've described earlier  
6 as you have a counter -- a named counterparty on the  
7 other end of the contract to whom you're selling,  
8 whether it's forward selling for a few months, or maybe  
9 up to as long as a year?

10 MR. DAVID CORMIE: Yes.

11 MR. BOB PETERS: And it does go as long  
12 as a year?

13 MR. DAVID CORMIE: Yes.

14 MR. BOB PETERS: How would Manitoba  
15 Hydro know a year in advance that it has enough water  
16 to meet that -- that bilateral arrangement?

17 MR. DAVID CORMIE: Sometimes it's quite  
18 obvious, Mr. Peters, like in the spring on 2011 when we  
19 had a -- a -- a flood of epic proportion. In years  
20 when the water supply is not obvious, we tend not to go  
21 that far forward. But we do do sensitivity studies on  
22 the water supply to see whether we can supply that  
23 energy. And as long as we have the capacity to produce  
24 it, having meet our own needs under a worst case, we  
25 will enter into these forward transactions.

1 MR. BOB PETERS: All right. And that -  
2 - that's the test we were going to get to then, Mr.  
3 Cormie. As long as Manitoba Hydro can meet the needs  
4 of Manitobans and it has surplus resources, will you  
5 then look to these types of arrangements? These  
6 opportunity bilateral arrangements?

7 MR. DAVID CORMIE: That's correct.

8 MR. BOB PETERS: And if you could  
9 disclose, Mr. Cormie, if Manitoba Hydro found itself in  
10 a situation where conditions changed and Manitoba Hydro  
11 was not able to meet the opportunity bilateral sale,  
12 would Manitoba Hydro then be obligated to financial  
13 settle that arrangement?

14 MR. DAVID CORMIE: Yes, that would be  
15 required.

16 MR. BOB PETERS: That would follow.  
17 And we look, in terms of the opportunity bilateral  
18 arrangements, the quantity of energy sold, in terms of  
19 gigawatt hours, is significant, but this would only be  
20 there if there was sufficient Manitoba Hydro resources  
21 to meet that requirement at the time the bilateral  
22 agreement was signed?

23 MR. DAVID CORMIE: That's correct.

24 MR. BOB PETERS: So then we do -- go  
25 down to the market export opportunity sales that are

1 depicted here, and the market was divided into two (2)  
2 parts, one (1) is called "day-ahead" and one (1) is  
3 called "real-time", if I understand correctly?

4 MR. DAVID CORMIE: That's correct.

5 MR. BOB PETERS: You did speak of day-  
6 ahead previously, but this would be a situation where  
7 Manitoba Hydro would offer its energy into the day-  
8 ahead market at a certain price?

9 MR. DAVID CORMIE: Yes.

10 MR. BOB PETERS: And you would have to  
11 wait to see if the market was -- whether the price was  
12 in merit, such that the market would require you to  
13 deliver it?

14 MR. DAVID CORMIE: Yes. We -- we know  
15 what the value of our electricity, what it costs us to  
16 produce, and we would offer in at our cost plus a  
17 reasonable profit. And if the market cleared above  
18 that, we would be in merit and be accepted and we would  
19 be paid. If the market cleared below that offer price,  
20 the MISO would say: Thank you for the offer Mr.  
21 Cormie. You're a little bit high today; sharpen your  
22 pencil and try again tomorrow.

23 MR. BOB PETERS: When Manitoba Hydro  
24 bids into the market, Mr. Cormie, on the day-ahead  
25 side, is it totally within Manitoba Hydros discretion



1 as to what that bid price will be?

2 MR. DAVID CORMIE: Yes.

3 MR. BOB PETERS: And likewise for the  
4 quantity?

5 MR. DAVID CORMIE: Yes.

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: When we look to the  
10 real-time market this is a electronic trading  
11 arrangement that is facilitated by MISO?

12 MR. DAVID CORMIE: It's the -- it's  
13 essentially the -- the same market except that Manitoba  
14 Hydro doesn't know in advance what the price will be,  
15 and we end up being a price-taker if we -- we commit to  
16 making the delivery. It's only after the end of the  
17 hour do we actually find out what the -- what we will  
18 get paid for that power.

19 So whereas the day -- in the day-ahead  
20 market you -- you know that you're going to get paid at  
21 least your offer price. In the day-ahead you -- you're  
22 -- you're anticipating that it will -- that it will be  
23 above that price but you -- there's no guara -- there's  
24 no -- there's no guarantee.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: I'm not sure if I  
4 misunderstood -- stood you or you misspoke but on the  
5 day-ahead market Manitoba Hydro will bid into the  
6 market and know that if it's called upon it will -- it  
7 will get at least the price at which it bid the -- the  
8 energy into the market?

9 MR. DAVID CORMIE: Yes, we -- we get  
10 paid a day ahead before we actually make delivery, and  
11 we get paid at least the -- our offer price.

12 THE CHAIRPERSON: Now, why -- why would  
13 it be higher?

14 MR. DAVID CORMIE: I'm sorry, what --  
15 why would what be higher?

16 THE CHAIRPERSON: When you say at least  
17 what -- you're offer price then there must be  
18 situations where you got more than the offer price.

19 MR. DAVID CORMIE: Oh, and that's the  
20 vast majority because we offer hydro in that -- at the  
21 value of the -- of hydro production. And let's say  
22 that that's our water rental cost plus our incremental  
23 O&M. Let's say it's five dollars (\$5) a megawatt  
24 dollar. The market could clear at fifty dollars (\$50).

25

1                   So we're in merit. MISO says, Manitoba  
2 Hydro you're below what the market clearing price is,  
3 we'll accept you. And we -- we will -- so we're  
4 getting fifty dollars (\$50) when we -- we offer them in  
5 a -- at our -- at our cost.

6                   Whereas in the -- in the real-time  
7 market we -- it's -- we say we have 100 megawatts and  
8 at the end of the hour we're prepared to accept  
9 whatever you pay us. And they may -- the prices may go  
10 negative and Manitoba Hydro may have a cost of five  
11 dollars (\$5) and, you know, the -- the price could be  
12 less than that.

13                   So there is -- there is price risk in  
14 the -- in the day-ahead market that we don't have in  
15 the real-time mark -- or in the day -- there's price  
16 risk in the real-time market that we don't have in the  
17 day-ahead market.

18                   THE CHAIRPERSON: I might as well take  
19 the opportunity while we're talking. With respect to  
20 the market clearing price, now the market clearing  
21 price represents the average of prices at which the  
22 energy is being sold?

23                   MR. DAVID CORMIE: The market clearing  
24 price is the -- the actual cost of dispatching the most  
25 expensive generator in the region to serve the last

1 megawatt of load. So that determines the market  
2 clearing price. And that's --that's set in the -- at  
3 some point in -- in the MISO market.

4                   And then all other prices are related to  
5 that based on the cost of losses and the cost of  
6 congestion back to the other commercial notes. So if  
7 the market clearing price is set in -- in Indiana we  
8 get paid a discount to that depending on the losses and  
9 the congestion. So it's set by a specific generator to  
10 serve the last megawatt of load in the region.

11

12 CONTINUED BY MR. BOB PETERS:

13                   MR. BOB PETERS: Mr. Cormie, just to  
14 help me with the numerical example of that discussion  
15 you had with the Chairman, on the day-ahead market if  
16 Manitoba Hydro bids in -- and let's just pick  
17 hypothetical numbers, but you bid in at half a penny a  
18 kilowatt hour you could -- you could bid that into the  
19 market, would you also have to bid in a quantity?

20                   MR. DAVID CORMIE: Oh, yes. So for  
21 each hour we -- we offer in a volume and a price. And  
22 we can offer in -- in additional volumes and different  
23 prices. So we will offer in our hydro in at one (1)  
24 price and we'll offer our combustion turbines at  
25 another price. They may accept our hydro but they may

1 not accept the combustion turbines. And they may  
2 accept it in one (1) hour, they may accept it in all  
3 hours.

4 MR. BOB PETERS: All right. And so if  
5 we've got a situation where hypothetically Manitoba  
6 bids in at half a penny a kilowatt hour, and other  
7 energy suppliers also bid in and somebody's got a gas  
8 plant and they bid in a five (5) cents a kilowatt hour,  
9 and the market needs that gas producer's energy to meet  
10 the demand, then everybody would get jumped up to five  
11 (5) cents a kilowatt hour for their -- for their sales?

12 MR. DAVID CORMIE: Yes. And in that  
13 example that assumes that there are no losses or  
14 congestion. In a -- in a perfect world we would all  
15 get paid the cost of that five (5) cent a -- a kilowatt  
16 hour generator.

17 THE CHAIRPERSON: Just to -- again, I  
18 want to make sure I understand you. Just -- you -- you  
19 -- so the -- so the -- the market would be looking at  
20 stacking its supply, right, and it would sort of start  
21 at the bottom end and work its way up. And the last  
22 price -- the last supplier becomes the price and  
23 everybody else is paid based on that price?

24 MR. DAVID CORMIE: That -- that's  
25 correct.

1 THE CHAIRPERSON: Oh.

2 MR. DAVID CORMIE: And that -- you  
3 know, if -- if you think about a perfect bilateral  
4 market where power traders are on the phone and they  
5 can talk to everybody they'll search out the highest  
6 possible price. That -- that is not possible, we can't  
7 talk to enough people. So what the market operator  
8 does he does that for -- he does that for everybody and  
9 everybody gets paid that -- that -- gets paid that  
10 value and -- and then they adjust it for the -- the  
11 cost of getting the energy there.

12

13 CONTINUED BY MR. BOB PETERS:

14 MR. BOB PETERS: Mr. Cormie, on this  
15 day-ahead market that you were talking to the Chairman  
16 about, can Manitoba Hydro withhold generation resources  
17 that it has in excess of its own firm obligations or  
18 must it bid in all of its surplus?

19

20 (BRIEF PAUSE)

21

22 MR. DAVID CORMIE: No, we have -- we  
23 have no obligation to offer any amount in except the  
24 capacity associated with our firm contracts. If -- if  
25 you were a generator in the MISO footprint you have an

1 obligation to offer all your resources in. Manitoba  
2 Hydro is -- generation is not in, so we're -- we don't  
3 have that must -- that we don't have the obligation of  
4 making our resources available.

5                   So we have complete discretion on how  
6 much surplus we determine is available and our  
7 incentive to offer it in is because our -- our product  
8 is -- is generally in merit and we would be foregoing  
9 revenue opportunities by not offering it in.

10                   MR. BOB PETERS: If Manitoba Hydro has  
11 to bid in the -- the capacity of its firm export  
12 agreements, you would bid that in at the price of your  
13 export agreement so that you -- you -- you'd be cost  
14 neutral in the exercise?

15                   MR. DAVID CORMIE: No, we can offer in  
16 at -- at our -- at our combustion cost, turbine cost if  
17 we chose to. We can offer -- there's no limit to what  
18 we can offer it in. We have an obligation to offer it,  
19 but there's no limitation on how we price it. We can  
20 price it so that it won't be dispatched if we chose --  
21 if we chose such.

22                   MR. BOB PETERS: Or you can price it as  
23 coming from your gas generator? You have to pick an --  
24 an actual generator in your system, you can't pick this  
25 price out of the air, can you?

1 MR. DAVID CORMIE: There -- there  
2 should be a -- a relationship between your offer price  
3 and your -- and your costs. And there is a market  
4 monitor that -- that looks at market participant  
5 behaviour and ensures that people aren't gaming. And,  
6 you know, Manitoba Hydro wants to be in the market for  
7 the long run. And we're not interested in -- in  
8 gaming, so we -- we have a pricing policy that we stick  
9 to.

10 MR. BOB PETERS: And so if Manitoba  
11 Hydro bids in the -- the capacity of its export  
12 agreements you would bid them in at a price higher than  
13 what you're receiving under the export agreements in  
14 case you had to -- in case somebody purchased them and  
15 then you'd have to financially settle your export  
16 agreements?

17 MR. DAVID CORMIE: No, I -- I don't see  
18 a reason why Manitoba Hydro wouldn't offer in the --  
19 the capacity that we actually felt was available at the  
20 cost associated with delivering that supply. I --  
21 there's no reason why we would artificially price our  
22 product.

23

24

(BRIEF PAUSE)

25



1 MR. BOB PETERS: In a mathematical  
2 example, Mr. Cormie, if Manitoba Hydro had a -- a 500  
3 megawatt sale, what quantity would Manitoba Hydro have  
4 to bid into the day-ahead market?

5 MR. DAVID CORMIE: We have to offer --  
6 for -- for those contracts that have the must-offer  
7 obligation, we have to make available the 500  
8 megawatts.

9 MR. BOB PETERS: You don't have to  
10 offer in the contract amount plus an equal amount over  
11 and above that?

12 MR. DAVID CORMIE: No, we only have the  
13 obligation associated with the contract. And we only  
14 have to offer that for the four (4) hours around the  
15 MISO peak.

16 MR. BOB PETERS: Under any  
17 circumstances, you only have to offer in it -- for --  
18 for the peak?

19 MR. DAVID CORMIE: Well, our contracts  
20 are of varying vintage, the existing contracts don't  
21 have the must-offer obligation. They -- they -- they  
22 assume and -- and -- and the rules make the assumption  
23 that for the hours, let's say it's a sixteen (16) hour  
24 delivery, that we will have the capacity available for  
25 the full sixteen (16) hours. Under the new contracts,

1 we only have the obligation to offer in for four (4)  
2 hours.

3                   So, whereas we have the full obligation  
4 now, into the new contracts, the must-offer obligation  
5 is only four (4) hours. But we have to be able to show  
6 that -- that we have that capacity and that if it was  
7 needed in the -- in the market, that we have the  
8 ability to supply it.

9                   MR. BOB PETERS:    Would it be correct  
10 for the Board to conclude at -- looking at -- at the  
11 table at page 78 of the book of documents, that  
12 Manitoba Hydro cannot sell all of its energy in  
13 realtime?

14                   MR. DAVID CORMIE:    No, it's -- it's not  
15 advisable to sell our energy in realtime. Firstly, we  
16 -- we want to have -- we want to manage our price risk.  
17 Secondly -- and -- and we get that price certainty by  
18 bidding into the day-ahead market. Secondly, the day-  
19 ahead market generally clears higher than the real-time  
20 market. And so there's a price advantage by selling a  
21 day ahead. I think a real-time market clears lower than  
22 the day-ahead market about 70 percent of the time. So  
23 it makes sense to -- if you have it, to offer it in  
24 early.

25                   The third thing is, if you -- MISO is

1 doing their generation dispatch based upon the orderly  
2 behaviour of participants in the day-ahead market. And  
3 they determine which combustion turbines they need to  
4 start and stop. And if Manitoba Hydro were to withhold  
5 all its energy and show up in the real-time market,  
6 MISO would have put in place a schedule of starting and  
7 stopping units that would not have been necessary. And  
8 then Manitoba Hydro gets charged with all those extra  
9 costs associated with now having to -- to compensate  
10 those people for not starting and stopping their units.  
11 And that's called the RSG charge, revenue sufficiency  
12 guarantee.

13                   So, there are penalties associated with  
14 not -- with -- with messing with the orderly operation  
15 of the -- of the day-ahead market. And those penalties  
16 can be extremely expensive. If -- if a generator  
17 started a unit based on the -- on a combustion turbine  
18 based upon the day-ahead dispatch orders, and -- and  
19 then all of sudden it wasn't necessary to start it  
20 because Manitoba Hydro came to the market with 1000  
21 megawatts of its surplus hydro. Well, somehow, that  
22 operator of that generator needs to be compensated so  
23 they take those charges of startup and they assign  
24 those to the people who caused the deviations.

25                   And so, the market rules are structured

1 so that most people make their energy available in the  
2 day-ahead market so MISO can do proper planning. And  
3 if you don't follow those -- follow those plans to the  
4 extent that you're causing additional costs, you get  
5 charged with those costs. And so there's lots of  
6 incentives for Manitoba Hydro to participate as a  
7 normal market participant in the day-ahead market.

8 THE CHAIRPERSON: You said that the  
9 market prices for the day-ahead market cleared higher  
10 than those in the real time. And I'm not getting that  
11 from the data here. Is that -- 'cause the data  
12 suggests that real-time prices are actually higher than  
13 the day-ahead prices. I'm looking at page 78 of  
14 course.

15

16 (BRIEF PAUSE)

17

18 MR. DAVID CORMIE: That's -- that's  
19 what I -- I see here as well, but when you compare the  
20 day -- the day-ahead price for a particular hour to the  
21 actual hourly price you'll -- you'll see that that  
22 spread is there. It doesn't show up here because these  
23 aren't necessarily the same time periods.

24

25 (BRIEF PAUSE)

1 MR. DAVID CORMIE: And I've also been  
2 advised that there are ancillary services associated  
3 with the real-time market that generates additional  
4 revenue that's showing up in this number, and that will  
5 affect this calculation.

6

7 CONTINUED BY MR. BOB PETERS:

8 MR. BOB PETERS: Mr. Cormie, has  
9 Manitoba Hydro ever been subject to those RSG payments,  
10 or revenue sufficiency guarantee payments that you had  
11 indicated?

12 MR. DAVID CORMIE: Yes, we have.

13 MR. BOB PETERS: And is that a constant  
14 re-occurring issue?

15 MR. DAVID CORMIE: Yes. It's a -- it's  
16 a cost of participating in the real-time market. And  
17 the rules around that are changing, Mr. Peters, and we  
18 expect that we will be experiencing less RSG charges in  
19 the future. But they are -- they are there and -- and  
20 those are built into our results.

21 MR. BOB PETERS: They're netted against  
22 the revenues?

23 MR. DAVID CORMIE: I believe that they  
24 show up in the energy purchase line, Mr. Peters, not in  
25 the revenue side. It's a billage (phonetic) we get

1 after the fact. It doesn't show up in the energy  
2 charges.

3 MR. BOB PETERS: You'd given an example  
4 to the Board as to what would cause those to arise.  
5 Can you give a more specific example as to Manitoba  
6 Hydro's conduct that would make it subject to an RSG  
7 penalty?

8 MR. DAVID CORMIE: Well, and this is  
9 the reason that we are anticipating the rule change.  
10 We can be dispatched down in real-time. So we're  
11 behaving different than what we had committed to in  
12 day-ahead. The markets say, You've now deviated from  
13 your day-ahead schedule, there's a penalty associated  
14 with that.

15 And we said, But we're being dispatched  
16 down based upon your instructions. So MISO tells us to  
17 -- to cut our schedules. But then they send us a bill  
18 for doing that. And we say, Well that's -- why -- you  
19 know, the rules aren't fair. You're asking us to do  
20 this. This is in the ben -- this is for the benefit of  
21 eve -- of everybody but -- but you're charging --  
22 sending us the bill for the -- the -- for doing that.

23 And that's an example of why the rules  
24 are changing. And a reason why it would -- might go  
25 the other way is...

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: If we have an  
4 emergency on our system and we have to cut our day-  
5 ahead schedules and it causes some start up costs for  
6 another generator to serve the load that's not  
7 reflected in the energy charge, then those costs could  
8 get passed onto Manitoba Hydro.

9 MR. BOB PETERS: Could you please  
10 provide the Board with the order of magnitude of those  
11 charges, say for the last year?

12 MR. DAVID CORMIE: Yes.

13 MR. BOB PETERS: Do -- do you know it,  
14 or is it something you'll have --

15 MR. DAVID CORMIE: I think -- I think  
16 it's a few million dollars. It's not a lot of money,  
17 Mr. Peters, in relative terms but -- but it's in the  
18 millions, and we'll get you that number. Yes, Manitoba  
19 Hydro will undertake to provide a history of RSG  
20 charges.

21

22 --- UNDERTAKING NO. 17: Manitoba Hydro to provide a  
23 history of RSG charges

24

25 CONTINUED BY MR. BOB PETERS:

1 MR. BOB PETERS: And, Mr. -- Mr.  
2 Cormie, to follow up on that discussion you had with  
3 the Chairman about the day-ahead prices on 70 percent  
4 of the time settling higher than real-time prices, have  
5 you any -- have you any printouts that you could  
6 provide that would demonstrate that to the -- to the  
7 Board? Is there a way to demonstrate that  
8 approximation?

9 MR. DAVID CORMIE: Yes, we can do that  
10 analysis. I stand to be corrected on the 70 percent  
11 but I know it's -- it's more than half -- more than  
12 half the time.

13 MR. BOB PETERS: That would be  
14 appreciated, if you would undertake to do that, sir.  
15 Thank you. And lastly I think on --

16 MR. DAVID CORMIE: Manitoba Hydro will  
17 provide an analysis of day-ahead versus real-time  
18 prices.

19

20 --- UNDERTAKING NO. 18: Manitoba Hydro to provide  
21 an analysis of day-ahead  
22 versus real-time prices

23

24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: Mr. Cormie, before I



1 leave page 78, Tab 8 of the book of documents, merchant  
2 sales revenues are shown on this chart, and these sales  
3 revenues are -- is it both Canadian and US-sourced?

4 MR. DAVID CORMIE: The majority of  
5 these revenues are a Canadian source.

6 MR. BOB PETERS: And they'd have to be  
7 netted against the -- the merchant purchases?

8 MR. DAVID CORMIE: The purchase and --  
9 and the cost of transmission service.

10 MR. BOB PETERS: Can you undertake to -  
11 - to provide that with this table, the merchant  
12 purchases and the associated merchant transmission?

13 MR. DAVID CORMIE: Yes.

14 MR. BOB PETERS: Just -- just for the  
15 year shown, please.

16 MR. DAVID CORMIE: Yes, we will.

17 MR. BOB PETERS: Thank you.

18

19 --- UNDERTAKING NO. 19: Manitoba Hydro to provide  
20 merchant purchases and  
21 associated merchant  
22 transmission

23

24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: Mr. Cormie, if we

1 could continue on to Tab 9 of the book of documents and  
2 look at some components of extraprovincial revenues.

3

4 (BRIEF PAUSE)

5

6 MR. BOB PETERS: We see at page 89 of  
7 the book of documents that -- and we've been through  
8 the quantity in the top half of the chart and the --  
9 the reduced forecasts. It would be correct in  
10 following up on Board Member Lafond's question to  
11 indicate that, some of the revenue being lost in the  
12 forward years, near the far right-hand side of the  
13 chart, would be as a result of volume adjustments as  
14 well as price reductions, would that be true?

15 MR. DAVID CORMIE: The price reductions  
16 meaning the lower forecast prices compared to the  
17 previous estimates?

18 MR. BOB PETERS: Yes, sir.

19 MR. DAVID CORMIE: Yes. And the volume  
20 adjustments -- there'll be a -- an adjustment on volume  
21 in those later years because of changes in domestic  
22 demand. If the forecast demand has gone down there'll  
23 be an increase in opportunity sales, if it's gone the  
24 other way there'll be a decrease in opportunity sales.

25 MR. BOB PETERS: If we look with the

1 Board to the bottom half of page 89, and we look at  
2 energy sales only, the intention here, Mr. Cormie, is  
3 to remove the merchant trading transactions, would that  
4 be understood?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: And under the  
7 dependable firm contracts only, I think yesterday you  
8 indicated to the Board that the pricing was in the  
9 range of five point three-nine (5.39) cents, and was  
10 that November of 2011?

11 MR. DAVID CORMIE: I -- I gave both the  
12 '11 and '12 price for November.

13 MR. BOB PETERS: All right. But they  
14 were -- they were approximately five point three nine  
15 (5.39), I think the other one I wrote down was five  
16 point two two (5.22). But subject to check, that's --  
17 that's the range in which those dependable firm  
18 contracts are holding?

19 MR. DAVID CORMIE: Yes, those are the  
20 numbers I provided in my direct.

21 MR. BOB PETERS: And under the  
22 opportunity revenues of 152 million, when that's added  
23 with the dependable firm exports we come up with total  
24 energy sales of \$327 million. And we contrast that  
25 with the three hundred and sixty-three (363) found in

1 the IFF, as seen at the top of the page. There's a \$36  
2 million difference between those two (2), Mr. Cormie.

3 Do you -- do you see where my math is?

4 MR. DAVID CORMIE: Yes, I do.

5 MR. BOB PETERS: And we'd have to  
6 remove the merchant trading, which, from the previous  
7 charts, I assume to be \$17 million. And we're still  
8 \$19 million lower at the bottom half of the -- of the  
9 chart than we are at the top half. Do you accept --

10 MR. DAVID CORMIE: Mr. -- Mr. Peters,  
11 have -- have we not already excluded merchant trading  
12 revenues from this table? I --

13 MR. BOB PETERS: Yes.

14 MR. DAVID CORMIE: So what are you --

15 MR. BOB PETERS: My fancy math was  
16 this, Mr. Cormie -- was I was trying to reconcile  
17 Manitoba Hydro's extraprovincial revenue line item on  
18 the IFF of 363 million to what Manitoba Hydro is  
19 selling as dependable as well as opportunity. And I  
20 come up with 327 million. And I'm wondering why  
21 there's a difference.

22 And the first thing I would add back  
23 would be the -- the merchant sales that would have been  
24 on the top line but not on the -- on the bottom line,  
25 so --

1 MR. DAVID CORMIE: Yes, I understand  
2 what you're doing, yes.

3 MR. BOB PETERS: So I'm still \$19  
4 million light in trying to reconcile the two (2), and I  
5 wondered if you could provide the Board with any  
6 explanation at this time as to what that might be from.

7

8 (BRIEF PAUSE)

9

10 MR. DAVID CORMIE: IFF11-2 showed \$363  
11 million in -- in export revenues, \$10 million of which  
12 was a forecast adjustment that was made at the last  
13 moment because the water conditions were quickly  
14 changing. And rather than go back through the process  
15 of running computer models and generating the reports,  
16 we -- we just put a line item "additional revenues" in.  
17 So that explains a portion of that difference, Mr.  
18 Peters.

19 MR. BOB PETERS: Is there any other  
20 significant number that would have been included in the  
21 -- in the top line of extraprovincial revenues but  
22 doesn't show up when we back out the energy sales,  
23 other than the merchant trading, and now this -- I'll  
24 call it a subjective adju -- adjustment, if that's  
25 fair?

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: Mr. Peters, we -- we  
4 talked earlier about these -- making deliveries to  
5 Ontario for which -- or making sales to Ontario for  
6 which we actually don't get deliveries, and of Ontario  
7 making Manitoba Hydro -- making whole payments. So  
8 those are called "congestion settlement management  
9 credits."

10 So they're -- they're revenue that  
11 Manitoba Hydro gets that's not associated with an  
12 actual delivery. And so that's -- that makes up the  
13 balance of the difference. So it's a lump-sum revenue  
14 that Manitoba Hydro receives from Ontario, and we -- we  
15 make forecast of -- of what those would be over time.

16 MR. BOB PETERS: And that's coming to  
17 an end?

18 MR. DAVID CORMIE: Yes.

19 MR. BOB PETERS: How soon?

20 MR. DAVID CORMIE: It ended on October  
21 the 1st.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: Mr. Cormie, are you

1 and/or Mr. Gawne able to tell if there's any  
2 transmission revenues associated with -- with the  
3 numbers shown on the -- in the IFF of \$363 million?

4

5 (BRIEF PAUSE)

6

7 MR. DAVID CORMIE: Those transmission  
8 revenues are net against transmission costs and they  
9 don't show up in the revenue table.

10 MR. BOB PETERS: Thank you. Mr.  
11 Chairman, in light of the hour, this might be an  
12 opportune time for the afternoon recess, subject to  
13 your questions.

14 THE CHAIRPERSON: Let's take ten (10)  
15 minutes, please.

16

17 --- Upon recessing at 2:50 p.m.

18 --- Upon resuming at 3:07 p.m.

19

20 THE CHAIRPERSON: I think we should  
21 call Ms. Morrison back to explain this pamphlet to us.

22

23 (BRIEF PAUSE)

24

25 MS. PATTI RAMAGE: You'll have your

1 chance with Ms. Morrison, I'm sure. We've distributed  
2 a number of documents at the break, the first of which  
3 is a binder of materials. The binder contains tabs for  
4 all of the PUB pre-asks. There's three (3) still  
5 outstanding in there; they would be at Tab 2, 3, and  
6 18. But we will get those filed.

7                   And similar to Board counsel's book of  
8 documents, we just -- we suggest this be given Manitoba  
9 Hydro Exhibit 18 and we'll get those pre-asks in --  
10 inserted into -- into those tabs in due course.

11

12 --- EXHIBIT NO. MH-18:            Tabs for all of the PUB  
13   pre-asks

14

15                   MS. PATTI RAMAGE:    That deals with the  
16 -- both depreciation and Pointe du Bois pre-asks from  
17 the PUB. I would comment, in fairness to Mr. Peters,  
18 he did tell me he wanted summaries of reports, and this  
19 is what the engineers tell me are summaries of reports.  
20 So I understand there's a room of materials, probably,  
21 to back this up.

22                   But that's -- just to let Mr. Peters off  
23 the hook there. I don't think he certainly knew he was  
24 asking for quite this volume.

25                   The next document that I suggest be



1 given Manitoba Hydro Exhibit 19 is the letter we  
2 referred to during Mr. Stokke's presentation -- or that  
3 he referred to, that is from Manitoba Hydro to Mr.  
4 Stokke, dated April 26th of 2012, and this deals with  
5 the Pointe du Bois spillway.

6 I should add, Mr. Stokke referred to it  
7 as a dam safety report. Manitoba Hydro would not  
8 characterize this as a dam safety report. This would  
9 be a response to his concerns from our integrity  
10 officer. It's a -- the result of fairly detailed  
11 investigation, but it wouldn't be the dam safety  
12 report. You do have one (1) of those in the binder of  
13 materials.

14

15 --- EXHIBIT NO. MH-19: Letter from Manitoba Hydro  
16 to Mr. Stokke, dated April  
17 26th, 2012 that deals with  
18 the Pointe du Bois spillway

19

20 MS. PATTI RAMAGE: Lastly, would be the  
21 replacing your furnace or wat -- or water heater  
22 document that Ms. Morrison referred to in her  
23 testimony. It is filed in response to Undertaking  
24 number 14 at page 945 of the transcript, and we're  
25 suggesting it be assigned Manitoba Hydro Exhibit 20.

1 --- EXHIBIT NO. MH-20: Response to Undertaking 14

2

3 MS. PATTI RAMAGE: And if I could just  
4 add, we are hoping to get a few more documents to you  
5 before the close of today. So prior to closing if we  
6 could just have a moment to caucus and see -- they're  
7 attempting to copy and produce in the back room, so if  
8 we can get more out to you I think the -- the more the  
9 better before the weekend.

10

11 (BRIEF PAUSE)

12

13 MR. LARRY SOLDIER: Ms. Ramage, would  
14 you know when the last dam safety report on Pointe du  
15 Bois was done?

16 MS. PATTI RAMAGE: I don't have the  
17 exact information, but I -- I see that the -- the dam  
18 safety report that was filed is dated 2008, and I -- I  
19 think I asked the same question you're getting at.  
20 That was the last dam safety report where Pointe Du  
21 Bois took a primary -- or was the focus of the report.  
22 And I think that is the report where the decisions were  
23 based. It was the answer I received.

24 So while there -- there's a -- the dam  
25 safety report is produced on an annual basis, but it

1 will have different focusses depending on the decisions  
2 that need to be made. So that is the report that  
3 focussed on Pointe Du Bois, but they do produce one (1)  
4 annually is what I was advised.

5 MR. LARRY SOLDIER: Can we get a copy  
6 of that report or the -- the 2008 report?

7 MS. PATTI RAMAGE: You have the 2008  
8 report. It is -- if you go to Tab 17 of the binders at  
9 Attachment 4, you'll see the dam safety report for  
10 2008.

11 MR. LARRY SOLDIER: Thank you.

12

13 (BRIEF PAUSE)

14

15 MS. PATTI RAMAGE: Our back row has  
16 pointed out to me that Attachment 1, for example --  
17 there's a number of attachments, and Attachment 1 is a  
18 more recent document. It's from KGS Acres. It also  
19 constitutes a -- a dam safety report. And it's  
20 December 2nd, 2011. So there's a number of documents  
21 here pertaining to this. The one (1) I pointed out was  
22 the Manitoba Hydro summary document from 2008.

23 THE CHAIRPERSON: Mr. Stokke will see  
24 all these documents. I guess he'll have an opportunity  
25 to -- to read them. We -- I think we did undertake to

1 make them available to him.

2 MS. PATTI RAMAGE: Yes. The Board -- I  
3 think the Board undertook. We wouldn't normally  
4 communicate with Mr. Stokke. We can. I -- I would  
5 assume we have his address, but I'm not sure. Oh, Mr.  
6 Singh is nodding.

7 MR. BOB PETERS: I think it was Mr.  
8 Peters who opened his mouth and suggested that Mr.  
9 Stokke would be provided copies, because it is a public  
10 -- it's publicly filed and he may not know how to  
11 access it. So perhaps I'll take responsibility to work  
12 with the Board office in -- in getting him a paper copy  
13 of what's been filed related to this matter.

14 MS. PATTI RAMAGE: It -- it may also  
15 simply things. I would assume Mr. Stokke has emails --  
16 email, and this will be posted on the Manitoba Hydro  
17 website as a filing.

18 MR. BOB PETERS: We'll alert him to  
19 both -- both instances. And I -- I apologize to Ms.  
20 Ramage in advance, but Board member Soldier's question  
21 was about the last dam safety report. And the one done  
22 by Manitoba Hydro is Attachment 4. And I'm wondering  
23 if Ms. Ramage is -- is being advised by her colleagues  
24 that this is the -- this is only the summary of it, and  
25 there is an entire document should someone wish to

1 inspect it.

2 MS. PATTI RAMAGE: I don't think  
3 there's an entire document. I -- what I'm hearing it's  
4 almost a room sort of thing of various different  
5 supporting documents. So this is a summary of the  
6 various supporting documents that come together.

7 MR. BOB PETERS: All right. I thank  
8 Ms. Ramage for that indication.

9

10 (BRIEF PAUSE)

11

12 CONTINUED BY MR. BOB PETERS:

13 MR. BOB PETERS: Mr. Cormie, can we  
14 pick up where we left off before the afternoon recess,  
15 sir? We were discussing the IFF extraprovincial  
16 revenue line items, and then we're looking to remove  
17 the energy sales to see what else may have been  
18 included in the extraprovincial revenue line.

19 Have you given that some more thought,  
20 sir?

21 MR. DAVID CORMIE: Yes. Just to  
22 clarify, extraprovincial revenue includes several items  
23 that aren't energy-related. And so, in order to do the  
24 average price calculation, we remove items such as the  
25 system merchant sales, congestion management credits,

1 those are the revenues that we receive from Ontario,  
2 the revenues that we receive for the sale of ancillary  
3 services, and the charges associated with  
4 transmissions, service charges for transmission service  
5 held in the United States. And the transmission  
6 revenues are included in total extraprovincial  
7 revenues, so that -- that's already in the 363 million.

8                   So in IFF11-2 there were \$63 million of  
9 charges that were subtracted from the extraprovincial  
10 revenue item -- line item to get the \$300 million in --  
11 in sales in order to calculate the average price for  
12 the energy that was sold.

13

14                   (BRIEF PAUSE)

15

16                   MR. BOB PETERS: Thank you, Mr. Cormie.  
17 I'll -- I'll work that through. Is that information  
18 contained also on the -- the summary, or the -- the  
19 average pricing and revenue information sheets? Would  
20 that be depicted on there?

21                   MR. DAVID CORMIE: That's -- that's the  
22 method that was used to calculate those numbers that  
23 are shown in there. So non-energy related revenues --  
24 or non -- non-energy related costs are -- are reduced -  
25 - it reduces the extraprovincial revenue. They're

1 netted out.

2 MR. BOB PETERS: Can you undertake to  
3 provide a listing of those, and I would suggest just  
4 for the years shown on page 89, if you can?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: Thank you, sir.

7

8 --- UNDERTAKING NO. 20: Manitoba Hydro to provide a  
9 list of non-energy costs  
10 for the years listed on  
11 page 89 of Board counsel's  
12 book of documents

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: Mr. Cormie, if we  
16 could turn to page 92 of the book of documents. This  
17 chart is an effort to show the Board the relationship  
18 between firm contract pricing and opportunity market  
19 pricing, and these figures are consecutive in -- in  
20 terms of years. But when the Board would look at  
21 Manitoba Hydro's extraprovincial revenues there's a --  
22 there's a baseline provided which is generally your --  
23 your firm long-term contracts that you have committed.

24 Would that be correct?

25 MR. DAVID CORMIE: Are you referring to

1 the red line, Mr. Peters?

2 MR. BOB PETERS: Yes, that's -- that  
3 for example would be one (1) of Manitoba Hydro's long-  
4 term firm contracts --

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: -- at vary -- and in--

7 MR. DAVID CORMIE: And just to clarify,  
8 Mr. Peters, this is the information, I'm assuming, is -  
9 - is available from the NEB data that Manitoba Hydro  
10 files?

11 MR. BOB PETERS: Correct.

12 MR. DAVID CORMIE: And just to clarify,  
13 NEB is only concerned about energy that actually flows  
14 over the border. It -- it -- there's actually a  
15 physical export. So this isn't sales data; this is  
16 physical deliveries. And so you -- you -- and -- and  
17 under the contract, there may be -- under the licence  
18 there may be dependable energy and opportunity energy  
19 sold that's associated with that licence. So, it's --  
20 these numbers don't necessarily reconcile with other  
21 sources of -- because it only shows a part of the  
22 information and -- and the NEB's definition of "firm"  
23 doesn't necessarily align with Manitoba Hydros  
24 definition of "dependable energy".

25 But having said that, I'll -- I'll offer



1 those comments and...

2 MR. BOB PETERS: No, I think that's  
3 helpful. And it's just to demonstrate to the Board that  
4 the long-term commitments, whether they are for a fixed  
5 price or whether they are on a dependable basis or have  
6 some opportunity components to them, they'd all get  
7 lumped into -- into the same report by the NEB.

8 MR. DAVID CORMIE: Yes, and a good  
9 example is you see in 2009/'10, in the -- in the -- in  
10 the May to August period, there's the step up where it  
11 goes from about 190 gigawatt hours a month to somewhere  
12 in the range of three (3) to four hundred (400). So,  
13 that's a mix of the dependable energy plus sales of  
14 some opportunity energy on that transmission that's  
15 associated with the sale, and -- and it all gets sold -  
16 - exported under the licence.

17 MR. BOB PETERS: And --

18 MR. DAVID CORMIE: And --

19 MR. BOB PETERS: I'm sorry, and the  
20 opportunity sales would dilute the actual value or the  
21 cost of the dependable energy associated.

22 MR. DAVID CORMIE: Right, and so when  
23 you do that -- when you do the unit price calculation,  
24 you can see that it drops from around 6 cents in April  
25 to four (4) and then three and a half (3 1/2) because

1 it's being averaged down by the opportunity sales. And  
2 then to make that the opposite point of in November and  
3 Dec -- through March of 2010/'11, you see how the  
4 volume dips down.

5                   That's because during those months,  
6 Manitoba financially settled for a portion of our  
7 obligation. And so that just reflects the amount of  
8 energy that was physically delivered. We met the  
9 balance of the obligation with purchase power, and  
10 we're not re -- required to report to the NEB energy  
11 that we purchase in the United States to serve the  
12 sale.

13                   So, again, it -- it causes the price to  
14 jump up to 6 1/2 cents because you're amortizing the  
15 demand charge into the number of megawatt hours that  
16 are physically del -- delivered and the physical  
17 delivery goes down, the revenue stays exactly the same  
18 so the unit prices goes up. So just to explain some of  
19 those fluctuations in price.

20                   MR. BOB PETERS: I think that's  
21 helpful, Mr. Cormie. On the same line, Mr. Cormie, are  
22 you able to advise the Board that in '11/'12, in the  
23 months of December and January, was there also  
24 financial settlement in respect of some obligations  
25 under a fixed-term agreement?

1 MR. DAVID CORMIE: Yeah, and -- and --  
2 and this is the -- the -- what I mentioned the other  
3 night when we were at the 43 or 4400 megawatt peak. We  
4 were serving our sale obligations, United States, with  
5 purchase power. And so for several days over the  
6 winter when the load in Manitoba is very high, rather  
7 than running our gas turbines to serve the sale, it's  
8 more economical for us to purchase the power.

9 And so physical deliveries of energy  
10 under the contracts in those months goes down. We're  
11 still fulfilling our obligations; we're still showing  
12 it as a sale. But we're not showing it as a delivery.

13 MR. BOB PETERS: And the month of  
14 February, shown on the 2011/'12 chart, what's the  
15 significance of the relatively low price of average  
16 energy in -- in that -- in that period, sir, for that  
17 delivery? Are you able to indicate?

18 MR. DAVID CORMIE: Well, I sure hope we  
19 didn't charge them a dollar seventy-six (\$1.76) for  
20 that power. I -- I think that's an error. I can check  
21 into that, but it's -- that's something that we would -  
22 - that's not a price that I'm ever familiar with.

23 MR. BOB PETERS: Well, perhaps if you  
24 could undertake to just verify what the -- what the  
25 average price should have been for that month. If it

1 wasn't -- wasn't one seventy-six (1.76), let -- let us  
2 know. From the NEB data, not from any internal data.

3 MR. DAVID CORMIE: Yeah, we'll look  
4 into that and see if we can explain it, Mr. Peters.

5

6 --- UNDERTAKING NO. 21: Manitoba Hydro to provide  
7 the correct number to  
8 replace \$1.76 shown for the  
9 month of February on the  
10 2011/'12 chart on page 92  
11 of Board counsel's book of  
12 documents

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: All right but the --  
16 and let's also step back and not -- not just look at  
17 the red line or the red-shaded area, but also above  
18 that is -- is an area that is unshaded.

19 That reflects that there have been other  
20 firm commitments. Would that be fair?

21 MR. DAVID CORMIE: Yes, we have  
22 licences associated with most of our long-term  
23 contracts. And some of them are seasonal because  
24 they're diversity contracts, and so you'll see them  
25 peak in the summertime and they won't be there in the

1 wintertime. And then there are other long-term firm  
2 contracts that go continuously over the year, so that  
3 white area represents the other licences that we export  
4 under on a firm basis.

5 MR. BOB PETERS: And I think you --  
6 you're indicating to the Board that the seasonal  
7 diversity is usually in the -- in the summer months,  
8 you'd -- you'd have the ability to export additional  
9 revenues pursuant to those agreements?

10 MR. DAVID CORMIE: Yes. And -- and for  
11 the last couple of years, we've been exporting under  
12 the diversity contract year round. We were able to  
13 negotiate an arrangement where it was favourable for  
14 Manitoba Hydro to use the firm transmission associated  
15 with the diversity contract, and -- and we've had to  
16 get an en -- a revision to our NEB licence to allow  
17 that to happen.

18 MR. BOB PETERS: How does a year-round  
19 diversity agreement work in terms of what Manitoba  
20 Hydro would expect in return?

21 MR. DAVID CORMIE: Well, it doesn't  
22 change our capacity obligations; it just allows us to  
23 sell energy on the trans -- transmission line in the  
24 wintertime.

25 So it doesn't change the swap-out

1 capacity. It just says if there's -- there's  
2 transmission available from Manitoba to the United  
3 States in the wintertime, we can use that to export in  
4 hours when we have surplus. And -- and our NEB permit  
5 needed to be revised to allow that to happen.

6 MR. BOB PETERS: Is there an additional  
7 cost to Manitoba Hydro for that?

8 MR. DAVID CORMIE: To...?

9 MR. BOB PETERS: To have access to that  
10 transmission year round?

11 MR. DAVID CORMIE: No, no. It's a very  
12 profitable arrangement we worked out because of the  
13 grandfathered nature of the transmission associated  
14 with the diversity.

15 MR. BOB PETERS: Speaking of then the  
16 opportunity sales, they would be in the -- in the grey  
17 shaded area at the top part of the chart. And there  
18 again the Board will see that the opportunity sales are  
19 generally higher in the summer months when -- when  
20 there's surplus capacity in the Manitoba system?

21 MR. DAVID CORMIE: That's correct.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: Without any specific

1 month or year, Mr. Cormie, but the -- the relative  
2 pricing as between fixed and firm is shown on this  
3 chart as well, subject to the caveat that, on some of  
4 your long-term arrangements, there may also be some  
5 opportunity sales thrown in?

6 MR. DAVID CORMIE: Yes. I'm not -- I'm  
7 not sure where those numbers were calculated, whether  
8 they're NEB numbers. I'm -- I'm not aware of that  
9 number, but those -- but that's what they appear to be.

10 MR. BOB PETERS: And, Mr. Cormie,  
11 yesterday you told the Board, I think it was in your  
12 direct evidence, that the long-term contracts were at  
13 approximately five point two (5.2) or five point three  
14 (5.3) cents a kilowatt hour.

15 You recall that?

16 MR. DAVID CORMIE: Yes.

17 MR. BOB PETERS: And then the on-peak  
18 opportunity was around the two dollar (\$2) -- or the --  
19 the two point eight (2.8) cents a kilowatt hour?

20 MR. DAVID CORMIE: For November?

21 MR. BOB PETERS: Yes. You -- you had -  
22 - you picked the month of November in two (2)  
23 successive years.

24 What was the price of the off-peak in  
25 the -- in -- by comparison to the -- to the on-peak

1 prices in those years?

2 MR. DAVID CORMIE: November of 2012 was  
3 nineteen dollars and fifty cents (\$19.50) a megawatt  
4 hour compared to a year ago when it was at fifteen  
5 dollars and fifty-six cents (\$15.56) a megawatt hour.

6 MR. BOB PETERS: So, off-peak, less  
7 than two (2) cents; on-peak, between two (2) and three  
8 (3); and your firm, above five (5)?

9 MR. DAVID CORMIE: Yes.

10 MR. BOB PETERS: Thank you.

11

12 (BRIEF PAUSE)

13

14 MR. BOB PETERS: Mr. Cormie, in -- in  
15 the NEB reporting on Manitoba Hydro's sales, what  
16 percent of Manitoba Hydro's sales are reported as  
17 physical sales by the National Energy Board?

18 MR. DAVID CORMIE: What percent of the  
19 sales are actually delivered?

20 MR. BOB PETERS: Yes.

21

22 (BRIEF PAUSE)

23

24 MR. DAVID CORMIE: I don't have that  
25 number exactly in front of me, but I suspect it's a



1 very high proportion.

2 MR. BOB PETERS: Can you ballpark that  
3 for us?

4 MR. DAVID CORMIE: I would say more  
5 than 90 percent.

6 MR. BOB PETERS: Okay. Which means in  
7 converse that Manitoba Hydro is financially settling as  
8 much as 10 percent of their sales.

9 MR. DAVID CORMIE: Yes, which is a good  
10 thing.

11 MR. BOB PETERS: And why is it a good  
12 thing?

13 MR. DAVID CORMIE: Well, if -- if we  
14 had to run our combustion turbines to serve the sale we  
15 would be spending -- the cost of serving the sale would  
16 be, you know, maybe twice what it would cost us to buy  
17 the electricity in the market. So our -- our cost  
18 would go up. Our revenues wouldn't change, so the  
19 profitability of those sales would go down.

20 And, you know -- and in our -- in our  
21 planning we -- we assume that if we have to we'll run  
22 those -- the combustion turbines. And I think in Mr.  
23 Miles's forecast under, "Dependable Conditions," he  
24 assumes that we run our thermal to serve our sales.

25 But in most years, water conditions are

1 fav -- more favourable or lower-cost imp -- purchase  
2 power in the market is available. And -- and so it's -  
3 - it's a rare time that we actually have to -- are  
4 forced to use those expensive sources of power when we  
5 have all these abilities to purchase power and -- and  
6 save the Corporation money.

7 MR. BOB PETERS: What it also means is  
8 Manitoba Hydro doesn't have the hydraulic resources  
9 available to -- to meet that obligation?

10 MR. DAVID CORMIE: Yes, because the  
11 water conditions are unfavourable. And -- and -- you  
12 know, we talked about a dependable supply under worst-  
13 case water conditions of around 30,000 gigawatt hours.  
14 And of that thirty-thousand (30,000) under that flow  
15 case, only fifteen thousand (15,000) are coming from --  
16 from energy from inflows.

17 So if you -- you know, under the worst  
18 case we're exposed to up to 50 percent of our supply  
19 from thermal resources. If the reservoirs were full,  
20 then it would be 21 gigawatt hour -- 21,000 gigawatt  
21 hours out of the thirty (30) would be from hydro. But  
22 we -- we would be exposed to, you know, about a third  
23 of our production under that as being thermal.

24 And that was the situation in 2003/'04.  
25 Rather than running our thermal resources, we chose to

1 keep them as back -- backup supplies and -- and to rely  
2 on the market to the extent that we could. And that's  
3 why our -- our therm -- our purchases in that year were  
4 so high relative to what we had in the -- in the  
5 dependable supply and demand tables.

6 MR. BOB PETERS: Well, while we're on  
7 the IFF purchasing -- purchasing of power and fuel, the  
8 Board will note back on Tab 3 of Board counsel's book  
9 of documents under the IFF that one of the expense line  
10 items in approximately the middle of the page deals  
11 with fuel and power purchases. And, Mr. Cormie, this  
12 would be the line item where Manitoba Hydro would --  
13 would record its expenses if it had to fire up the --  
14 the thermal units?

15 MR. DAVID CORMIE: Yes. And that's  
16 where -- you know, we do -- we do run them for training  
17 and proficiency. And so those -- the cost of running  
18 Brandon 5 and the running of CTs is -- is in there but  
19 it's in -- in a normal year it's a minor amount. And  
20 the difference is -- is the power purchases in the  
21 market to financially settle some of those contracts  
22 and the -- and the wind energy purchases.

23 MR. BOB PETERS: All of the wind  
24 purchases would be under that line item of "Fuel and  
25 Power Purchased"?

1 MR. DAVID CORMIE: Yes.

2

3 (BRIEF PAUSE)

4

5 MR. BOB PETERS: When the Board looks  
6 at the assumptions that underpinned IFF11, found on  
7 page 72 of the Board counsel book of documents, just to  
8 provide the Board with a reference to it; it's also in  
9 one (1) of those enlarged sheets the Board may have.

10 Generally speaking, Mr. Cormie, Manitoba  
11 Hydro's generation from the '07/'08 year through to  
12 2010/'11 has been in the 34,000 gigawatt hours a year  
13 range?

14 MR. DAVID CORMIE: Yes.

15 MR. BOB PETERS: And the domestic  
16 consumption is probably closer to 24,000 gigawatt hours  
17 per year?

18 MR. DAVID CORMIE: Yes.

19 MR. BOB PETERS: And that'll leave  
20 Manitoba Hydro about 10,000 gigawatt hours a year that  
21 it can export?

22 MR. DAVID CORMIE: Yes.

23 MR. BOB PETERS: And we've already  
24 talked that some of that is firm and dependable --

25 MR. DAVID CORMIE: Yes.

1 MR. BOB PETERS: -- but there's also --  
2 also considerable opportunity, as we've also seen from  
3 the previous statistics, correct?

4 MR. DAVID CORMIE: Yes.

5 MR. BOB PETERS: Now, to support some  
6 of those export arrangements, Manitoba Hydro will also  
7 buy some power and ship it back to Manitoba?

8 MR. DAVID CORMIE: Yes.

9 MR. BOB PETERS: And Manitoba Hydro  
10 does that so that it can leave water in the reservoir  
11 storage and -- and use it at a later time?

12 MR. DAVID CORMIE: Most of that is  
13 buying overnight, Mr. Peters, to serve the Manitoba  
14 load so that the water -- water levels in front of the  
15 dams can build up overnight so that we can sell back to  
16 the export market in the daytime.

17 So -- and -- and that happens in the  
18 wintertime, so they're arbitrage transactions. And --  
19 and nat -- and due to the nature of the ice  
20 restrictions, that's -- that's a very normal thing.  
21 Even in the highest-flow years there's -- there are  
22 opportunities to buy at night in the winter to sell  
23 back in the daytime.

24 MR. BOB PETERS: I'm sorry, could you  
25 repeat that?

1 MR. DAVID CORMIE: Oh, even in the  
2 highest of flow years we will do that, because the --  
3 the high-flow years the flows on the -- in -- in the  
4 rivers in the wintertime aren't high enough to allow us  
5 to displace all the -- to -- to meet all the market  
6 opportunities there that exist.

7 MR. BOB PETERS: Does that not, Mr.  
8 Cormie, involve an element of speculation of the market  
9 prices?

10 MR. DAVID CORMIE: No, it's -- it's --  
11 those -- those off-peak purchases for on-peak sale are  
12 made on a day-to-day basis. We know what -- we know  
13 where the market -- like, remember we talked about in  
14 the day ahead market we get -- we get to offer in our  
15 power. We know what we're offering in at and we also  
16 have the right to set the price at which we're going to  
17 buy.

18 So we'll -- we'll purchase in the day-  
19 ahead market and sell in the day-ahead market and we  
20 can guarantee that we will do that at a profit, there's  
21 no speculation involved.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: When the Board

1 considers the gross export revenues, they'd have to  
2 take the extraprovincial revenue line of the IFF and  
3 also then subtract the fuel and fow -- and power  
4 purchases that have go -- gone in to support that  
5 export agreements or arrangements.

6                   Would that not be correct?

7                   MR. DAVID CORMIE:    Yes.

8                   MR. BOB PETERS:    And so on the test  
9 years if the Board has IFF3 -- sorry, IFF11-2 at Tab 3  
10 of Board counsel's book of documents, and we take the  
11 2013 year -- test year and subtract from the  
12 extraprovincial revenues the fuel and power purchases,  
13 the net is -- the net revenue is around \$159 million of  
14 -- of net export revenues, Mr. Cormie?

15                   You'd accept that, subject to check?

16                   MR. DAVID CORMIE:    Well, I -- I would  
17 disagree with that calculation, because it assumes that  
18 all fuel and power purchase as associated with an  
19 export activity.  The only reason we're -- we run  
20 proficiency runs at the Brandon generating station and  
21 at the combustion turbines of the coal plant is to  
22 ensure a reliable supply for the domestic customer.

23                   So those aren't costs that are -- are --  
24 that our export sales are responsible for.  And the --  
25 you know, so I -- I think you have to -- if you want to

1 do the calculation correctly you have to isolate which  
2 of the costs of -- are incurred associated with the  
3 extraprovincial sales, and one (1) of those costs  
4 rightly are the power purchased at night in order to  
5 sell it back in the daytime. That's a fair cost that  
6 you can assign to extraprovincial revenues.

7                   But I don't think it's fair to assign  
8 all the -- all the fuel and power purchases to those so  
9 it's an indication but it's -- it -- you really need to  
10 do a much more careful calculation before you charge  
11 the extraprovincial sales with all those costs.

12                   MR. BOB PETERS: And from your previous  
13 evidence a few minutes ago, those proficiency runs that  
14 you mentioned on firing up the -- the Brandon barbecue,  
15 or the -- the Selkirk gas, those -- those costs, I  
16 thought you indicated, were relatively minor?

17                   MR. DAVID CORMIE: Yes. They are --  
18 they are small, yes, in -- in terms.

19                   MR. BOB PETERS: But your -- your point  
20 to the Board is if you want precision you better go --  
21 you're better to go through each of the -- each of the  
22 ledger items as to why the -- the fuel or power  
23 purchase was made.

24                   MR. DAVID CORMIE: Yes. And -- and one  
25 (1) of those costs are the transmission service



1 reservations associated with the exports. It's fair to  
2 charge the \$27 million in -- in charges because that's  
3 what gives us access to the market. And so you have to  
4 make sure that you charge those costs to -- to those  
5 customers.

6 MR. BOB PETERS: And I think we're  
7 headed the same -- oh, I'm sorry, Mr. Warden, I didn't  
8 mean to cut you off.

9 MR. VINCE WARDEN: Sorry. I was just  
10 going to point out diesel fuel is also included in the  
11 fuel and power -- power purchase line on the IFF.

12 MR. BOB PETERS: And that's significant  
13 because that's diesel fuel for the -- for the diesel  
14 zone?

15 MR. VINCE WARDEN: Yes, that's right.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Mr. Warden, I'm just  
20 wondering, when Manitoba Hydro presented its IFF12 and  
21 the downturn, or the further downturn in the export  
22 market, there was an approximate \$3 billion over the  
23 long run of -- of reduced extraprovincial revenues?

24 MR. VINCE WARDEN: Over the twenty (20)  
25 year forecast period, yes.

1 MR. BOB PETERS: And of that \$3  
2 billion, was that all net export revenues, or was --  
3 was there still to be a netting out of fuel and power  
4 purchase arrangements respecting that?

5

6

7 (BRIEF PAUSE)

8

9 MR. VINCE WARDEN: Yes, Mr. Peters, in  
10 answer to your question it -- it is net -- net of fuel,  
11 power purchase, water rentals, export sales, fuel --  
12 minus fuel and power purchased and water rentals.

13 MR. BOB PETERS: It essentially made  
14 the adjustments that Mr. Cormie had suggested would be  
15 needed to have a proper indication of what the -- what  
16 the net number was?

17 MR. VINCE WARDEN: No. It was just a  
18 simple net of those -- those lines on the financial  
19 forecast I just mentioned.

20

21 (BRIEF PAUSE)

22

23 MR. TERRY MILES: Just -- that's from  
24 IFF10 to 11, is that the drop that we're talking about?  
25 The \$3 billion decrease is IFF --

1 MR. BOB PETERS: IFF11-2 to IFF12 was  
2 my intention on that, Mr. Miles. If I misspoke, I  
3 apologize.

4 MR. TERRY MILES: Okay. No, that's  
5 fine. I -- I didn't hear the question --

6 MR. BOB PETERS: All right.

7 MR. TERRY MILES: -- because I was  
8 looking at something else at the time.

9

10 (BRIEF PAUSE)

11

12 MR. VINCE WARDEN: Mr. Miles just  
13 pointed out, which is important, that it's not solely  
14 due to a drop in export revenues. There is a deferral  
15 of Cona -- one (1) year deferral of Conawapa in there  
16 as well that affects the \$2.9 billion that we were  
17 referencing earlier.

18 MR. BOB PETERS: Mr. Miles,  
19 approximately 80 percent of that price reduction, or of  
20 that loss of revenue attributed to the extraprovincial  
21 line was -- was due to the price reduction, and 20  
22 percent was related to the deferral of Conawapa?

23

24 (BRIEF PAUSE)

25

1 MR. VINCE WARDEN: Mr. Peters, you are  
2 correct. We refer to that in IFF12, on -- at the  
3 bottom of page 5.

4 MR. BOB PETERS: Yes, thank you Mr.  
5 Warden. Mr. Cormie, stay with me if you will with the  
6 Board on page 90 of Tab 9 of the book of documents.  
7 And what we see on the top half of the page under  
8 various years is the extraprovincial amount shown in  
9 IFF11-2 and then a simple subtraction of the fuel and  
10 power purchases to come up with a net export revenue.

11 And you've given us qualifications to  
12 say that that's -- that's imprecise because there may  
13 be some -- some amounts that should -- should not be  
14 subtracted because they weren't in an effort to either  
15 protect, raise, or obtain export revenue.

16 MR. DAVID CORMIE: Yes, I see that.

17 MR. BOB PETERS: Okay. But relatively  
18 in terms of directions on a -- on a fairly high level,  
19 if we then take the energy sales that Manitoba Hydro  
20 has reported and subtract from that the -- the fuel and  
21 power purchase costs of energy, we -- we come up with  
22 another net export revenue line dealing with only the  
23 energy purchases. And it appears that there's about  
24 \$10 million of other revenues in IFF11-2 under -- under  
25 the extraprovincial revenue.

1                   That number may -- may in fact be -- is  
2 that the order of magnitude of those adjustments or...

3                   MR. DAVID CORMIE:    Yeah, that's the  
4 non-energy-related revenues.

5                   MR. BOB PETERS:    When you say non-  
6 energy related, non-energy related to the exports?

7                   MR. DAVID CORMIE:    Yes.

8                   MR. BOB PETERS:    And then if we go over  
9 a year, Mr. Cormie, to the test year of 2012/'13, we  
10 see that the -- the other net -- the non-energy items  
11 increases to as much as 33 million.

12                   MR. DAVID CORMIE:    Yes.

13                   MR. BOB PETERS:    Is that -- do you know  
14 the composition of that, in -- in terms of other  
15 aspects that would be included, without necessarily the  
16 --

17                   MR. DAVID CORMIE:    Yes. I -- there was  
18 a -- a \$10 million in additional revenue and \$10  
19 million in reduced costs that we threw into the  
20 forecast at the last minute to recognize the changing  
21 water conditions at -- at the time the IFF was  
22 prepared. And rather than going back and doing weeks  
23 and weeks of work to -- to figure out what that detail  
24 would be, we -- we thought that was a reasonable  
25 estimate of the value of the changed conditions. And

1 in retrospect, we should have done more; but that's  
2 what we put into the IFF.

3                   Actually, that was Mr. Warden that did  
4 that, not me. He didn't -- he didn't -- you know, when  
5 you're sitting in your office and it's raining and --  
6 and I come in and say it's dry, he doesn't believe you  
7 --

8                   MR. BOB PETERS:    Okay.

9                   MR. DAVID CORMIE:   -- and he makes up  
10 his own numbers.

11                  MR. VINCE WARDEN:   That's that -- we're  
12 always striving to get the perfect forecast.

13                  MR. BOB PETERS:    And Mr. Cormie, is  
14 the -- is the -- IFF12 doesn't have that same  
15 subjective aspect to it?

16                  MR. DAVID CORMIE:   No, we -- we had  
17 lots of time to put IFF12 together. Followed the  
18 normal procedures, and I think we're on track there.

19                  MR. BOB PETERS:    In addition to that  
20 \$20 million, Mr. Cormie, does the -- the remaining \$13  
21 million under test year '13 then fall into those fuel  
22 and power purchase items that would not be attributed  
23 to export revenues?

24                  MR. DAVID CORMIE:    Yes, and I -- you  
25 know, that includes the condition management settlement

1 credits. And we don't show those in the long run becau  
2 -- and -- and when Mr. Miles takes over the forecast,  
3 you know, he wasn't including any of those numbers.  
4 And fortunately -- or, unfortunately, that opportunity  
5 has disappeared, and we -- we won't be showing that in  
6 the forecast from now on because we're not able to  
7 generate those revenues.

8                   But we always had those kind of short-  
9 term revenue opportunities put in as we knew -- we were  
10 pretty confident in the short term they would be there.  
11 Whether they would be there in the long run for the  
12 twenty (20) years of the IFF, we didn't have that  
13 confidence, and so we've left those out in the long  
14 run. But the -- those were in for '11/'12 and '12/'13.

15                   MR. BOB PETERS:    What about in '13/'14,  
16 sir?

17                   MR. DAVID CORMIE:    Yeah, we made the  
18 same management adjustment in '13/'14, 20 million to  
19 the revenue and a \$10 million reduction to cost,  
20 because we -- what we felt was that the change in water  
21 supply conditions were such that there would be  
22 carryover effects into fiscal '13 and '14 as a result  
23 of the turnaround in water conditions that we were  
24 seeing. So we adjusted both years.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Would merchant trading  
4 revenues have to be also considered in the -- in the  
5 difference, Mr. Cormie?

6 MR. DAVID CORMIE: Yes, that -- that  
7 would be an -- a factor. With the spreads between the  
8 markets really diminished in the last few years, the  
9 net profitability of that activity is measured in --  
10 it's a few million dollars, Mr. Peters. And -- and,  
11 you know, we can justify that in the short term, but we  
12 -- we don't include that in the long run as a -- as  
13 part of the -- the balance of the eighteen (18) --  
14 balance of the eighteen (18) years of the forecast. We  
15 -- we're just not confident that it's there.

16

17 (BRIEF PAUSE)

18

19 MR. DAVID CORMIE: So in the '12/'13  
20 number, the merchant net revenue was 4 million. And  
21 after that we've just -- we assumed it was zero.

22 MR. BOB PETERS: Mr. Cormie, it sounds  
23 like those numbers are relatively at hand. Could you  
24 undertake to provide the details of that other revenues  
25 and costs, excluding sales of Manitoba Hydro-generated



1 energy that appear in the IFF for the test years under  
2 extraprovincial revenue and fuel and power --

3 MR. DAVID CORMIE: Yes.

4 MR. BOB PETERS: -- purchases?

5 MR. DAVID CORMIE: We will.

6 MR. BOB PETERS: I think that would --

7 MR. DAVID CORMIE: For which years, Mr.  
8 Peters?

9 MR. BOB PETERS: Let's just do for the  
10 years depicted, if you have it.

11 MR. DAVID CORMIE: So up to '15/'16?

12 MR. BOB PETERS: That's far enough,  
13 yeah.

14 MR. DAVID CORMIE: Yes, we'll undertake  
15 to provide those other revenues for those years.

16

17 --- UNDERTAKING NO. 22: Manitoba Hydro to provide  
18 the details of the other  
19 revenues and costs,  
20 excluding sales of Manitoba  
21 Hydro-generated energy that  
22 appear in the IFF for the  
23 test years under  
24 extraprovincial revenue and  
25 fuel and power for the

1 years depicted up to  
2 '15/'16

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: And is the -- is the  
6 reason that the apparent drop off in other net revenues  
7 in the forward years of '15 and '16 is because of the -  
8 - the management adjustment that hasn't been carried  
9 forward?

10 MR. DAVID CORMIE: Yes. We didn't  
11 think that our ability to forecast improved water  
12 conditions would go out that far.

13 MS. PATTI RAMAGE: If I could just jump  
14 in, Mr. Peters, the undertaking you requested, I think  
15 we've already provided an undertaking for that, but  
16 either way, you'll get it. But if the record shows two  
17 (2), our -- our notes indicate you've got that one.

18 MR. BOB PETERS: Thank you.

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: Mr. Cormie, I'd like  
22 to turn to page 91 of the book of documents and explain  
23 and discuss with you to explain to the Board the --  
24 perhaps the relationship between exports and imports.  
25 This table attempts to summarize export and infor --

1 export information and import information provided in  
2 the -- in the doc -- in the filings.

3 But one (1) of the things noticed is  
4 that there's -- there's perhaps two (2) different  
5 levels of export sales volumes for the same year  
6 provided. Is that just a -- a lack of reconciliation,  
7 or is there some -- would there be some reason why --  
8 why that would occur?

9 MR. DAVID CORMIE: The total exports --  
10 exports are total sales. So in the first column, it  
11 says ten thousand one hundred and seven (10,107). So  
12 that's how many gigawatt hours we sold. How many of  
13 those we actually physically delivered is the ninety-  
14 eight eighteen (9,818). So it's the difference between  
15 physical deliveries and sales.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: When the contract  
20 information is -- is put across the various years for  
21 which data was provided, the contract prices are -- are  
22 simply averaged. This may contain, Mr. Cormie, then  
23 the opportunity sales under a long-term contract that  
24 would -- would also suppress the average price.

25 Would that be -- would that be accurate?

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: I'm un -- I'm unsure  
4 what you mean by the contract. Are these the term  
5 sales, Mr. Peters? I -- I didn't prepare this  
6 document.

7 MR. BOB PETERS: No, I -- what I was  
8 trying to get at was that the -- the contract line  
9 contained the reported sales by Mani -- by Manitoba  
10 Hydro through NEB, pursuant to what were long-term  
11 arrangements?

12 MR. DAVID CORMIE: So if -- if those  
13 two (2) lines represent the NEP -- NEB data then the  
14 contract sales would be those that -- under which we  
15 had firm licences and the day-ahead and real-time would  
16 have gone under the general purpose export licence.

17 MR. BOB PETERS: And -- and the -- the  
18 contract sales would be the dependable energy sales,  
19 like the long-term contracts together with any  
20 bilateral contracts that Manitoba Hydro would have?

21 MR. DAVID CORMIE: Well, I think rather  
22 than "contract" that you should describe them as those  
23 sales that are sold under the firm licences, because  
24 under the firm licences you can sell dependable energy  
25 and opportunity energy. I note that if you add those

1 two (2) lines, the day-ahead, real-time to the contract  
2 you get the physical sales. And all you're doing is  
3 separating out those that are done under the general  
4 licence to the ones that apply to the specific  
5 contract. So their -- their contract includes -- it --  
6 it's actually licence sales versus the general purpose  
7 sales.

8 MR. BOB PETERS: All right. We'll --  
9 we'll check that, but I think the reference was from --  
10 from data provided by Manitoba Hydro in response to the  
11 Information Request, so I -- I may have been incorrect  
12 in suggesting the source on that, Mr. Cormie. But in  
13 terms of the data, the -- the day-ahead market prices  
14 and the real-time were -- were combined in terms of  
15 volumes to -- to come up with an average price.

16 And according to this data, in 20 --  
17 let's pick 2011/'12, Manitoba Hydro would have sold  
18 approximately 3,899 gigawatt hours on the day-ahead and  
19 real-time market. And on average would have received  
20 two point one (2.1) cents?

21 MR. DAVID CORMIE: Yes, I -- I see  
22 that.

23 MR. BOB PETERS: Would -- would it be  
24 correct for the Board to assume and conclude that  
25 Manitoba Hydro's bid price on the day-ahead would have

1 averaged below the two point one (2.1) cents?

2 MR. DAVID CORMIE: Yes.

3 MR. BOB PETERS: And that's because

4 Manitoba Hydro could -- could bid it in lower than two

5 point one (2.1) cents, maybe even much lower than two

6 point one (2.1) cents and still be the beneficiary of

7 whatever the market was cleared at?

8 MR. DAVID CORMIE: Yes. Our -- our

9 costs for incremental generation are less than two

10 point one (2.1) cent.

11 MR. BOB PETERS: And that's the basis

12 on which Manitoba Hydro routinely decides what price to

13 bid into the market, Mr. Cormie?

14 MR. DAVID CORMIE: Yes, we -- for each

15 offer that we make we determine what the source of the

16 energy is going to be. If it's coming out of -- out of

17 Hydro it will be our water rental costs, our O&M costs

18 adjusted to the border converted into US dollars plus a

19 margin. If it's coming from energy that's purchased at

20 night then it will reflect the cost of purchased energy

21 plus a margin.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: Mr. Cormie, from what

1 you've told the Board would it be correct that there's  
2 no guarantee of any sale or of any price if energy is  
3 sold in the real-time market?

4 MR. DAVID CORMIE: Yes. The -- the  
5 price that's achieved in the real-time market is  
6 determined on five (5) minute increments. They're not  
7 known in advance. And at the end of the hour the MISO  
8 averages those five (5) minute prices out to get a --  
9 to calculate an hourly price. And you get -- you --  
10 you find out what that price is after the fact. And  
11 it's a highly volatile price.

12 MR. BOB PETERS: So it's possible, Mr.  
13 Cormie, that Manitoba Hydro may not -- may get shut out  
14 of an energy sale on a particular day.

15 MR. DAVID CORMIE: If the -- if the  
16 price were to drop below our -- our production costs  
17 then we -- we would not want to make that transaction  
18 and we would leave the water in the reservoir to sell  
19 it the next -- at a -- at another time.

20 MR. BOB PETERS: But is there  
21 sufficient time on the day-ahead market to -- to leave  
22 it in the reservoir, or has the water already left the  
23 reservoir and is on it's way to the generating stations  
24 to -- to meet that obligation?

25 MR. DAVID CORMIE: No, there -- there

1 are -- there are balancing reservoirs in front of each  
2 of the generating stations. And -- and we have a  
3 significant reservoir at the Nelson River plants that -  
4 - that has a huge ability to store energy in response  
5 to these types of market price fluctuations.

6 But we don't have infinite storage and  
7 so we couldn't not participate in the market for many  
8 days before we'd have to open the spillway in order to  
9 manage the water.

10 MR. BOB PETERS: Can you indicate to  
11 the Board, sir, how often Manitoba Hydro does not  
12 achieve sales that they've bid in to the -- to the  
13 market?

14 MR. DAVID CORMIE: Are you speaking in  
15 the day-ahead market?

16 MR. BOB PETERS: Yes, sir.

17 MR. DAVID CORMIE: I think it would be  
18 very rare that our hydro energy wouldn't clear the  
19 market. And our offer of our thermal resources into  
20 the market rarely clear. So we -- we have either  
21 really cheap power to offer or we have really  
22 expensive. The -- the low-cost power all -- almost  
23 always clears and the very expensive rarely clears.

24 MR. BOB PETERS: And in the real-time  
25 market, sir, do you find Manitoba Hydro ever gets shut



1 out of that market?

2 MR. DAVID CORMIE: What's happening --  
3 been happening over the last few years that -- that  
4 real-time prices are being affected during periods of  
5 high wind generation in the region, driving the real-  
6 time price at the MISO -- Manitoba Hydro's MISO  
7 commercial load to very low values, and to the point  
8 where we -- we may not want to participate in the  
9 market because to sell into the market we would have to  
10 pay. Like the prices can go negative and we would have  
11 to pay.

12 What we do in those events when prices  
13 go negative is we cut our day-ahead schedules. So  
14 energy that we sold day ahead at thirty dollars (\$30),  
15 we cut those schedules and we're required to replace  
16 them. So we get paid to replace them.

17 So we hold the -- keep the water in the  
18 reservoir, and we have cut our schedules. But we're  
19 financially obligated to cover the costs, but then it's  
20 a negative price so we can make money. So even when  
21 prices go negative, Mr. Peters, we not -- may not want  
22 to sell, we want to buy, and we want to get paid to  
23 buy. So low prices aren't necessarily -- negative  
24 prices aren't necessarily a bad thing as long as it  
25 doesn't create spillage for us.

1 MR. BOB PETERS: Is the -- is the  
2 amount -- is the price at which Manitoba Hydro bids  
3 into the market commercially sensitive, Mr. Cormie? Or  
4 can you indicate to the Board whether it's generally  
5 below one (1) cent or below two (2) cents? Can you --  
6 how -- how fine can you --

7 MR. DAVID CORMIE: Well, it's -- it --  
8 for the hydraulic resources it's -- it's -- it -- if  
9 it's coming from hydro energy, it's below -- it's below  
10 10 cents. If it's coming from purchase power, like  
11 energy that we're buying at night in order to support  
12 an on-peak sale, it will reflect the cost of replacing  
13 that at another time with more purchases. So -- and  
14 then it will be -- it will be tied to a market price.

15 What -- and -- and it's valued at, what  
16 will it cost Manitoba Hydro to replace that energy  
17 having sold it out of the reser -- out of -- out of the  
18 system, because now the water levels in front of the  
19 dam go down, we need -- we need to get them back. So  
20 we look forward and say, well, having sold in the day-  
21 ahead market, reservoir is lower, we need to re-  
22 establish that level, what is it going to cost us to  
23 replace it.

24 And so that becomes the basis for  
25 pricing the energy, and everyday we establish a value

1 of water in reservoir storage and the traders trade  
2 around that. That's -- you know, what's the cost of  
3 your inventory at this moment in time. And so we trade  
4 around the value of the inventory.

5 MR. BOB PETERS: I'm not sure if I  
6 understand, you say that you could -- if it's a  
7 hydraulic resource you could bid in at ten (10) cents,  
8 was it -- I thought I heard ten (10) cents but you're -  
9 - ten dollars (\$10) a megawatt --

10 MR. DAVID CORMIE: One (1) cent -- ten  
11 dollars (\$10) a megawatt hour, it's less than ten  
12 dollars (\$10) a megawatt hour.

13 MR. BOB PETERS: Right, okay. So, a  
14 penny or less would be -- per kilowatt hour would be  
15 the bid. And as you say, that would usually clear  
16 unless prices even go negative. And would the negative  
17 price only be because of wind generation coming on at a  
18 subsidy?

19 MR. DAVID CORMIE: There will -- there  
20 will be times when prices could go negative because of  
21 lack of load and base load thermal resources running.  
22 But it's -- it's mainly now the effect of -- of the  
23 10,000 megawatts of wind that are now in the MISO  
24 footprint and -- and mainly in the off-peak. So it is  
25 -- it is driven by the wind.

1 MR. BOB PETERS: Mr. Cormie, to quickly  
2 then review the top half of the chart on page 91, the  
3 Board will see that from '08/'09, the contract prices  
4 line where they were at about six (6) cents, they fell  
5 to four point two (4.2). And they've fallen a bit more  
6 and -- and come out around four point zero (4.0).

7 MR. DAVID CORMIE: Mr. Peters, these --  
8 these numbers don't reflect the demand charge, so these  
9 are just the energy charges under those contracts. The  
10 NEB doesn't calculate the all-in price. So, that four  
11 (4) cents for '11/'12 is -- it's missing the -- the  
12 demand revenue. And when Manitoba Hydro calculates the  
13 revenues on a unit basis for its contract sales, we  
14 include the demand charge.

15 MR. BOB PETERS: You -- you include the  
16 revenues in your average price calculation?

17 MR. DAVID CORMIE: Yes.

18 MR. BOB PETERS: And can you explain to  
19 the Board how you are able to charge both an energy  
20 rate and a capacity rate? That's a negotiated matter  
21 in the contract?

22 MR. DAVID CORMIE: Yes, it's  
23 negotiated.

24 MR. BOB PETERS: And does that mean  
25 that Manitoba Hydro will keep a certain amount of

1 capacity dedicated to serve that sale and that's the  
2 compensation to Manitoba Hydro for doing that?

3 MR. DAVID CORMIE: Yes, it's -- it's  
4 designed to be equivalent to the purchasers alternative  
5 cost of capacity in that or -- in -- you know, to  
6 reflect that that's the value of capacity.

7 MR. BOB PETERS: That's the proxy  
8 that's used by Hydro?

9 MR. DAVID CORMIE: Well, generally,  
10 their capacity charge is more but we -- we -- we like  
11 to have a demand component in there to guarantee us  
12 that revenue whether we sell a megawatt hour or not.

13 MR. BOB PETERS: But there's no  
14 capacity charges related to the day-ahead or the real-  
15 time market, correct?

16 MR. DAVID CORMIE: Absolutely, there's  
17 -- that's -- you're just getting paid for energy.

18 MR. BOB PETERS: And so there, the  
19 Board will see that from '08/'09 through to '11/'12,  
20 the average price has fallen from four (4) cents, down  
21 to closer to two (2) cents.

22 MR. DAVID CORMIE: Yes.

23 MR. BOB PETERS: And if we then look to  
24 see what Manitoba Hydro has done in terms of  
25 purchasing, we look to the bottom half of the schedule

1 and these are total energy purchases from the data that  
2 was -- was used. This purchase of electricity would  
3 show up in the fuel and power purchases line on the  
4 IFF, correct?

5 MR. DAVID CORMIE: Yes.

6 MR. BOB PETERS: And again, because  
7 Hydro sells more electricity than it hydraulically  
8 generates, it often will buy energy from the MISO  
9 market and -- and resell it.

10 MR. DAVID CORMIE: Yes.

11 MR. BOB PETERS: I'm not sure if Mr.  
12 Miles answered this question for me earlier, but I --  
13 does Manitoba Hydro have a fixed-price contract to buy  
14 energy from counterparties?

15 MR. DAVID CORMIE: Not in the export  
16 market. We have no fixed-price obligation, only for  
17 the -- under the wind power purchase agreements.

18 MR. BOB PETERS: Okay. Thank you. It  
19 appears, on looking at this chart on page 91 of Tab 9  
20 of the book of documents, Mr. Cormie, that Manitoba  
21 Hydro's energy purchases from 2008/'09 going through to  
22 the '11/'12 year, the -- the amount purchased has --  
23 has increased.

24 MR. DAVID CORMIE: Yes.

25 MR. BOB PETERS: And significantly so

1 in the '11/'12 year, sir. What made that year a year  
2 worthy of almost doubling the -- the purchase  
3 commitments?

4 MR. DAVID CORMIE: That's when the St.  
5 Joseph wind farm came into service.

6 MR. BOB PETERS: Is there any --  
7 anything on this chart that reflects purchases from the  
8 Wuskwatim Power Limited Partnership?

9 MR. DAVID CORMIE: No.

10

11 (BRIEF PAUSE)

12

13 MR. BOB PETERS: Just a thought back to  
14 a -- just the second-last answer you gave me, Mr.  
15 Cormie, that Manitoba Hydro's purchased energy is made  
16 up of dependable energy through wind purchases then.

17 Is that correct? Wind is considered  
18 dependable energy that I reviewed with Mr. Miles this  
19 morning?

20 MR. DAVID CORMIE: Yes.

21 MR. BOB PETERS: And even though it's  
22 considered dependable, it's not dispatchable by  
23 Manitoba Hydro in that they can use it when they want  
24 to?

25 MR. DAVID CORMIE: It's not

1 dispatchable.

2 MR. BOB PETERS: So then the -- the  
3 hydraulic resources are needed to -- to back it up or  
4 to firm it up?

5 MR. DAVID CORMIE: That's correct.

6 MR. BOB PETERS: On the wind --  
7 dependable purchases including wind line, is the price  
8 a matter that fluctuates or is it a matter that's  
9 negotiated through the power purchase agreements with  
10 the wind farm operators?

11 MR. DAVID CORMIE: The prices are  
12 established under formula in the power purchase  
13 agreements and they don't fluctuate.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: Mr. Cormie, if the  
18 Board looks at the dependable purchases including the  
19 wind, and looks at the prices, on the face of it the  
20 purchase cost for the dependable energy including wind  
21 appears to be higher than the opportunity sales prices  
22 that Manitoba Hydro is getting in -- in terms of sales.

23 Would that be generally consistent and  
24 correct?

25 MR. DAVID CORMIE: Yes, and it's very



1 similar to the difference that you see between the  
2 contract sale prices and the real-time prices on the  
3 export contracts. The contract sales reflect the co --  
4 the value of having that resource to the customer on --  
5 as a -- as a dependable supply. And it doesn't  
6 necessarily reflect the market value of the energy that  
7 is produced. So you see on the -- the difference  
8 between our dependable sale contracts at -- you know,  
9 around five and a half (5 1/2) cents. And you're  
10 comparing that to a spot market price of two and a half  
11 (2 1/2) cents. And you would say, Well -- to a  
12 customer, you know, Why did you buy that from Manitoba  
13 Hydro at five and a half (5 1/2) cents?

14                   Because they're getting more than the  
15 energy. They're getting that resource. And that's the  
16 same thing that we're -- we're paying our -- our  
17 suppliers under the PPAs for wind an all-in price that  
18 reflects having that resource on the Manitoba Hydro  
19 system.

20                   And that doesn't necessarily match the  
21 spot market value of the energy at that time. And Mr.  
22 Miles can now include those wind power purchase  
23 agreements in as a dependable source of energy in the  
24 system. And so they are -- they have more value than  
25 just the spot market value of energy.

1                   So you're -- it's -- it's a comparison  
2 of apples and oranges. It's an all-in cost compared to  
3 the marginal value of the energy.

4                   MR. BOB PETERS:    Does Manitoba Hydro  
5 ever bid into the day-ahead export market its wind  
6 purchases?

7                   MR. DAVID CORMIE:   No, because we can't  
8 forecast that in advance. The wind energy is generally  
9 offered in -- with -- within the hour it's produced.

10                  MR. BOB PETERS:    It's the real-time  
11 sales.

12                  MR. DAVID CORMIE:   It forms -- forms a  
13 portion of the real time sales.

14                  MR. BOB PETERS:    But again at the wind  
15 prices that Manitoba Hydro is -- is paying to buy it,  
16 wind from Manitoba Hydro would seldom be in merit then  
17 on the -- on the real-time market?

18                  MR. DAVID CORMIE:   Well, the -- the  
19 wind power purchase agreements are take or pay. So,  
20 you know, the -- the actual cost of buying it is regard  
21 -- is not relevant. We have to pay that anyways. So  
22 what we're trying to do is we're taking that energy to  
23 market and trying to maximize its value. And we're not  
24 -- we don't have the choice of not purchasing the wind  
25 energy.

1 MR. BOB PETERS: Which means, Mr.  
2 Cormie, that you're buying it at six (6) cents and you  
3 could be selling it at two (2) cents, but that's --  
4 that's simply the economics of that transaction.

5 MR. DAVID CORMIE: Well, if you assume  
6 that wind is at the -- is the marginal resource. And  
7 every generating station in our system produces surplus  
8 energy so why would you say that -- that the wind is --  
9 is the marginal resource?

10 Every hydro station has a dependable  
11 component of its energy and it has a surplus. And --  
12 and the amount of surplus goes up when the water flows  
13 are high. And so I don't think it's fair to take any  
14 particular resource and put it at the margin. It -- it  
15 unfairly penalizes that. And if you did that with  
16 every resource you'd never -- you'd never be giving any  
17 resource in the system its full value.

18 So it -- it's fair -- it's -- it's more  
19 fair to think that is part of the Manitoba Hydro  
20 resources and -- and give it the average value that the  
21 system has, not stick it on the margin, whether that's  
22 Wuskwatim or wind or the -- the incremental generation  
23 that comes out of Limestone or -- even Pine Falls  
24 that's been in the system for sixty (60) years. It  
25 produces surplus energy beyond its dependable

1 capability.

2 MR. BOB PETERS: The average of your  
3 surplus of your system is then what -- what Manitoba  
4 Hydro uses in terms of bidding into the market. I'm  
5 sorry, in terms of -- in terms of servicing for example  
6 a real-time market.

7 MR. DAVID CORMIE: The -- the way the  
8 wind effects our -- our activities in the market is --  
9 it goes to serve load, it frees up a hydraulic  
10 resource, and the hydraulic resource is offered and not  
11 -- not the wind but it's through displacement.

12 Be -- because the wind has no capacity  
13 behind it it's -- it's the hydro that you have to offer  
14 in because you offer it in for a fixed schedule for an  
15 hour. And -- and so there has to be a resource that  
16 can carry the sale for the hour. Wind doesn't do that.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Mr. Chairman, I just  
21 had a bit more on this area, but I also want to  
22 recognize Ms. Ramage wanted an opportunity before we  
23 closed today to address any additional information that  
24 Manitoba Hydro may have prepared, and the Board  
25 themselves may have questions.

1                   So perhaps what I'll do is I'll stand  
2 down and defer to the Board as well as Ms. Ramage on  
3 anything further.

4                   THE CHAIRPERSON:   Mr. Lafond has some  
5 questions.

6

7                                   (BRIEF PAUSE)

8

9                   MR. RAYMOND LAFOND:   One (1) question  
10 to Mr. Cormie. The last few sentences where you  
11 indicated that it would not be fair for any source of  
12 power to use the marginal cost or the marginal revenue.  
13 However, if Manitoba Hydro decides to build a power  
14 station five (5) or ten (10) years earlier than would  
15 have been really needed by Manitobans -- and -- and I  
16 would say really needed, that is for instance, you  
17 could say before we need the full amount or the -- the  
18 power we will start by importing a certain amount and  
19 only at that point it's worth building.

20                               So, therefore, if you do build in  
21 advance is it not the marginal rates again -- revenues  
22 that should count if it's really for the purposes of  
23 exports for the first five (5) to ten (10) years?

24                   MR. DAVID CORMIE:   Oh, I -- I don't  
25 disagree with you there, Mr. Lafond. If the purpose of

1 building the resource is to attract additional export  
2 revenues it is the marginal resource. It's -- you --  
3 you need to look at the revenues that are being  
4 generated.

5 And so I -- it -- it depends on the  
6 situation.

7

8 (BRIEF PAUSE)

9

10 MR. LARRY SOLDIER: Mr. Cormie, I know  
11 Mr. Warden had talked about Limestone costing a cent to  
12 a cent and a half to produce the power. And -- and I  
13 know Wuskwatim it's a much higher rate. But what  
14 you're looking at is when you make your sales, you're  
15 taking the whole system, the -- all the assets and the  
16 cost of producing that power. So even though, say  
17 Conawapa is coming in at ten (10) cents a kilowatt,  
18 it's because of the other resources your -- your cost  
19 of power is reduced.

20 Is that my understanding?

21 MR. DAVID CORMIE: Yes. The embedded  
22 costs of -- of Manitoba Hydro's generation fee is  
23 relatively low. When you add in the cost of a new  
24 resource the overall embedded cost -- the overall cost  
25 goes up on an -- on an average basis.

1 MR. LARRY SOLDIER: And I guess the  
2 contention is that eventually those resources are going  
3 to expire or become not use -- not usable because of  
4 the age. And -- and I guess looking at Pointe du Bois  
5 there's a -- you're looking at like the -- whether or  
6 not it should be replaced or you're looking at even  
7 though it's -- the cost of the power it's producing is  
8 less. So eventually you're going to have to replace  
9 the -- all the assets over -- over a one hundred (100)  
10 year period.

11 Is that my -- my understanding?

12 MR. DAVID CORMIE: I -- yes, I -- I  
13 believe you're right. In the -- in the long run no --  
14 no generating station will last forever and it will  
15 need to be reinvested in.

16 MR. RAYMOND LAFOND: When -- when you  
17 negotiate contracts with a partner under new power  
18 plants or stations, what kind of a basis do use -- do  
19 you use for allocation of revenues? Is it actually the  
20 average across the system or some other formula?

21 MR. DAVID CORMIE: Our -- our objective  
22 in negotiating is to maximize the value of the contract  
23 to Manitoba Hydro and -- and -- without putting the  
24 sale at risk. And, you know, there's a limit to what  
25 the customer is willing to pay, and that's based on his

1 alternative costs.

2                   And -- and then the contract is -- comes  
3 back to Manitoba Hydro and the organization evaluates  
4 whether it's in the financial interests of the Company,  
5 given all the costs associated with serving that sale.  
6 Does it make financial sense to engage in that  
7 transaction?

8                   It -- and I -- I don't necessarily look  
9 at the cost of serving the sale. I'm -- I'm out there  
10 to maximize -- maximize the revenue.

11                   MR. RAYMOND LAFOND:    What I'm getting  
12 at is it is new for Manitoba Hydro to have partners in  
13 the development of new plants, including Wuskwatim and  
14 now Keeyask. So to -- and yesterday we were talking  
15 about the pro -- the sharing of the profitability,  
16 which means costs are relatively easy to allocate to  
17 the specific plant, but the revenue -- what basis do  
18 you use for the allocation of revenues?

19                   MR. DAVID CORMIE:    I think I'll let Mr.  
20 Warden speak to that on the revenue-sharing aspect of -  
21 - with the -- with the partnership, First Nations.

22                   MR. RAYMOND LAFOND:    To be more  
23 precise, is -- that's in relation to the question in  
24 terms of marginal revenues when you build an advance  
25 and for export purposes.



1 MR. VINCE WARDEN: Well, with specific  
2 reference to Wuskwatim, there is a revenue-sharing  
3 formula that is based on -- primarily on contractual  
4 export sales. I -- I don't have that formula right in  
5 front of me, but -- but it's for -- formula-based  
6 revenue sharing that -- that is used for the Wuskwatim  
7 partnership and determining what is credited back to  
8 the Wuskwatim partnership.

9 MR. RAYMOND LAFOND: But it is based  
10 mostly on -- on export prices rather than the average  
11 price of all sales, including --

12 MR. VINCE WARDEN: Yes.

13 MR. RAYMOND LAFOND: -- Manitobans and  
14 exports?

15 MR. VINCE WARDEN: It's based entirely  
16 on export sales, yes.

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: Excuse me, Mr.  
20 Chairman. I might assist Mr. Warden, or attempt to  
21 assist Mr. Warden. At Tab 24 of Board counsel's second  
22 book of documents is a response from Manitoba Hydro to  
23 the PUB in Question First Round 134. It's found on  
24 page 255 at the top right-hand corner.

25 I wondered if Mr. Warden could advise

1 the Board whether the formula that he was referring in  
2 response to Board member Lafond's question is contained  
3 in this response.

4 MR. VINCE WARDEN: Yes. Thank you, Mr.  
5 Peters. It is.

6 MR. DAVID CORMIE: Mr. Peters, maybe I  
7 can speak to the Undertaking number 21 that we took on.  
8 We identified the error in the National Energy Board  
9 table that you had provided us where it showed one  
10 point seven six (1.76) cents per kilowatt hour for  
11 licence number 224. The revenue was shown in the table  
12 as two hundred and fifty-nine thousand, nine hundred  
13 and thirty-six dollars (\$259,936).

14 That is incorrect. It should be eight  
15 million, five hundred and seventy-two thousand dollars,  
16 five hundred and ninety-four (\$8,572,594). And when  
17 you do the math using that revenue, that dollar seventy  
18 -- one point seven six (1.76) cents per kilowatt hour  
19 works out to five point eight (5.8) cents per kilowatt  
20 hour.

21 MR. BOB PETERS: It was an error in the  
22 -- in the table?

23 MR. DAVID CORMIE: Yes.

24 MR. BOB PETERS: Okay. Thank you very  
25 much for clarifying that.

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: Are you done, Mr.  
4 Peters? Yes...?

5 MR. BOB PETERS: I think, for purposes  
6 of today, Mr. Chairman, I will stop my questions. And  
7 I would, in my last comments, just remind parties that  
8 I'll continue on revenue requirement on Monday and have  
9 my -- my pencil out over the weekend to make sure I'm  
10 removing any duplication, because we have covered quite  
11 a bit of information in the last few days.

12 But I would remind parties that on  
13 Tuesday, subject to Ms. Ramage's confirmation, as well  
14 as Wednesday, Mr. Larry Kennedy is available from  
15 Gannett Fleming. And he is assisting the panel related  
16 to depreciation.

17 So we will jump from the exciting  
18 discussion of export revenues to depreciation on  
19 Tuesday morning. And remind parties to be prepared,  
20 because I will answer -- ask my questions is the  
21 intent. And then I'll turn to Mr. Williams, followed  
22 by Mr. Gange, followed by Mr. Hacault to pose their  
23 questions of Mr. Kennedy while he's in town for the two  
24 (2) days. And we suspect we -- we won't need the full  
25 two (2) days.

1 (PANEL RETIRES)

2

3 MS. PATTI RAMAGE: And before everyone  
4 departs for the weekend, Manitoba Hydro is -- have we  
5 distributed? Oh, we are about to distribute another  
6 exhibit; we're suggesting this be Exhibit 21.

7 This is a package of IR responses. In  
8 the -- in the IR process, there was a number of  
9 questions where Manitoba Hydro responded, where the  
10 question requested information ba -- based on IFF12, or  
11 we've responded we would need IFF12, in order to  
12 respond.

13 So, this is a package of responses to  
14 those IRs based on IFF12, and I'm suggesting they --  
15 this be marked as an exhibit in one (1) package. We  
16 went up to twenty (20), I believe, so I believe this is  
17 twenty-one (21); Mr. Singh is nodding, yes.

18

19 --- EXHIBIT NO. MH-21: Package of IR responses  
20 based on IFF12

21

22 MR. PATTI RAMAGE: And -- and that's  
23 all we have for now. There may be -- and I -- and I  
24 don't want to make any promises. If we do get more  
25 done over the weekend, we were thinking we may

1 distribute by email and then enter them on the -- in  
2 the morning of Monday, but if -- if they are done,  
3 we'll try to get them out that way, just so people get  
4 to see them ahead of time.

5 THE CHAIRPERSON: Thank you for that.  
6 I don't know that there are any other matters to  
7 address. If not, we will adjourn shortly, and we'll  
8 see each other again on Monday morning at nine o'clock.

9 So thanks very much. I hope everyone  
10 has a good weekend and we'll see you on Monday at nine  
11 o'clock. We're adjourned.

12

13 --- Upon adjourning at 4:31 p.m.

14

15

16

17 Certified Correct,

18

19

20

21 \_\_\_\_\_

22 Cheryl Lavigne, Ms.

23

24

25

1316				
<u>        </u> \$	1179:3	1050:23,24	<b>1,250</b> 985:5	<b>100-</b>
<b>\$1.6</b> 1119:20	<b>\$5</b> 1158:23	1053:2,16	<b>1,639</b>	<b>megawatt-</b>
<b>\$1.76</b> 962:8	1159:11	1056:1,10	1030:5,25	<b>capacity</b>
1191:19	<b>\$50</b> 1158:24	1057:10	<b>1.76</b> 1192:1	1075:16
1192:8	1159:4	1059:8,15	1238:10,18	<b>1024</b> 961:10
<b>\$10</b> 1086:2	<b>\$500</b> 1013:6	1060:2,11,	<b>1/2</b> 966:8	<b>1062</b> 961:18
1090:17	<b>\$55</b> 1136:20	18 1062:17	1138:23	<b>11</b> 1175:12
1177:11	<b>\$57</b> 1139:11	1063:6	1189:25	1206:24
1208:24	<b>\$63</b> 1186:8	1064:13	1190:14	<b>11/'12</b>
1209:18	<b>\$66.52</b>	1065:16	1229:9,11,	1025:10
1211:19	1149:20	1072:20	13	1026:6
1223:9,11,	<b>\$71</b> 1139:16	1081:2	<b>1/4</b> 1037:2	1114:13
12	<b>\$71.78</b>	1083:21	<b>1:00</b> 1097:25	1190:22
<b>\$13</b> 1210:20	1139:7	1085:11,20	<b>10</b> 994:4	1211:14
<b>\$15.56</b>	<b>\$8,572,594</b>	1095:16	1010:12	1224:11
1196:5	1238:16	1096:21	1052:19	1225:19
<b>\$159</b> 1203:13	<b>\$88.14</b>	1101:11	1068:21	1226:22
<b>\$17</b> 1176:7	1150:1	1106:20	1090:4	1227:1
<b>\$19</b> 1176:8	<u>        </u>	1113:1	1144:14,22	<b>11:03</b>
1177:3	0	1117:25	,23	1050:12
<b>\$19.50</b>	<b>03/'04</b>	1118:16	1148:8,9	<b>11-02</b> 1102:7
1196:3	992:20	1119:20	1179:14	<b>115A</b> 1068:11
<b>\$2</b> 1195:18	<b>04/'05</b>	1128:8,13	1197:8	<b>1171</b> 961:20
<b>\$2.9</b> 1207:16	1122:23	1133:17	1222:10	<b>1172</b> 961:22
<b>\$20</b> 1115:1	<b>07/'08</b>	1135:17	1223:7,8	<b>1173</b> 961:25
1137:6	1200:11	1142:14	1233:14,23	<b>1180</b> 960:3
1210:20	<b>08/'09</b>	1144:1	1234:17	<b>1181</b> 960:7
<b>\$200</b> 1089:18	1139:3,4	1151:19	<b>10,000</b>	<b>1182</b> 960:8
1090:3	1224:3	1156:2	1118:1	<b>1187</b> 962:6
<b>\$221</b> 1146:1	1225:19	1160:23	1200:20	<b>1192</b> 962:11
<b>\$259,936</b>	<b>09</b> 967:10	1161:2	1223:23	<b>12</b> 966:7
1238:13	<u>        </u>	1181:12	<b>10,107</b>	968:18
<b>\$27</b> 1205:2	1	1183:3,16,	1215:11	1175:12
<b>\$3</b> 1205:22	<b>1</b> 961:13	17,21	<b>10,400</b>	<b>12/'13</b>
1206:1,25	968:25	1188:3	1119:3	1021:19
<b>\$30</b> 1137:7	969:19	1200:9	<b>10,500</b>	1026:6
1221:14	970:3	1204:3,25	1119:3	1048:1
<b>\$300</b> 1186:10	974:24	1207:15	<b>10:49</b>	1110:7
<b>\$327</b> 1175:24	986:5	1215:3	1050:11	1111:24
<b>\$35</b> 1115:1	1004:16	1222:5	<b>100</b> 967:21	1114:14
<b>\$36</b> 1176:1	1015:20,22	1223:10	1010:14	1144:16
<b>\$363</b> 1177:10	1016:10	1233:9	1035:5	1211:14
	1026:13	1240:15	1073:12,13	1212:19
	1033:1	<b>1,000</b>	1159:7	
	1034:4	1053:16	1235:9	
		<b>1,100</b>	<b>1000</b> 1167:20	
		1030:24		
		1081:14		
		<b>1,205</b>		
		1001:20		

1316				
1097:24	1214:7	1181:1	1015:12	1010:12
<b>1213</b> 962:19	<b>15,000</b> 975:5	<b>190</b> 1189:11	1019:7	1022:24,25
<b>1240</b> 960:10	976:5	<b>1920</b> 1116:25	1022:23	1023:3
<b>1241</b> 957:24	984:2,4,22	<b>1939</b> 974:19	1023:24	1102:23
959:14	985:10	975:1	1024:15	1111:10
<b>125</b> 1068:24	1198:15	985:24,25	1029:9	1181:25
1069:6	<b>15/'16</b>	<b>1939/'40/'41</b>	1050:23	1187:8
1070:2,8	962:19	983:25	1053:2	1205:24
<b>13</b> 1072:12	1213:11	<b>1940</b> 975:1	1054:12	1207:21
1085:25	1214:2	986:1	1056:9	1211:12,18
1086:1	<b>150</b>	<b>1940/'41</b>	1059:8,17	1217:16
1210:21	1008:22,25	974:18	1060:2,12,18	1240:16
1211:22	1009:5,13	975:2	18 1061:9	<b>20,000</b>
<b>13,000</b>	1026:24	978:15	1062:18	979:12
1081:20	1027:20,23	985:17	1063:6	<b>20,700</b> 977:2
<b>13/'14</b>	1070:20	987:14	1064:13	978:5
1094:9	<b>152</b> 1175:22	<b>1941</b> 975:1	1065:16	992:3
1095:24	<b>16</b> 961:11	986:2	1072:20	<b>20,720</b> 996:4
1101:20	971:4,13	<b>1976</b> 1085:24	1079:15	997:1
1102:3	1062:15	<b>1977</b> 988:10	1080:11	<b>200</b> 1027:23
1114:15	1135:20,21	<b>1987</b> 1119:18	1096:21	1073:25
1211:15,18	1138:2,11	<b>1990</b> 986:22	1113:1,11	1074:7,11,12,13
<b>134</b> 1237:23	1165:23,25	<b>1992</b> 1119:18	1117:25	1092:4
<b>14</b> 957:23	1214:7	<b>1996</b> 961:14	1120:13	<b>2000</b> 1037:1
960:8	<b>16,250</b>	1060:5,19	1135:18	1064:14
964:9	985:12	1062:5,19	1144:13,20	<b>2003</b> 993:2
989:14	<b>16,500</b> 985:2	1064:14	1145:18	<b>2003/'04</b>
994:17	<b>16.2</b> 985:7	<b>1st</b>	1156:1	991:5
1040:7	986:6	968:17,22	1176:2	1038:15
1098:22	<b>17</b> 961:19	1080:18	1177:4	1198:24
1181:24	1108:13	1081:9	1180:5	<b>2004/'05</b>
1182:1	1149:1,10,	1135:13	1195:22	1122:18
1211:22	16 1171:22	1178:21	1196:7	<b>2005</b> 1135:13
<b>140</b>	1183:8	<hr/>	1214:17	<b>2007/'08</b>
1008:20,23	<b>18</b> 961:21	<hr/>	1215:4	1119:4
<b>15</b> 961:3	966:9	<hr/>	1216:13	<b>2007/2008</b>
965:19	974:25	<hr/>	1217:1	1117:24
966:18	991:17,24	<b>2</b> 959:6	1222:5	<b>2008</b> 1139:20
967:6	992:1,18	961:7,13	1225:21	1140:4,9
988:1	993:4	963:24	1229:11	1182:18
991:18	1172:20	968:16	1231:3	1183:6,7,10,22
992:23	1180:6,9	969:12	1239:24,25	<b>2008/'09</b>
993:1,4,6,10	1212:13,14	971:24	<b>2,700</b> 1030:4	1226:21
1024:9	<b>18,000</b>	973:9	1031:1	<b>2008/2009</b>
1025:19	992:18	996:2	<b>2.1</b> 1217:20	
1051:7	<b>19</b> 961:23	1011:11	1218:1,5,6,10	
1070:20	1173:19	1013:24	<b>2.8</b> 1195:19	
1071:22		1014:16	<b>2:50</b> 1179:17	
			<b>20</b> 962:3	

1316				
1138:24	1100:25	<b>2020</b> 1003:1	<b>25/'26</b>	1119:15
<b>2009/'10</b>	1181:4,17	1017:13	1027:3	1198:21
1189:9	1196:2	1019:3	<b>250</b> 1071:23	<b>30,000</b>
<b>2010</b> 968:22	<b>2012/'13</b>	1071:24	<b>250-megawatt</b>	1198:13,14
988:10	957:8	1077:4	1080:3	<b>30,200</b>
<b>2010/'11</b>	<b>2012/'13</b>	1080:18	<b>255</b> 1237:24	1032:3
1190:3	1005:16	1081:9	<b>26th</b> 960:5	1048:6
1200:12	1025:11	<b>2022</b> 972:2	1181:4,17	<b>30,744</b>
<b>2011</b> 961:15	1032:2	<b>2025</b> 1003:6	<b>27,000</b>	1066:12
968:17	1040:5	1027:24	1081:17	<b>300</b> 1000:21
1003:13	1102:10	1147:4,7	1083:2	1059:16
1025:14	1109:13	<b>2026</b> 1025:17	<b>28,500</b>	1073:20
1036:24	1144:8	<b>2030/'31</b>	1047:22	1078:2,4
1040:7	1146:1	1008:10	<b>2nd</b> 1183:20	1080:24
1057:24	1209:9	1012:7		1085:9
1062:21	<b>2012/2013</b>	<b>2035</b> 1082:24	<hr/>	1092:20
1063:7	996:2	<b>21</b> 962:7	3	<b>325</b> 1070:17
1064:7,15,	<b>2013</b> 965:17	964:14	<b>3</b> 964:6	<b>327</b> 1176:20
22 1100:24	969:3	968:7	966:8	<b>33</b> 1037:8,23
1144:7	1074:22	971:2,9,23	968:7	1039:16
1154:18	1203:11	985:20	991:17	1117:5
1175:10	<b>2013/14</b>	986:7	1013:12,14	1144:17
1183:20	957:8	987:11	,22,23	1209:11
<b>2011/'12</b>	<b>2013/'14</b>	1192:6	1014:17	<b>330</b> 957:21
962:10	1066:10	1198:20	1015:6,11	<b>34,000</b>
996:15	1067:8	1238:7	1054:16	1200:12
1001:23	1101:13	1240:6,17	1055:14	<b>340</b> 997:5
1007:9	1102:11,14	<b>21,000</b>	1065:15	1000:22
1020:8	1114:21	979:15	1096:20,22	1032:13
1026:1	1118:23	1198:20	,23	<b>363</b> 1175:25
1102:9	<b>2014</b> 965:17	<b>21/22</b> 971:9	1097:1,4,6	1176:18
1114:21	<b>2014/'15</b>	<b>22</b> 962:12	1099:24	1186:7
1117:25	1146:2	1213:17	1100:18	<b>37</b> 1145:12
1191:14	<b>2015</b>	<b>221</b> 1144:18	1180:4,5	<b>375</b> 1070:17
1192:10	1027:14,24	<b>224</b> 1238:11	1189:12,25	1080:4,11
1217:17	1031:14	<b>225</b> 1010:20	1196:8	<b>3-inch</b>
<b>2011-2IFF</b>	1068:20	<b>230</b> 1080:6,7	1199:8	1097:17
1102:5	<b>2015/'16</b>	<b>24</b> 1126:21	1203:9	<hr/>
<b>2012</b> 957:23	1030:3	1237:21	<b>3,800</b>	4
960:5	1146:6	<b>24,000</b>	1056:12	<b>4</b> 966:20
968:8	<b>2019/'20</b>	1200:16	<b>3,899</b>	989:7,13
1007:10	1017:16	<b>240</b> 1033:24	1217:18	991:7
1019:20	1144:12	1034:12	<b>3.50</b> 972:1	1015:19
1020:5	1146:14	<b>25,173</b>	<b>3.9</b> 966:9	1016:2
1021:18	1149:17	1040:8	<b>3.95</b> 972:1	1055:15
1033:14	<b>2019/2020</b>		<b>3:07</b> 1179:18	1112:21
1036:25	1144:20		<b>30</b> 1118:4	
1037:3				
1039:16				



1316				
1120:13		1072:15,18	1039:17	1085:7
1165:14	<hr/> 5 <hr/>	1073:12,13	1040:6	1092:20
1166:1,5	<b>5</b> 994:3	,23 1074:3	1048:3	<b>76</b> 1136:8
1183:9	996:21	1080:5,10,	1057:23	1137:25
1184:22	1015:1,19	13 1085:24	1059:7	<b>777</b> 1020:5
1189:25	1016:18	1165:2,7	1064:22	<b>78</b> 1010:23
1212:20	1017:16	<b>54</b> 967:13	<hr/> 7 <hr/>	1011:7
1224:11	1019:2	<b>589</b> 1113:18	<b>7</b> 1016:21	1139:7
1225:20	1045:22		1054:19	1153:17,24
<b>4,000</b> 988:23	1049:24	<hr/> 6 <hr/>	1135:5	1166:11
<b>4,200</b>	1052:18	<b>6</b> 966:18	<b>7,000</b> 993:25	1168:13
1016:25	1055:15	967:5	1118:3,23	1173:1
<b>4,442</b>	1070:12,14	994:3	1119:1	<b>781</b> 1027:13
1067:18	1086:8	1016:21	<b>7.11</b>	<hr/> 8 <hr/>
<b>4,530</b>	1090:13	1052:18	987:10,13	<b>8</b> 994:25
1067:13	1092:23	1118:1	<b>7:00</b>	1032:2
<b>4,600</b> 1067:9	1118:9,10	1189:24	1138:3,5,7	1039:18
<b>4.0</b> 1224:6	1119:13,14	1190:14	<b>70</b> 1064:24	1040:6
<b>4.2</b> 1224:5	,17	1224:4	1065:3	1048:3
<b>4:31</b> 1241:13	1130:24	1231:2	1093:21	1057:22
<b>40</b> 967:7,12	1135:19,21	<b>6,000</b> 975:13	1166:22	1059:7
1095:7	1137:5	976:8,11	1172:3,10	1064:22,24
1119:15	1138:2,23	985:17	<b>72</b> 1108:4,21	1065:4
<b>40/'41</b> 984:6	1161:8,11,	986:3,5	1109:2,8	1068:7,18
<b>400</b> 957:21	15 1196:8	<b>6,337</b>	1111:22	1093:21
1072:24	1199:18	1111:23	1120:25	1098:15
1073:19	1208:3	1114:1,2	1143:13	1111:22
1074:8	1219:6,8	<b>6.3</b> 1144:10	1144:6	1112:11
1189:12	1229:9,13	<b>6:00</b>	1149:24	1118:16
<b>40th</b>	1233:14,23	1138:6,10	1200:7	1125:12
1116:8,9	<b>5.2</b> 1195:13	<b>60</b> 1090:3	<b>720</b> 1144:18	1131:10
<b>41</b>	<b>5.22</b> 1175:16	1111:8	<b>74</b>	1135:4
1037:11,18	<b>5.3</b> 1195:14	1231:24	1098:15,21	1136:8
<b>43</b> 1010:24	<b>5.39</b>	<b>600</b> 1075:4	1112:11	1137:25
1011:8	1175:9,15	1086:9	1122:6	1173:1
1191:3	<b>5.7</b> 1139:11	1088:1	1125:12	<b>80</b> 1055:13
<b>4400</b> 1191:3	<b>5.8</b> 1238:19	1091:20,23	1127:25	1207:19
<b>450</b> 1078:1	<b>5/12</b> 970:5	1133:9,10	1131:18	<b>800</b> 1111:1
1079:10,12	<b>50</b> 990:16	<b>603</b> 972:2	1141:5	<b>81</b> 1144:18
,16,25	992:22	<b>619</b> 972:3	<b>75</b> 1010:19	<b>811</b> 1015:23
1080:9	1071:21	<b>625</b> 1144:11	1131:10	<b>819</b> 1019:12
1081:8	1097:10	<b>69</b>	1135:3	<b>84</b> 1153:22
<b>49</b> 988:2	1116:17	994:8,14,2	1139:8	<b>844</b> 1033:25
990:1	1119:15	5 1007:17	1141:5	1034:13
991:3	1139:10	1025:1	<b>750</b> 1077:25	<b>85</b> 1068:7,17
	1198:18	1028:12	1079:5,16,	
	<b>500</b> 1027:4	1032:2	24 1080:5	
	1030:10			

1316				
89 962:5 1174:6 1175:1 1187:4,11	<hr/> A <hr/>	<b>absolute</b> 1090:22	<b>accounting</b> 1020:11,25	1113:9 1203:19 1212:9
890 1002:9,10	<b>a.m</b> 963:1 1050:11,12 1138:11	<b>absolutely</b> 966:25 1121:20 1127:18 1151:2 1153:4 1225:16	<b>accumulate</b> 1046:4	<b>actual</b> 966:20,21 1053:25 1102:9 1105:14,21 1118:20 1120:15 1121:16 1159:24 1163:24 1168:21 1178:12 1189:20 1230:20
<hr/> 9 <hr/>	<b>abilities</b> 1198:5	<b>ac</b> 1121:9	<b>accumulating</b> 963:11	
9 1118:14,18 1121:2 1174:1 1208:6 1226:19	<b>ability</b> 977:21 981:8 1023:16 1034:13 1038:13 1107:17 1166:8 1193:8 1214:11 1220:4	<b>accept</b> 965:2 1159:3,8 1160:25 1161:1,2 1176:9 1203:15	<b>accuracy</b> 966:23	
9,818 1215:14	<b>able</b> 979:18,22 986:15 1012:14 1015:24 1017:4 1022:18 1023:22 1026:24 1031:13 1046:13 1049:1 1061:24 1063:12,19 1069:13,25 1071:9 1072:22 1073:9 1083:5 1087:2 1091:4 1097:18 1109:18 1127:10 1152:14 1155:11 1166:5 1179:1 1190:22 1191:17 1193:12 1211:6 1224:19	<b>acceptable</b> 1053:24	<b>accurate</b> 965:3 966:25 967:21 1120:18 1215:25	
9:01 963:1		<b>accepted</b> 1156:18	<b>achieve</b> 1143:10 1220:12	<b>actually</b> 974:18,25 980:23 1005:24 1008:8 1010:6 1014:11 1038:15 1041:4 1063:9 1076:19 1097:16 1102:3 1106:10 1107:16 1130:21 1141:11 1143:2 1148:12 1157:17 1158:10 1164:19 1168:12 1178:6 1188:13,14 1196:19 1198:3 1210:3 1215:13 1217:6 1235:19
90 1143:6 1197:5 1208:6		<b>access</b> 1029:15 1082:20 1083:6 1099:8 1103:20,22 1104:16,17 1130:9,12 1133:6,23 1184:11 1194:9 1205:3	<b>achieved</b> 1219:5	
900 980:15,17 1112:20		<b>accommodate</b> 1059:22 1063:20	<b>achieving</b> 1083:7	
90s 1060:1		<b>accommodated</b> 1004:17	<b>Achilles's</b> 1056:14	
91 1048:22 1214:22 1224:2 1226:19		<b>accordance</b> 970:8 1099:3	<b>acquired</b> 1030:10	
915 1109:13,18 1110:7 1112:18 1113:25		<b>according</b> 1217:16	<b>acquiring</b> 1133:21	
92 962:10 1187:16 1192:10		<b>account</b> 969:23,25 970:4 1001:6 1020:22	<b>Acres</b> 1183:18	
945 1181:24			<b>across</b> 989:21 1055:20 1077:2 1099:11,17 1104:12 1105:22 1107:23 1109:12 1215:20 1235:20	
957 957:24			<b>activities</b> 1003:24 1010:3 1232:8	
96 973:22 995:18 1058:1,11 1065:20			<b>activity</b> 1110:23	
960 959:3				
961 959:4				
964 959:12				

1316				
1121:6,25	1147:22	982:16	1219:7	1185:14
<b>adapt</b>	1210:19	987:25	1230:8	<b>afterwards</b>
1054:25	<b>additional</b>	1142:11	1233:21	1080:23
<b>add</b> 972:7	961:9	1184:5	1236:24	<b>against</b>
975:15,17	964:21,23,	1232:23	<b>advancing</b>	977:14
979:8	24 965:9	1241:7	1151:17,21	1049:17
986:4,6	967:25	<b>adjourn</b>	,23	1053:16
991:22	968:3,8	1093:19	<b>advantage</b>	1058:4,14
1006:16,18	971:8,17	1097:10,22	1082:3	1134:16,21
1009:17	972:9	1241:7	1091:5	1140:3
1010:23	1000:16	<b>adjourned</b>	1151:22,24	1169:21
1011:8	1001:13	1241:11	1166:20	1173:7
1013:8,20	1006:17,18	<b>adjourning</b>	<b>adverse</b>	1179:8
1014:4	,23	1241:13	961:9	<b>age</b> 1235:4
1018:22	1008:11,12	<b>adju</b> 1177:24	1023:1,5,2	<b>Agency</b>
1020:17	1009:6	<b>adjust</b>	0	1072:8
1030:24	1011:8	1147:16	1024:1,18	<b>aggressive</b>
1036:4	1013:20	1162:10	1034:5,17	1148:10,12
1052:7	1014:10,11	<b>adjusted</b>	1035:5,8,2	<b>ago</b> 981:23
1056:17	1020:10	972:17	5 1036:3	1011:11
1057:12	1021:8	984:6	1048:13,18	1016:8
1176:22	1023:3,25	1211:24	,25	1059:17
1181:6	1024:17	1218:18	1049:3,19	1072:16
1182:4	1027:2,7	<b>adjusting</b>	1056:25	1120:22
1216:25	1028:23	1096:2	<b>advisable</b>	1137:5
1234:23	1029:4,24	<b>adjustment</b>	1166:15	1196:4
<b>added</b> 996:10	1036:14	997:5	<b>advise</b>	1204:13
1041:10,13	1069:3	999:15	1190:22	<b>agreed</b>
1049:7	1074:11	1000:5	1237:25	1064:2
1064:1	1078:14	1038:13,24	<b>advised</b>	<b>agreeing</b>
1110:13	1081:10	1039:1	1169:2	1043:19
1138:5	1085:9	1048:13,14	1183:4	<b>agreement</b>
1175:22	1089:18	1049:12	1184:23	997:10
<b>adding</b>	1090:11	1049:12	<b>aeroplane</b>	1005:13
1014:3	1097:5	1049:12	1055:25	1027:6,17
<b>addit</b> 970:12	1120:16	1049:12	<b>affect</b>	1030:9
<b>addition</b>	1143:25	1138:16	1074:6,24	1035:9
964:11	1145:10,11	1174:20	1151:8	1036:2
975:10	,13	1177:12,24	1169:5	1047:12
985:9	1146:9,13,	1211:18	<b>affected</b>	1068:19
998:3	21 1147:17	1214:8	1151:7	1072:22
1022:18	1151:13	<b>adjustments</b>	1221:4	1073:3
1029:8	1160:22	1032:14	<b>affects</b>	1074:19,23
1035:4	1168:4	1174:13,20	1053:15	1155:22
1048:7	1169:3	1206:14	1207:16	1163:13
1071:7	1177:16	1209:2	<b>afternoon</b>	1190:25
1103:6,12	1193:8	<b>advance</b>	1179:12	1193:19
1119:25	1194:6	1125:13,17	<b>agreements</b>	
1130:3,4	1209:18	1154:15		
1146:16	1232:23	1157:14		
	1234:1	1184:20		
	<b>address</b>			

1316				
961:7	1224:10	1151:18	1151:13	1138:9
997:19	1229:17	1152:20	1162:23	1149:7
998:13	1230:2	1153:1	1165:10	1182:23
999:6,7,16	<b>allocate</b>	1225:4	1190:7	1206:10
1000:11	1236:16	1236:1	1199:19	1227:14
1023:24	<b>allocated</b>	<b>alternatives</b>	1208:8	1239:20
1024:15	1078:3	1151:11	1222:2	<b>answered</b>
1046:1,13	<b>allocation</b>	<b>alternatives</b>	1224:25	1226:12
1047:1,16	1235:19	-to 1087:7	1226:22	<b>answers</b>
1163:12	1236:18	<b>am</b> 985:5	1231:12	963:11
1164:12,13	<b>allow</b> 987:9	994:11	1233:17,18	1057:18
,16 1193:9	1023:2	1037:4	<b>amounts</b>	1078:8
1203:5	1027:7	1065:10	1090:22	1103:15
1226:17	1035:4	1110:4	1114:18	1104:5
1228:9,13	1049:1	1116:9	1122:10	<b>answer's</b>
1229:23	1103:16	<b>American</b>	1208:13	1015:16
1230:19	1104:6	1077:11,13	<b>analysis</b>	<b>anticipated</b>
<b>Ah</b> 988:16	1193:16	1079:15	961:21	1028:14
<b>ahead</b> 1005:4	1194:5	1152:4	1091:7	1045:5
1045:17	1202:4	<b>amongst</b>	1172:10,17	<b>anticipating</b>
1049:12	<b>allows</b>	964:15	,21	1147:23
1156:6,8	1014:16	1099:23	<b>anchor</b>	1157:22
1158:10	1076:25	<b>amortizing</b>	1080:10	1170:9
1166:19,21	1083:8	1190:14	<b>ancillary</b>	<b>Antoine</b>
1171:5	1104:23	<b>amount</b> 972:4	1169:2	958:12
1202:14,19	1193:22	975:8,24	1186:2	<b>anymore</b>
1221:14	<b>already</b>	976:21	<b>and/or</b>	983:10
1222:21	969:19	977:5	1179:1	1020:21
1241:4	973:3	978:14,17	<b>Anderson</b>	1030:14
<b>air</b> 999:11	1004:14	980:10	958:14	<b>anything</b>
1163:25	1015:1	981:16	<b>anecdotal</b>	965:21
<b>alarm</b> 989:2	1019:6	985:25	1054:20	979:8
<b>Alberta</b>	1049:18	990:16	<b>annual</b>	981:3,5
990:13	1091:13	997:24	996:21	1039:12
1099:6,9,1	1128:20	1009:5	1182:25	1048:7
2,23	1146:24	1012:17	<b>annually</b>	1052:11
1103:9	1176:11	1013:2	1183:4	1079:3
1104:13,21	1186:7	1021:18	<b>answer</b>	1111:13
1105:25	1200:23	1032:17,18	974:22	1227:7
1106:2	1214:15	1033:4,6	1018:11	1233:3
1107:19	1219:22	1049:7	1022:13	<b>anyways</b>
1109:21	<b>alter</b>	1057:13	1036:18	1028:23
1111:11,13	1151:11	1061:1	1037:15	1230:21
<b>alert</b>	<b>alternate</b>	1079:9	1087:5	<b>apart</b>
1184:18	1037:15,18	1081:21	1093:5	1056:10
<b>align</b>	<b>alternative</b>	1110:2	1104:5	<b>apologize</b>
1070:16	1037:13	1113:15	1115:4	1007:23
1188:23	1080:11	1123:21	1128:22	1100:22
<b>all-in</b>	1150:17,19	1144:15		

1316				
1153:23	1172:14	1071:22	1155:13	1235:9
1184:19	<b>appropriate</b>	1135:13	1157:11	<b>assign</b>
1207:3	1026:4	1181:4,16	1193:13	1066:24
<b>apparent</b>	1050:16	1189:24	1194:12	1167:23
1214:6	1093:7	<b>arbitrage</b>	<b>arrangements</b>	1204:6,7
<b>appear</b>	<b>approval</b>	1129:11,14	1000:23	<b>assigned</b>
962:15	968:15,24	1137:19	1029:9	1181:25
1024:24	1087:20	1201:18	1032:20,25	<b>Assiniboine</b>
1195:9	<b>approvals</b>	<b>area</b> 988:10	1033:7	1059:16
1213:1,22	1087:15	1192:17,18	1042:18,22	<b>assist</b>
<b>APPEARANCES</b>	<b>approved</b>	1193:3	1043:11,12	1012:14
958:1	968:14,23	1194:17	1068:12	1108:12
<b>appearing</b>	969:2,20,2	1232:21	1073:8	1237:20,21
1025:1	5 970:12	<b>aren't</b>	1078:22	<b>assistance</b>
<b>appears</b>	1143:21	1005:18	1086:13	1057:22
968:8	<b>approximate</b>	1007:21	1087:2	1098:11
988:22	991:5	1028:21	1090:20	<b>assisting</b>
1019:21	1016:25	1049:1	1130:19	1239:15
1025:18	1062:3	1100:11	1133:17	<b>associated</b>
1109:13	1089:18	1129:21	1155:5,6,1	961:12,24
1208:23	1205:22	1164:5	8 1195:4	964:16
1226:19	<b>approximatel</b>	1168:23	1201:6	1008:13
1228:21	<b>y</b> 975:5	1170:19	1203:5	1015:13
<b>appetite</b>	977:2	1185:23	1206:4	1019:25
1152:13	985:13	1202:4	1216:11	1020:18
<b>apple</b>	988:14	1203:23	<b>arrive</b>	1021:2
1050:25	991:17	1221:23,24	1050:2	1022:8
<b>apples</b>	992:18	<b>arise</b> 1170:4	<b>arrived</b>	1036:15
1230:2	993:25	<b>arising</b>	1145:6	1040:1,24
<b>application</b>	1011:8,9	970:5	<b>artificially</b>	1058:17
957:7	1016:6	<b>arrange</b>	1164:21	1062:16
965:20	1067:7,9	1105:5	<b>aspect</b>	1064:12
1050:21	1095:7	<b>arrangement</b>	1210:15	1077:3
<b>applications</b>	1109:19	1026:13,24	1236:20	1090:12
1093:13	1116:15	1027:22	<b>aspects</b>	1094:5
<b>applies</b>	1133:10	1028:5	1041:1	1096:9
1144:8	1135:5	1029:14,22	1209:15	1120:1
<b>apply</b> 974:4	1175:14	1036:6	<b>assess</b>	1129:22,25
1007:2,3	1195:13	1043:19,20	1050:18	1133:1
1141:17	1199:10	1069:5	1142:8	1134:9
1217:4	1207:19	1070:14,19	<b>asset</b>	1146:19,21
<b>appreciate</b>	1217:18	1071:8,21	1085:14,15	1149:18,24
1024:6	<b>approximatio</b>	1072:9	,16,17	1162:24
1088:17	<b>n</b> 1172:8	1085:23	1090:15	1164:20
1091:10	<b>April</b> 960:5	1086:1,23	<b>assets</b>	1165:13
<b>appreciated</b>	968:17,22	1087:8,23	1056:1	1167:9,13
	988:15	1089:7	1084:9	1169:2
	1068:20	1104:23	1128:1	1170:13
	1070:20	1154:16	1234:15	1173:12,21

1316				
1178:11	1052:9,12,	1044:18	1148:4	1191:15,25
1179:2	16 1114:8	1114:25	1152:15	1215:24
1186:3	1165:22	1115:2	1163:4,6	1217:15,19
1188:19	<b>assumptions</b>	1125:23	1164:19	1224:16
1189:15,21	1058:25	1127:22	1165:7,24	1225:20
1192:22	1067:2	1150:19	1168:1	1231:20
1193:14	1113:12	<b>attributed</b>	1184:1	1232:2
1194:13	1143:18	1013:13,16	1188:9	1234:25
1203:18	1145:2	1207:20	1194:2	1235:20
1204:2	1146:3	1210:22	1198:2,9	1237:10
1205:1	1200:6	<b>attributes</b>	1239:14	<b>averaged</b>
1236:5	<b>assure</b>	1131:7	<b>ave</b> 1059:12	1139:15
<b>assume</b>	1093:8	<b>augment</b>	<b>Avenue</b>	1190:1
978:25	<b>asterisk</b>	987:3	957:21	1215:22
1017:10	964:22	<b>August</b>	<b>average</b>	1218:1
1028:22	965:6,7	1189:10	988:17	<b>averages</b>
1074:14	<b>Attachment</b>	<b>authority</b>	1006:9	1219:8
1096:7	1183:9,16,	990:24	1041:22	<b>averl</b>
1111:10,12	17 1184:22	<b>avail</b>	1051:19	1067:10
1119:12	<b>attachments</b>	1081:21	1059:12	<b>aware</b> 1074:3
1165:22	1183:17	<b>available</b>	1065:5,9	1075:13
1176:7	<b>attempt</b>	966:15	1066:4,5,6	1195:8
1184:5,15	1126:12	967:2	,12	<b>away</b> 1101:24
1197:21	1131:11	976:22	1067:10	
1217:24	1237:20	989:8	1094:17,19	
1231:5	<b>attempting</b>	990:5	,21,23	<hr/> B <hr/>
<b>assumed</b>	1182:7	993:14	1095:1,5,6	<b>ba</b> 966:14
972:13	<b>attempts</b>	998:9	1096:12	1240:10
993:1,3	1214:25	1001:21	1102:12	<b>backed</b>
1001:19	<b>attend</b> 963:6	1022:20	1108:5,15	1126:10
1212:21	978:8	1027:3	1110:14	<b>backup</b>
<b>assumes</b>	<b>attends</b>	1033:6	1114:16	1199:1
984:5	1087:6	1036:9	1115:23	<b>backwards</b>
1096:13	<b>attention</b>	1044:23	1116:3,8	1121:20
1115:20	966:17	1048:7	1117:2	<b>bad</b> 993:2
1161:13	967:5	1049:25	1118:15,16	1058:17
1197:24	967:5	1053:25	,18	1119:14
1203:17	1007:19	1055:7	1119:24	1221:24
<b>assuming</b>	1099:25	1058:15	1121:1,24	
981:9	1148:25	1067:10	1123:18,23	
989:16	<b>attract</b>	1068:4	,25	<b>balance</b>
1017:15	970:6	1067:10	1135:24	1019:24
1027:3	1234:1	1081:11,22	1136:3,5,2	1064:25
1031:23	<b>attracting</b>	1082:9,23	1 1138:20	1065:5
1134:10	970:8	1083:12	1139:5	1070:13
1188:8	1042:2	1089:11	1146:4	1072:24
<b>assumption</b>		1099:17	1149:2,19	1073:14,15
977:22		1107:20	1150:4	1111:2
980:11	<b>attractive</b>	1118:21	1159:21	1178:13
986:17		1124:19,20	1185:24	1190:9
			1186:11,19	

1316				
1212:13,14	1237:3,9,15	1052:17	1218:6	1164:12
<b>balanced</b>		<b>behalf</b>	<b>benefit</b>	1165:4
1151:12	1240:10,14,20	1082:2	998:5,17	1217:25
<b>balancing</b>	<b>baseline</b>	1087:15	1033:8	1218:4,13
978:11	1047:19	<b>behaving</b>	1035:11	1220:12
1220:1	1187:22	970:25	1038:21	1223:7,15
<b>ballpark</b>	<b>basically</b>	971:17	1086:19	1230:5
1087:24	978:16	1170:11	1107:7	<b>bidding</b>
1197:2	1010:7	<b>behaviour</b>	1170:20	1166:18
<b>bank</b> 982:1	1049:2	971:6	<b>benefits</b>	1232:4
<b>bar</b> 1074:7	<b>basis</b>	1164:5	1033:2	<b>bids</b> 1156:24
<b>barbecue</b>	966:2,20	1167:2	1036:2	1160:16
1204:14	968:15	<b>behind</b>	1086:10	1161:6
<b>barrier</b>	1001:4	1100:3	<b>beside</b>	1164:11
1099:18	1045:15,16	1143:17	964:22	1222:2
<b>base</b> 967:1	1095:17,18	1144:25	<b>best</b> 965:25	<b>biggest</b>
1005:25	1110:14	1232:13	966:14	1050:24
1036:24,25	1124:21	<b>beige</b> 988:10	967:1	<b>bilater</b>
1037:1,3	1132:19	<b>bel</b> 1059:11	1010:2	1135:16
1040:7	1152:15	<b>believe</b>	1022:5	<b>bilateral</b>
1223:21	1182:25	963:4	1048:16	1106:15
<b>based</b> 960:9	1189:5	1003:3,25	1053:23	1132:19
965:25	1193:4	1005:25	1153:11,13	1135:17
966:14	1202:12	1011:14	<b>better</b>	1154:5,16
967:21	1218:11	1013:19	963:12	1155:6,11,
976:25	1222:24	1022:15	1006:20	17,21
977:21	1224:13	1025:23	1039:13	1162:3
1001:22	1234:25	1028:22	1131:1	1216:20
1051:19	1235:18	1040:23	1182:9	<b>bill</b> 1142:16
1057:25	1236:17	1041:1	1204:20,21	1170:17,22
1074:23	<b>basket</b>	1043:25	<b>beyond</b>	<b>billage</b>
1079:21	1049:9	1053:21	965:19	1169:25
1096:11	<b>became</b>	1056:18	1012:7	<b>billion</b>
1101:14,20	974:14	1059:20	1018:25	986:7
1102:8,10,	<b>becau</b> 1211:1	1060:4	1019:3	987:11
12,14	<b>become</b>	1070:25	1023:3	1011:12
1114:8	1235:3	1076:12	1065:15	1086:1
1120:19	<b>becomes</b>	1078:23	1078:10	1090:17
1123:19	983:7	1081:14	1100:10,17	1091:19,24
1143:1	1039:23	1084:4	1231:25	1092:21
1150:16	1161:22	1122:25	<b>Bi</b> 1097:6	1119:20
1152:6	1222:24	1142:23	<b>bias</b> 980:25	1205:22
1154:4	<b>begin</b>	1146:20	<b>bid</b> 1157:1	1206:2,25
1160:5	1071:24	1169:23	1158:5,7	1207:16
1161:23	<b>beginning</b>	1210:6	1160:17,18	<b>billions</b>
1167:1,17,	991:6	1235:13	,19	1151:6
18 1170:16	1005:5	1240:16	1161:7,8	<b>binder</b>
1182:23		<b>ben</b> 1170:20	1162:18	1097:17
1235:25		<b>beneficiary</b>	1163:11,12	

1316				
1180:3	968:6,24	21 1091:12	1220:11	997:4,15,2
1181:12	970:5,8	1093:6	1222:4	2
<b>binders</b>	973:9	1098:7,14,	1224:3,19	998:6,11,1
1183:8	974:12	21	1225:19	8,23
	975:4	1108:3,6,1	1228:18	999:2,5,10
<b>Bipole</b>	976:4,25	2,23,25	1232:24	,14
1013:12,13	983:25	1109:7,19	1233:2	1000:9,13
1050:23	986:18	1111:22	1237:21	1001:3,12,
1051:12	988:7,14	1112:2,7	1238:1,2,8	24
1053:2	990:12	1116:14		1002:2,8,1
1054:1	991:3	1120:10,14	<b>Board's</b>	2,14,20,25
1060:18	994:17,25	,24,25	967:5	1003:5,10,
1096:20,21	995:7	1121:15	1007:19	17
,22,23	996:1,19,2	1122:6	<b>Bob</b> 958:2	1004:2,5,1
1097:1,4,6	4 997:20	1123:2	959:12	1,19
	1000:14	1125:14	963:20	1005:1,14
<b>Bipoles</b>	1001:5,16	1126:12	964:5,6	1006:11,19
961:13	1002:16,20	1131:17	965:5,16	,22
1059:8	1003:12	1132:10	966:4	1007:1,11,
1060:2	1006:14	1136:8	967:4,10,1	14,17,23
1062:17	1011:2,17	1138:19	4,23	1008:1,4,6
1063:6	1013:5,15,	1148:25	968:6,16,2	,14,21
1064:13	18 1014:25	1149:7	5 969:9,17	1009:1,3,1
<b>bit</b> 969:11	1017:21	1152:3	970:2,10,1	1,15,22,25
971:6	1018:13	1153:17	8,22	1011:1,2,6
973:24	1019:7	1166:10	972:20,21	,10,16
978:22	1022:2,18	1170:4	973:3,7,13	1012:3,12
984:24	1023:23	1171:10	,18	1013:4,11
1017:23	1024:10	1172:7	974:11,21	1014:14,22
1049:6,11	1025:3	1174:10	975:3,10,2	,24
1054:8	1026:8,17,	1175:1,8	0 976:3,24	1015:4,7,1
1075:22	25 1028:13	1177:5	977:9	5,22
1093:15	1031:8	1180:7	978:4	1016:1,5,9
1110:18	1033:13,15	1184:2,3,1	983:22,23	,15,20,24
1119:1	1035:11	2,20	984:8,11,2	1017:3,18,
1156:21	1037:7	1187:11,17	0,25	19 1018:12
1224:5	1039:17	,20 1189:3	985:3,8,14	1019:4,10,
1232:21	1040:6	1190:22	,21	14,18
1239:11	1041:15	1192:11	986:9,14	1021:3,9,1
<b>bizarre</b>	1042:4,16,	1193:6	987:5,24	4,17,22
971:6	23 1044:23	1194:18	988:5,13,1	1022:1,12,
	1046:14	1195:11	7,21	17
<b>black</b> 988:18	1050:7	1196:17	989:1,22	1023:10,15
	1057:23	1199:8	991:1,2,8,	,22
<b>Board</b>	1062:6	1200:5,7,8	12,20,25	1024:3,6,2
957:3,13,1	1064:20	,9 1202:25	992:7,17	1,22
4,15,16,20	1065:1	1203:9,10	993:7,13,1	1025:12,14
958:2	1067:2,9	1204:20	7,21,24	1026:7,12,
961:3	1068:8,18	1208:6	994:6,12,1	16,23
962:5,11	1074:17	1214:23	6,24	1027:12,19
963:21	1081:8	1217:24	995:5,13,2	1028:3,9
965:5,21	1087:5,19,	1219:1	2,25	1029:7,12,
966:4,12			996:9,19	



1316				
19 1030:6	1,13	15,21	1164:10	19
1031:7,21,	1073:17	1122:4,16,	1165:1,9,1	1206:1,13
25	1074:14	23	6 1166:9	1207:1,6,1
1032:6,10	1075:1,5,8	1123:2,7,1	1169:7,8,1	8
1033:12	,14,20	6	3,21	1208:4,17
1034:20,21	1076:3	1124:5,10,	1170:3	1209:5,8,1
1035:10	1077:9	14,22	1171:9,13,	3
1036:4	1078:17,18	1125:11	25	1210:8,13,
1037:7,12	1079:2,8,1	1126:4,11,	1172:1,13,	19 1211:15
1038:9,10	4,19,23	16	24,25	1212:3,22
1039:15	1080:14,19	1127:1,15,	1173:6,10,	1213:4,6,9
1040:3,12,	1081:6	19,24	14,17,24,2	,12
17	1082:16	1128:21	5	1214:4,5,1
1041:8,12,	1083:19	1129:2,13,	1174:6,18,	8,20,21
15,20	1085:3,4,2	16,24	25	1215:19
1042:3,15,	0 1086:21	1130:6,11,	1175:6,13,	1216:7,17
20	1087:4,12,	18,25	21	1217:8,23
1043:2,9,1	24	1131:9,15,	1176:5,13,	1218:3,11,
6	1088:6,12,	22	15	25
1044:19,25	17,21,25	1132:3,9,1	1177:3,19	1219:12,20
1045:3,10	1089:13,14	5,21	1178:16,19	1220:10,16
1046:11,12	,22 1090:2	1133:3,13,	,25	,24 1222:1
,20,24	1091:9,24	16,19	1179:10	1223:5,13
1047:10,18	1092:3,6,1	1134:13,22	1184:7,18	1224:1,15,
1048:2,12	1,17	1135:2,8,1	1185:7,12,	18,24
1049:11,17	1093:4	1,14	13 1186:16	1225:7,13,
,22 1050:4	1098:6,9,1	1136:6,14	1187:2,6,1	18,23
1057:16,17	0,19	1137:10,23	4,15	1226:6,11,
1058:6	1099:1,7,1	,24	1188:2,6,1	18,25
1059:4,23	3,21	1138:10,13	1	1227:6,13,
1060:6,9,1	1100:4,8,1	,19	1189:2,17,	21
4	9 1101:25	1139:3,6,1	19 1190:20	1228:2,6,1
1061:15,16	1102:19	0	1191:13,23	7
,19	1103:1,14,	1140:16,23	1192:14,15	1230:4,10,
1062:1,9,1	21,25	1148:23,24	1193:5,18	14 1231:1
2	1104:4,22	1149:6	1194:6,9,1	1232:2,20
1063:3,4,1	1108:1,2,1	1152:1,2,1	5,25	1237:18,19
4,22	1,20	6,25	1195:10,17	1238:21,24
1064:1,5,1	1109:6,17	1153:5,14,	,21	1239:5
9 1065:10	1110:3,8,1	21	1196:6,10,	<b>boiler</b>
1066:18,21	1,17,24	1154:3,11,	14,20	1016:17,18
,25	1111:9,14,	14	1197:2,6,1	,19
1067:5,15,	17	1155:1,8,1	1 1198:7	
17,20,22	1112:1,6,1	6,24	1199:6,23	<b>Bois</b> 960:6
1068:2,7,1	0,14	1156:5,10,	1200:5,15,	1005:18
7,23	1115:16,17	23	19,23	1007:2,4
1069:16,24	,25	1157:3,9	1201:1,5,9	1008:8,10
1070:7,11,	1116:7,13,	1158:3	,24	1009:4,19
18	18,22	1160:12,13	1202:7,25	1010:4,21
1071:3,6,1	1120:8,9,2	1161:4	1203:8	1012:1,4,6
2,15,20	3	1162:13,14	1204:12,19	,16,23
1072:2,7,1	1121:8,12,	1163:10,22	1205:6,12,	1053:13
				1180:16

1316				
1181:5,18	1118:25	1180:2	1126:25	1097:5
1182:15,21	<b>border</b>	<b>bridge</b>	1129:6	1105:17
1183:3	1078:9	1079:1	1130:14	1148:25
1235:4	1084:2	1080:21	1132:7	1153:11
<b>book</b>	1086:8	<b>bridge-</b>	1136:12	<b>bringing</b>
962:6,11	1088:7	<b>finance</b>	1141:2	967:5
964:7,13	1090:1	1080:21	1145:20	1036:7
968:7	1091:25		1147:20	1104:18
971:2,23	1100:15	<b>bridging</b>	1149:13	<b>brings</b>
994:7,17,2	1104:11,14	1084:7,10	1153:19	1055:12
5 996:20	,18,25	1090:13	1157:7	<b>broad</b> 988:9
1007:14	1105:22	1091:1	1158:1	<b>broader</b>
1025:1	1129:10	1092:7,22	1162:20	973:24
1026:18	1132:12,14	<b>BRIEF</b> 969:7	1164:24	<b>brought</b>
1032:3	,22	979:4	1168:16,25	1060:2
1039:17	1133:24	992:15	1171:1	1061:16
1040:6	1188:14	994:22	1174:4	1118:24
1057:22	1218:18	995:9	1177:8	<b>build</b> 1041:5
1059:7	<b>borne</b>	1001:1	1178:1,23	1052:11,14
1064:22,23	1084:21,22	1002:6	1179:5,23	1069:3,8,1
1068:8,18	<b>borrowing</b>	1003:20	1182:11	2 1077:1
1093:21	970:9	1004:9	1183:13	1082:4,12
1098:15,21	<b>bottom</b>	1006:3	1185:10	1086:7
1108:4,21	965:8,18	1007:6	1186:14	1087:21
1111:22	991:9	1008:17	1194:23	1091:6
1120:14,25	1004:15,20	1012:10,20	1196:12,22	1096:20,21
1122:6	1032:6,9	1018:8,20	1200:3	,22,25
1131:10	1040:4	1019:16	1202:23	1097:1
1136:8	1052:4	1023:8	1205:17	1150:9
1137:25	1052:4	1025:6,21	1206:7,21	1151:1,24
1141:5	1161:21	1026:21	1207:10,24	1201:15
1143:13	1175:1	1027:10	1212:1,17	1233:13,20
1166:11	1176:8,24	1028:1	1215:17	1236:24
1173:1	1208:3	1033:20	1216:1	<b>building</b>
1174:1,7	1225:25	1034:1	1218:23	1040:23
1180:7	<b>Brandon</b>	1034:1	1227:11	1041:4
1187:12,16	980:19	1035:1	1228:15	1056:2
1192:11	1015:1,5,1	1036:11,21	1232:18	1057:10
1199:8	1	1038:17	1233:7	1089:8
1200:7	1016:18,21	1046:9	1234:8	1097:8
1203:10	1017:5,15	1060:21	1239:1	1150:19,24
1208:6	1018:4,25	1069:22	<b>briefly</b>	1151:20
1214:22	1019:2	1077:18	1074:16	1233:19
1226:20	1049:23	1081:4	<b>bring</b> 966:16	1234:1
1237:22	1050:1	1091:15	976:13	<b>buildings</b>
<b>booked</b>	1199:18	1096:17	1007:19	1057:6,7
1142:2	1203:20	1098:17	1027:7	<b>built</b> 1054:5
<b>books</b>	1204:14	1101:7	1031:10	1076:20
1085:15	<b>break</b>	1108:18	1035:17	1085:24
1130:21	963:14,15,	1109:23	1055:5	
<b>boosting</b>	16 1110:1	1111:5	1077:5	
		1112:23	1084:2	
		1116:20		

1316				
1086:12	1036:7	1,14	980:8,21	<b>car</b>
1097:4,7	1128:13	1112:3,17	996:22	980:14,18,
1119:23	1130:3	1117:18	1001:9	20
1151:4	1131:6	1124:8	1006:8	<b>care</b> 1038:4
1169:20	1201:13	1131:21,24	1009:10	<b>careful</b>
<b>bulk</b> 1099:24	1222:11	1144:9,17	1010:8	1204:10
<b>business</b>	1230:20	<b>Canadian</b>	1011:3	<b>carried</b>
993:11	1231:2	1084:5	1028:25	1009:18
1009:17	<b>Byron</b> 958:7	1092:4	1029:2	1010:11
1011:17		1110:23	1046:22	1139:20
1078:22	<hr/>	1113:9,13	1047:2,3,7	1214:8
1085:21	<hr/>	1114:4,20	,8 1056:13	<b>carries</b>
1089:6	<b>CAC</b> 958:7	1123:17	1070:19	1146:2
1090:20	<b>CAC/Manitoba</b>	1124:3	1071:18	<b>carry</b> 979:22
1103:8	1068:11	1131:19	1077:16	1012:1
<b>busy</b>	<b>calculate</b>	1141:20	1078:2,24	1078:4
1026:8,11	1065:17	1142:2,4	1079:17	1232:16
<b>buy</b> 1030:13	1186:11,22	1173:3,5	1080:12	<b>carrying</b>
1031:9,13	1219:9	<b>cap</b> 980:5	1081:10	1090:11,14
1034:8,24	1224:10	<b>capabilities</b>	1082:19,24	1091:1
1035:5,17	<b>calculated</b>	1020:15	1085:10	1092:7,18
1044:3,6,1	1065:15	<b>capability</b>	1097:5	<b>carryover</b>
2,14	1101:2	977:4	1122:10	1211:22
1045:7,18	1195:7	978:3	1127:7,9	<b>cart</b> 1050:25
1069:15	<b>calculates</b>	980:6,8,16	1131:7	<b>case</b> 971:15
1080:2,3,4	1224:12	1001:11	1147:24	977:14,16
1100:14	<b>calculation</b>	1010:18	1154:23	978:1
1104:10,13	983:5,6,9	1020:10	1162:24	979:7
1105:18,25	987:11	1027:5	1163:11	1009:17
1120:1	1127:17	1028:16,20	1164:11,19	1011:17
1125:9	1169:5	1029:13,24	1165:24	1045:9
1128:8	1185:24	1030:16	1166:6	1048:4,22,
1129:4,9	1189:23	1031:1	1193:22	24
1130:23	1203:17	1036:14	1194:1,20	1049:3,25
1137:17	1204:1,10	1051:24	1224:20	1154:24
1141:23	1224:16	1052:10	1225:1,5,6	1164:14
1153:2	<b>calculations</b>	1055:18	,10,14	1198:13,15
1197:16	1039:24	1075:4	1232:12	,18
1201:7,22	1040:2	1077:24	<b>capital</b>	<b>cases</b>
1202:17	1108:5,15	1117:13	961:16	1115:24
1221:22,23	<b>calendar</b>	1232:1	1062:22	<b>catastrophe</b>
1226:8,13	1003:15	<b>capable</b>	1064:8,15	1056:22
1229:12	1060:15	979:14	1075:21	<b>catastrophic</b>
1230:15	<b>Canada</b> 973:4	1052:2	1084:3	1053:3
<b>buyer</b>	989:21	1107:14	1086:4	1055:16,21
1044:3,6	1078:12	<b>capacity</b>	1089:3,16	<b>category</b>
1046:17	1098:24	973:25	1090:5,12	1017:10,11
<b>buying</b>	1099:2	974:1	1091:10	
1031:14	1109:1,3,1	976:25	<b>capture</b>	
1035:19		977:4	1095:21	
			1128:15	

1316				
1131:2	1233:18	972:5,8,11	1170:9	1171:11,20
<b>caucus</b>	<b>certainly</b>	980:24	1193:22,25	,23
1182:6	1013:14	982:3	1197:18	1186:3,4,9
<b>cause</b> 989:1	1180:23	990:7,20	1211:20	1205:2
1168:11	<b>certainty</b>	1050:8,14	<b>changed</b>	1224:9
1170:4	973:20	1051:16	1004:12	1225:14
<b>caused</b>	1076:14,19	1053:1	1072:2	<b>charging</b>
1167:24	,22,24	1056:23	1106:21	1170:21
<b>causes</b>	1077:5	1061:7	1132:22	<b>chart</b> 962:10
1171:5	1082:5,8	1077:20	1140:15	990:1
1190:13	1090:19	1078:7	1155:10	991:3,9
<b>causing</b>	1121:16	1083:24	1209:25	1002:23
1168:4	1166:17	1084:15	<b>changes</b>	1004:20
<b>caveat</b>	<b>Certificate</b>	1093:8	966:19	1006:12,23
1195:3	959:14	1094:7,12,15	971:25	1017:13
<b>cent</b> 1161:15	<b>Certified</b>	1095:3,8,1	1007:18	1032:7,9
1218:10	1241:17	0,14,23	1072:6	1040:4
1222:5	<b>cetera</b>	1097:9,21	1132:13	1043:6
1223:10	999:24	1098:1,5	1133:23	1068:24
1234:11,12	1046:4	1105:8	1174:21	1100:5
<b>cents</b>	<b>Chairman</b>	1107:17	<b>changing</b>	1122:7,18
1138:23	957:14	1116:23	1117:4,6	1139:8
1139:7,12	963:10,21	1117:11	1169:17	1173:2
1149:20	964:6	1137:12,21	1170:24	1174:8,13
1150:1	972:22	1141:4,19	1177:14	1176:9
1161:8,11	981:7	1142:1,7,19	1209:20	1187:17
1175:9	987:25	1158:12,16	<b>characterist</b>	1191:14
1189:24	988:7	1159:18	<b>ic</b> 999:18	1192:10
1190:14	1050:6	1161:17	<b>characterize</b>	1194:17
1195:14,19	1057:19	1162:1	1181:8	1195:3
1196:3,5,7	1059:5	1168:8	<b>charge</b>	1224:2
1217:20	1065:1	1179:14,20	1047:1,4,5	1226:19
1218:1,5,6	1068:8	1183:23	1167:11	1227:7
1222:5,10	1093:5	1233:4	1171:7	<b>charts</b>
1223:7,8	1098:7	1239:3	1190:15	1176:7
1224:4,11	1101:17	1241:5	1191:19	<b>cheap</b>
1225:20,21	1108:3,25	<b>chance</b>	1204:10	1220:21
1229:9,11,13	1116:1	1180:1	1205:2,4	<b>cheaper</b>
1231:2,3	1160:15	<b>change</b>	1224:8,14,19	1127:13
1234:17	1162:15	966:2,3,21	1225:10	<b>check</b> 1002:4
1238:10,18,19	1172:3	967:3	<b>charged</b>	1024:25
<b>certain</b>	1179:11	1003:1	1167:8	1175:16
997:24	1232:20	1015:17	1168:5	1191:20
1045:12	1237:20	1020:24	<b>charges</b>	1203:15
1048:21	1239:6	1051:7	961:20	1217:9
1156:8	<b>CHAIRPERSON</b>	1110:20	1046:25	<b>chequebook</b>
1224:25	963:3,18	1117:13	1167:23	1034:24
	970:15,20,24	1133:1	1169:18	<b>Cheryl</b>
		1134:10	1170:2	1241:22
		1146:18		

1316				
<b>chime</b> 1022:5	1087:13	1049:24	1197:14,22	<b>commercial</b>
<b>choice</b>	<b>clear</b>	1050:1	1203:21	1040:13
982:24	1010:14	1147:25	<b>comes</b> 973:15	1160:6
983:1	1101:12,16	1203:21	975:19	1221:7
1230:24	,22	<b>coal-fired</b>	1012:5	<b>commercially</b>
<b>choose</b>	1102:1,18	1015:1	1019:25	1222:3
1069:7,15	1158:24	1016:18	1020:19	<b>commit</b>
1107:10	1220:18,20	<b>coal-</b>	1021:9	1090:19
1113:20	1223:15	<b>generating</b>	1032:3	1157:15
1125:19,20	<b>cleared</b>	1017:5	1035:21	<b>commitment</b>
<b>choosing</b>	1140:7	<b>coincides</b>	1058:23	1022:10
1113:20	1156:17,19	1029:13	1081:15,16	<b>commitments</b>
<b>chose</b> 983:3	1168:9	1030:8	1146:15	1189:4
1046:17	1218:7	<b>collapse</b>	1231:23	1192:20
1163:17,20	<b>clearing</b>	1063:12	1236:2	1227:3
,21	1107:1	1136:3	<b>comfortable</b>	<b>committed</b>
1198:25	1159:2,20,	<b>collapsed</b>	1058:24	1019:11
<b>chosen</b>	23	1139:23	<b>comforting</b>	1170:11
1080:13	1160:2,7	1140:8	981:25	1187:23
<b>chunks</b>	<b>clearly</b>	<b>colleagues</b>	<b>coming</b>	<b>communicate</b>
1080:2	1137:12	1184:23	986:22	1184:4
<b>circumstance</b>	<b>clears</b>	<b>column</b> 996:3	1001:15	<b>companies</b>
1045:11	1166:19,21	1109:2	1003:1,6	1022:23
<b>circumstance</b>	1220:23	1123:17	1026:18	1033:8
<b>s</b> 986:20	<b>close</b> 991:24	1124:6	1027:14	<b>company</b>
1165:17	1065:12	1135:3	1031:4	1072:14
<b>City</b> 958:16	1066:18	1144:16	1061:5	1083:8
1060:3	1067:15	1149:16,17	1082:24	1236:4
<b>clarify</b>	1112:20	1215:10	1100:2	<b>comparable</b>
977:10	1182:5	<b>combination</b>	1102:20	972:2
989:11	<b>closed</b>	1023:4	1115:2	1136:24
1027:2	1232:23	1080:7	1123:3	<b>compare</b>
1067:23	<b>closer</b>	1126:22	1143:15	1020:13
1100:7	985:11	1146:12	1163:23	1136:19,21
1138:8	1200:16	<b>combine</b>	1178:16	1137:1
1185:22	1225:21	1114:19	1198:15	1145:18
1188:7,12	<b>closing</b>	<b>combined</b>	1218:16,19	1149:25
<b>clarifying</b>	1182:5	1059:2	1222:9,10	1168:19
1238:25	<b>closure</b>	1079:12	1223:17	<b>compared</b>
<b>classificati</b>	1077:5	1113:14	1234:17	1025:10
<b>on</b> 1126:3	<b>co</b> 1229:3	1217:14	<b>commence</b>	1120:12,15
<b>clause</b>	<b>coal</b> 980:1	<b>combustion</b>	963:7	1121:24
1018:3	1015:12,13	1016:12	<b>commencing</b>	1125:23
<b>clauses</b>	1016:2	1125:10	963:1	1174:16
1023:2	1017:4,16	1160:24	<b>comment</b>	1196:4
1048:18	1018:4	1161:1	1180:17	1230:2
	1019:1	1163:16	<b>comments</b>	<b>compares</b>
		1167:3,17	1189:1	
			1239:7	

1316				
1138:21	1144:24	1087:14	1212:15	1212:4
<b>comparing</b>	<b>compounding</b>	1114:15	<b>confidential</b>	1227:17,22
1135:18	1148:9	1210:25	1079:3	<b>considering</b>
1136:24	<b>computer</b>	<b>conditioning</b>	<b>confirm</b>	1057:3
1139:2,5,7	979:11	999:11	1007:8	<b>considers</b>
1229:10	1177:15	<b>conditions</b>	1018:3	1021:15
<b>comparison</b>	<b>Cona</b> 1207:15	966:2,21	1025:9	1203:1
1020:16	<b>Conawapa</b>	967:3	<b>confirmation</b>	<b>consistent</b>
1136:23	976:13,17	983:17	1239:13	1118:5
1137:1	986:16	984:19	<b>confusing</b>	1228:23
1195:25	1002:22	999:20	1008:4	<b>constant</b>
1230:1	1003:6,15,	1017:8	<b>confusion</b>	1051:11
<b>compensate</b>	23,25	1034:6,15,	1153:23	1169:13
1167:9	1004:23	18	<b>congestion</b>	<b>constitutes</b>
<b>compensated</b>	1080:5	1035:7,8,2	1014:16	1183:19
1167:22	1081:7,12,	5 1036:1,3	1160:6,9	<b>constraints</b>
<b>compensation</b>	15,16,19	1044:17	1161:14	989:17
1225:2	1082:1,6,8	1048:19	1178:8	<b>construct</b>
<b>compete</b>	,25	1051:5,9,2	1185:25	1085:6
1077:2	1090:17,21	0 1059:12	<b>conjunction</b>	<b>construction</b>
<b>competitive</b>	1096:21	1065:6,9	1089:23	996:16
1125:6	1097:1,6,7	1066:14	<b>consecutive</b>	1040:18,25
<b>complete</b>	,8 1150:25	1067:11	1187:19	1073:1
1062:6	1151:19,21	1073:24	<b>consensus</b>	1150:9,12
1163:5	1207:15,22	1087:18,22	1150:3	1152:5
<b>completed</b>	1234:17	1094:17	<b>consequence</b>	<b>consumers</b>
996:16,17	<b>concentrated</b>	1096:1,4,1	1063:23	964:15,21
<b>completely</b>	1039:10	0	<b>consequences</b>	969:2
1055:16	<b>concerned</b>	1114:14,16	1051:13,15	970:12
<b>completeness</b>	1039:20	,17	1053:10	1143:21
1062:2	1055:23	1118:14	1054:22	<b>consumer's</b>
<b>complexity</b>	1066:23	1119:24	<b>conservative</b>	969:20
1036:5	1188:13	1140:15	1094:24	<b>Consumers</b>
<b>component</b>	<b>concerns</b>	1155:10	1095:15	965:9
1042:13	1181:9	1177:13	1148:13	<b>consummate</b>
1047:2	<b>conclude</b>	1197:23,25	<b>consider</b>	1080:16
1225:11	978:24	1198:11,13	969:12	<b>consummated</b>
1231:11	1073:10	1209:21,25	973:9	1086:24
<b>components</b>	1166:10	1211:21,23	1030:21	<b>consumption</b>
1117:7	1217:24	1214:12	1031:6,18	971:16
1174:2	<b>concluded</b>	<b>conduct</b>	<b>considerable</b>	972:13
1189:6	1076:21	1170:6	1201:2	1041:13
<b>composition</b>	<b>conclusion</b>	<b>confidence</b>	<b>considered</b>	1200:16
1209:14	1072:23	1211:13	1019:23	<b>Con't</b> 962:1
<b>compounded</b>	<b>condition</b>	<b>confident</b>	1038:24	<b>contact</b>
	974:20	1073:25	1050:17,21	
	1048:25	1092:14		
	1069:1,8	1126:8		
		1152:14		
		1211:10		

1316				
1023:20	1034:20	1072:5	1022:8,13, 22	1175:24
<b>contain</b>	1038:9	1080:18		<b>contribution</b>
1215:22	1046:11	1083:8,10, 14	1023:2,19	1086:4
<b>contained</b>	1057:16	1087:8,13, 18	1024:13	<b>control</b>
1002:23	1061:4,15	1092:12,15	1028:21	989:14,24
1108:15	1063:3	1105:16	1033:6	990:5,11,1 5,17,19
1120:13	1078:17	1106:3	1034:5	1031:15
1186:18	1085:3	1123:10,20	1035:4	1057:7
1216:9	1089:13	1124:1,2	1036:15	
1238:2	1098:9	1125:19,25	1042:7	<b>controlled</b>
<b>contains</b>	1108:1	1138:21,25	1043:1,23	990:9,10,1 2 1105:23
1002:17	1115:16	1146:7,19, 20,24	1044:3	<b>controls</b>
1040:12	1120:8	1147:3	1045:24	989:19
1068:12	1137:23	1153:11	1047:2	<b>conversant</b>
1098:22	1148:23	1154:7	1048:17	1089:17
1180:3	1152:1	1165:10,13	1059:2	<b>converse</b>
<b>contention</b>	1160:12	1187:18	1068:10	1197:7
1235:2	1162:13	1188:17	1071:2	<b>converted</b>
<b>CONTENTS</b>	1169:7	1193:12,15	1077:25	1015:8
959:1	1171:25	1215:19,21 ,23	1078:1,25	1218:18
<b>context</b>	1172:24	1216:4,8,1 4,18,22	1081:15	<b>converter</b>
966:15,16	1173:24	1217:1,5	1082:24	1055:10
1074:2	1185:12	1224:3,13, 21 1226:13	1083:11	1056:9
1093:12	1187:14	1229:2,3	1113:2	<b>cooler</b>
1099:19	1192:14	1235:22	1122:12,14	1045:5
1108:8	1214:4,20	1236:2	1123:23,24	<b>cooperation</b>
<b>contingencie s</b>	1237:18	<b>contracted</b>	1139:19,20 ,25	1111:19
1005:11	<b>continues</b>	1022:2,7	1140:11	<b>copied</b>
<b>contingent</b>	1071:18	1028:11,22	1150:8	1008:9
1068:25	1146:11	1029:9	1152:8,17	<b>copies</b>
<b>continue</b>	<b>continuously</b>	1030:2	1162:24	994:19
983:24	1193:2	1042:25	1165:6,19, 20,25	1065:2
1010:6,7	<b>contract</b>	1043:5	1166:4	1184:9
1033:7	974:10	1047:9,10	1175:7,18	<b>copy</b>
1040:4	1004:23	1077:16	1187:23	964:9
1113:5	1005:6	1078:5	1188:4	994:8
1151:8	1023:6	<b>contracting</b>	1191:10	1037:6
1174:1	1025:25	1077:6	1192:23,24	1109:8
1239:8	1028:8	<b>contracts</b>	1193:2	1182:7
<b>continued</b>	1030:12,14 ,17,18	961:6	1195:12	1183:5
959:12	1031:3	973:25	1199:21	1184:12
964:5	1035:13	974:5	1216:19,20	<b>Cormie</b>
972:20	1042:9	992:9	1224:9	959:10
983:22	1043:8,17, 18,22,24	997:11	1229:3,8	964:3
991:1	1044:6	1019:7	1235:17	973:7,12,1 7,23
1011:1	1048:21		<b>contractual</b>	
1017:18	1049:2		1042:18	
1024:21	1070:13,17		1133:17	
	1071:14		1237:3	
			<b>contrast</b>	

1316				
974:12,16, 23	1042:3,8,1 9,21	1086:21,25 1087:10,17	1125:12,16 1126:9,14,	22 1163:15 1164:1,17
975:7,14,2	1043:25	1088:3,9,1	19,20	1165:2,5,1
2 976:10	1044:2,20, 24	5,19,24	1127:2,5,1	2,19
977:3,10,1	1045:2,8,1 4	1089:4,14, 23 1090:8	8,23,25 1128:4,21	1166:14 1168:18
3 979:9	1046:7,12, 19,23	1091:17	1129:1,8,1	1169:1,8,1
981:6	1047:3,15, 18,25	1092:1,5,8 ,10,13	5,19,20 1130:2,10, 16,20	2,15,23 1170:8
982:17	1048:3,9,1 7	1094:25 1095:5,9,1 2,16	1131:4,13, 14,20,25	1171:3,12, 15
983:23	1049:10,12	1096:6,23	1132:13,18 ,25	1172:2,9,1 6,25
984:4,10,1 3,23	1050:15	1098:19,25	1133:8,15, 18,21	1173:4,8,1 3,16,25
985:1,6,13 ,19,22	1051:2,23	1099:5,6,1 0,16	1134:17,24	1174:15,19
986:12,21	1053:7	1100:1,6,9 ,20	1135:4,7,1	1175:2,5,1 1,19
987:8,24	1054:16	1101:16	0,13,16	1176:2,4,1
988:4,12,1 6,20,25	1057:4,17	1103:5,10, 13,15,19,2	1136:7,15, 18	0,14,16 1177:1,10
989:6,22	1058:3,12	1104:3,8	1137:18,24	1178:3,18, 20,25
990:2,10,2 3	1059:9	1105:2,12	1138:4,12, 14,20	1179:7
991:2,7,10 ,15,23	1060:11	1106:19	1139:1,4,9 ,13	1185:13,21 1186:16,21
992:4,11,2 4	1063:17,24	1107:21	1140:20,25	1187:5,15, 25
993:7,12,1 6,20,23	1065:13	1108:2,10, 20	1141:16,22	1188:5,7,1 2
994:2	1068:10,16 ,22,23	1109:5,10, 16,25	1142:4,17, 20 1145:22	1189:8,18, 22 1190:21
995:15,19	1069:4,18, 24	1110:6,9,1 5,18	1147:2,13, 22	1191:1,18
997:9	1070:5,10, 15,23	1111:7,12, 15,25	1148:14,24	1192:3,21
998:19	1071:5,10, 13,17	1112:5,9,2 5	1149:5,15, 23	1193:10,21
1004:13,21 ,22,25	1072:1,4,1 0,12,17	1114:6,23	1151:2,14	1194:8,11, 21
1005:3	1073:18,21	1115:9,12, 17,22	1152:2,9,2 3	1195:1,6,1 0,16,20
1012:22	1074:18	1116:6,11, 16	1153:4,10	1196:2,9,1
1013:5,10	1075:3,6,1 2,18,22	1117:10,12 ,22	1154:1,2,1 0,13,17	4,18,24
1016:3,7	1076:1,6	1118:11	1155:3,7,9 ,14,23	1197:4,9,1 3 1198:10
1022:5,21	1077:13,21 ,23	1119:16	1156:4,9,1	1199:11,15
1023:13,18	1078:11,19 ,21	1120:9	4,21,24	1200:1,10, 14,18,22,2
1024:1,2,5	1079:4,7,1 1,18,22	1121:2	1157:2,5,1 2	5
1026:8	1080:1,17, 25	1122:5,11, 21,24,25	1158:9,14, 19 1159:23	1201:4,8,1 2
1027:1,15, 18,21	1081:7,13	1123:6,11, 22	1160:13,20	1202:1,8,1 0
1030:1,7	1082:21	1124:9,13, 18,24	1161:12,24	1203:7,14,
1031:12,23	1083:21		1162:2,14,	
1032:19	1084:3,20			
1033:5	1085:11,22			
1034:3,22				
1035:3,16				
1036:5,13				
1038:10,19				
1039:22				
1041:24				



1316				
16	990:13	,14	1204:1	,23,24
1204:17,24	1013:6,9	1098:25	<b>cost</b> 981:3,5	1235:7
1206:14	1058:24	1102:13	1013:8	1236:9
1208:5,16	1060:16,17	1103:13,24	1039:21,25	<b>costing</b>
1209:3,7,9	1116:4	1104:3	1073:5,7	1151:5
,12,17	1198:6	1111:24	1076:8,14,	1234:11
1210:9,13,	<b>correct</b>	1112:5,9	15	<b>costs</b> 961:16
16,20,24	962:8	1115:21	1078:4,24	962:4,14
1211:17	965:14	1116:6	1079:1	1062:23
1212:5,6,1	968:2,10	1117:10	1080:12	1064:8,16
9,22	973:8	1118:11	1083:9	1078:12,14
1213:3,5,7	983:25	1123:1,5,6	1086:10	1083:25
,11,14	993:11	,8 1124:18	1088:7,22,	1084:2,5,7
1214:10,21	995:3,4	1126:19	24 1089:8	,13,15,18,
1215:9,22	997:3,21	1127:23	1090:25	19,20,22,2
1216:3,12,	998:10	1128:3	1092:2,21	4 1089:18
21	999:1,4	1129:15,18	1095:18,19	1090:10,11
1217:12,21	1000:19	1130:10	1096:8	,14
1218:2,8,1	1002:11,19	1132:10	1108:15	1091:1,7,1
3,14,25	,24	1135:6,7	1119:19,22	0
1219:4,13,	1003:16	1138:12	1130:3,5	1092:7,19
15,25	1005:21,23	1149:4	1134:15,23	1096:14
1220:14,17	1006:25	1152:17	1150:9,10,	1120:1,3
1221:2	1009:14,16	1154:1	12,16,24	1123:15
1222:3,7	1015:3,25	1155:7,23	1151:12	1129:22,24
1223:10,19	1016:23	1156:4	1152:5	1134:19
1224:1,7,1	1017:2,7,1	1161:25	1153:6	1151:7,8,1
7,22	4	1166:9	1156:16	1 1152:19
1225:3,9,1	1019:9,13	1174:9	1158:22	1156:15
6,22	1021:8	1187:24	1159:5,10,	1164:3
1226:5,10,	1026:15	1188:11	24 1160:5	1167:9
15,20,24	1029:11	1192:7	1161:15	1168:4,5
1227:4,9,1	1032:4,5	1194:21	1162:11	1171:5,7
5,20,25	1040:10,11	1201:3	1163:13,16	1179:8
1228:5,11,	1041:14,19	1203:6	1164:20	1186:24
17,25	1042:4	1208:2	1169:16	1187:9
1230:7,12,	1044:1	1217:24	1173:9	1203:23
18	1046:24	1219:1	1189:21	1204:2,3,1
1231:2,5	1049:16,21	1225:15	1194:7	1,15,25
1232:7	1050:3	1226:4	1197:15,16	1205:4
1233:10,24	1057:21	1227:17	,17	1208:21
1234:10,21	1058:2	1228:5,24	1199:17	1209:19
1235:12,21	1063:7	1241:17	1204:5	1212:25
1236:19	1065:7,10	<b>corrected</b>	1211:19	1213:19
1238:6,23	1067:1,4	1006:5	1218:20	1218:9,17
<b>corner</b>	1068:1,5,6	1172:10	1222:12,16	1219:16
1237:24	,16,22	<b>correctly</b>	,22 1223:2	1221:19
<b>corporate</b>	1071:25	991:16	1225:5	1234:22
996:21	1072:1	1102:11	1228:20	1236:1,5,1
<b>corporation</b>	1079:6,18,	1116:5	1230:2,20	6
984:2	22	1145:10	1233:12	<b>cou</b> 1031:19
	1094:10,11	1156:3	1234:16,18	

1316				
<b>council</b> 1087:19	<b>counterparts</b> 999:19	970:11 1237:7	1040:13 1045:16 1078:3	1168:11 1188:9,15 1192:2
<b>counsel</b> 958:2 1100:22 1120:14 1200:7	<b>counterparty</b> 1029:14 1031:4,10, 19 1034:25 1043:4,12 1071:23 1132:17,19 1133:19 1134:9 1142:5,15 1153:1 1154:6	<b>credits</b> 1178:9 1185:25 1211:1	1105:15 1133:2 1203:22 1229:4,12 1235:25	1215:21 1216:13 1217:10,13 1226:1
<b>counsel's</b> 962:6,11 994:17,25 1039:17 1040:6 1068:18 1098:15,21 1111:22 1120:25 1122:6 1136:8 1141:5 1153:17 1180:7 1187:11 1192:11 1199:8 1203:10 1237:21	<b>counter-party</b> 997:23	<b>critical</b> 974:24 975:17 1057:5 1137:15	<b>customers</b> 974:2,5 993:15 1022:9 1039:6 1040:14 1063:16 1086:19 1100:11,12 ,17 1140:2 1150:8,16 1151:10 1152:12 1205:5	<b>date</b> 967:21 1003:14,25 1005:8 1072:3 1076:13 1077:4 1084:22
<b>count</b> 1044:14 1123:8 1233:22	<b>counterparty's</b> 1132:23 1152:20	<b>Cross-</b> <b>examination</b> 959:12 964:5	<b>CTs</b> 1199:18	<b>dated</b> 960:5 1181:4,16 1182:18
<b>count</b> 1044:14 1123:8 1233:22	<b>couple</b> 964:19 1050:20 1055:5 1067:25 1193:11	<b>cumulative</b> 972:4	<b>cumulative</b> 972:4	<b>dates</b> 1004:12,23 1016:8
<b>counter</b> 998:11 999:5 1151:11 1154:6	<b>course</b> 972:3 1168:14 1180:10	<b>current</b> 972:18 976:23 991:4 1001:19,25 1011:15 1021:7 1041:16 1042:21 1047:21 1067:24 1068:2,12 1096:10 1101:19 1114:13 1120:18 1146:25	<b>customer's</b> 1131:6	<b>DAVID</b> 959:10 964:3 973:12,17, 23 974:16,23 975:7,14,2 2 976:10 977:3,13 979:9 981:6 982:17 984:4,10,1 3,23 985:1,6,13 ,19,22 986:12,21 987:8 988:4,12,1 6,20,25 989:6 990:2,10,2 3 991:7,10,1 5,23 992:4,11,2 4 993:12,16, 20,23 994:2 1004:13,25 1005:3
<b>counterparties</b> 961:8 1023:25 1024:16 1026:14 1028:18 1103:9,10 1132:11 1141:21 1152:4 1226:14	<b>cover</b> 982:10 1221:19	<b>currently</b> 1028:20 1029:8,15 1085:9 1100:2	<b>cut</b> 1095:20 1170:17 1171:4 1205:8 1221:13,15 ,18	
<b>creating</b> 1054:4	<b>covered</b> 1239:10	<b>curtailed</b> 1134:7	<b>customer</b> 997:12,13 1034:9	
<b>credit</b> 1142:22,23	<b>creates</b> 974:20	<b>curve</b> 1106:24	<b>customer</b> 997:12,13 1034:9	
<b>credited</b>	<b>creating</b> 1054:4	<b>customer</b> 997:12,13 1034:9	<b>customer's</b> 1131:6	
	<b>credit</b> 1142:22,23	<b>customer</b> 997:12,13 1034:9	<b>cut</b> 1095:20 1170:17 1171:4 1205:8 1221:13,15 ,18	
	<b>credited</b>	<b>customer</b> 997:12,13 1034:9	<b>dam</b> 1053:13 1181:7,8,1 1 1182:14,17 ,20,24 1183:9,19 1184:21 1222:19	
			<b>dams</b> 1201:15	
			<b>dark</b> 988:18	
			<b>DARREN</b> 959:8 964:1 1101:9 1102:6,21 1120:20	
			<b>data</b> 1118:1 1120:19	

1316				
1012:22	25 1081:13	1126:9,14,	1169:1,12,	1216:3,12,
1013:10	1082:21	20	15,23	21 1217:21
1016:3,7	1083:21	1127:5,18,	1170:8	1218:2,8,1
1022:21	1084:3,20	23 1128:4	1171:3,12,	4
1023:13,18	1085:11,22	1129:1,8,1	15	1219:4,15,
1024:2,5	1086:25	5,20	1172:9,16	25
1027:1,18,	1087:10,17	1130:2,10,	1173:4,8,1	1220:14,17
21	1088:3,9,1	16,20	3,16	1221:2
1030:1,7	5,19,24	1131:4,14,	1174:15,19	1222:7
1031:12,23	1089:4	20,25	1175:5,11,	1223:10,19
1032:19	1090:8	1132:13,18	19	1224:7,17,
1033:5	1091:17	,25	1176:4,10,	22
1034:3	1092:1,5,1	1133:8,15,	14	1225:3,9,1
1035:3,16	0,13	18,21	1177:1,10	6,22
1036:13	1094:25	1134:17,24	1178:3,18,	1226:5,10,
1038:19	1095:5,9,1	1135:7,10,	20 1179:7	15,24
1039:22	2,16	13,16	1185:21	1227:4,9,2
1041:24	1096:6,23	1136:18	1186:21	0,25
1042:8,19	1098:25	1137:18	1187:5,25	1228:5,11,
1044:2,24	1099:6,10,	1138:4,12,	1188:5,7,1	25
1045:2,8,1	16	14	2	1230:7,12,
4	1100:1,6,9	1139:1,4,9	1189:8,18,	18 1231:5
1046:7,19,	1103:13,19	,13	22	1232:7
23	,24	1140:20,25	1191:1,18	1233:24
1047:3,15,	1104:3,8	1141:16,22	1192:3,21	1234:21
25 1048:9	1105:2,12	1142:4,17,	1193:10,21	1235:12,21
1051:2,23	1106:19	20 1145:22	1194:8,11,	1236:19
1053:7	1107:21	1147:2,13,	21	1238:6,23
1054:16	1108:10	22 1148:14	1195:6,16,	<b>day</b> 963:5
1057:4	1109:5,16,	1149:5,15,	20	967:23
1058:3,12	25	23	1196:2,9,1	1045:17
1059:9	1110:6,9,1	1151:2,14	8,24	1052:23
1060:11	5,18	1152:9,23	1197:4,9,1	1069:1
1063:17,24	1111:7,12,	1153:4,10	3 1198:10	1102:10,19
1068:16,22	15,25	1154:2,10,	1199:15	1128:11
1069:4,18	1112:5,9,2	13,17	1200:1,14,	1131:8
1070:5,10,	5	1155:7,14,	18,22,25	1138:2
15,23	1114:6,23	23	1201:4,8,1	1156:5,7
1071:5,10,	1115:9,12,	1156:4,9,1	2	1157:19
13,17	22	4	1202:1,10	1158:10
1072:1,4,1	1116:6,11,	1157:2,5,1	1203:7,16	1159:15
0,12,17	16	2	1204:17,24	1166:18,21
1073:21	1117:10,12	1158:9,14,	1208:16	1168:20
1074:18	1118:11	19 1159:23	1209:3,7,1	1171:4
1075:3,6,1	1119:16	1160:20	2,17	1202:14,18
2,18	1122:11,21	1161:12,24	1210:9,16,	1219:14
1076:1,6	,25	1162:2,22	24 1211:17	1221:14
1077:13,23	1123:6,11,	1163:15	1212:6,19	1222:20
1078:11,21	22	1164:1,17	1213:3,5,7	
1079:7,11,	1124:9,13,	1165:5,12,	,11,14	<b>day-ahead</b>
18,22	18,24	19 1166:14	1214:10	961:22
1080:1,17,	1125:16	1168:18	1215:9	1045:15,20
				1140:21

1316				
1156:2,24	1208:22	1013:7	1051:22	1105:7
1157:19,21	<b>deals</b> 960:6	<b>decommission</b>	<b>defined</b>	1106:7,10,
1158:5	1065:4	<b>ed</b> 1015:9	1122:9	12,13,18
1159:14,17	1180:15	1016:2,6	1125:13	1107:10,11
1160:15	1181:4,17	<b>decommission</b>	<b>defines</b>	,13
1162:15	1199:10	<b>ing</b>	978:19	1125:21
1165:4	<b>dealt</b> 964:14	1012:17	<b>definitely</b>	1133:1
1166:18,22	992:9	<b>decrease</b>	966:1	1137:3
1167:2,15,	1005:10	1112:18	<b>definition</b>	1157:16
18	<b>Dec</b> 1125:20	1114:1,2,2	1051:17	1158:10
1168:2,7,9	1190:3	2 1115:5,6	1138:18	1165:24
,13,20	<b>December</b>	1118:4	1188:22,24	1178:12
1170:12,13	957:23	1144:13,21	<b>del</b> 1190:16	1190:17
1172:3,17,	999:3	1174:24	<b>delay</b>	1191:12,17
21 1202:19	1125:20	1206:25	1004:16,22	<b>demand</b>
1216:15	1183:20	<b>decreased</b>	<b>delayed</b>	979:17,25
1217:1,13,	1190:23	967:7	1004:3	995:2
18,25	<b>decide</b>	1014:9	1005:11	1019:24
1219:21	1011:23	1115:7	<b>deliv</b> 1127:8	1020:14,17
1220:15	1046:17	<b>decreases</b>	<b>deliver</b>	1021:2
1221:13	1048:20	1148:8	1034:22	1034:16
1225:14	1077:1	<b>decreasing</b>	1035:13	1039:11
1230:5	1089:6	1033:24	1045:6	1040:2
<b>days</b> 981:23	1093:13	<b>dedicate</b>	1046:2	1048:23
1128:16,17	<b>decided</b>	1046:21	1048:19,21	1049:14
1138:2	1074:21	<b>dedicated</b>	1106:2	1064:25
1191:5	1083:22	1075:23	1107:15	1065:5
1220:8	1110:21	1225:1	1127:8,13	1116:25
1239:11,24	<b>decides</b>	<b>deem</b> 1048:24	1156:13	1117:16
,25	1218:12	1106:12	<b>delivered</b>	1144:6
<b>daytime</b>	1233:13	<b>deemed</b>	1004:7	1150:14
1201:16,23	<b>decision</b>	1010:11	1022:10	1161:10
1204:5	990:24	1106:17	1190:8,16	1174:22
<b>day-to-day</b>	1009:21	<b>defer</b> 1018:6	1196:19	1190:15
1202:12	1010:9,12	1233:2	1215:13	1199:5
<b>DC</b> 1051:14	1011:20	<b>deferral</b>	<b>deliveries</b>	1224:8,12,
1053:21	1070:4	969:23,24	1107:3	14 1225:11
1054:1,9	1079:24	970:3,4	1178:4,6	<b>demands</b>
1055:2	1082:6,7	1207:14,15	1188:16	976:12
<b>de</b> 975:11	<b>decisions</b>	,22	1191:9	1065:14
<b>deal</b>	990:21	<b>deferred</b>	1215:15	<b>demand-side</b>
1005:7,12	1087:20	970:3	<b>delivering</b>	1021:10
1056:25	1182:22	1084:19	1110:22	<b>demonstrate</b>
1059:3	1183:1	<b>deficits</b>	1164:20	1172:6,7
1078:19,22	<b>declined</b>	1052:7	<b>delivery</b>	1189:3
1083:16	967:12	<b>define</b>	1004:23	<b>demonstrated</b>
1117:5	<b>decommission</b>		1034:7	966:18
<b>dealing</b>	1012:25			1061:12
964:13				<b>Denise</b>

1316				
958:16	1047:21	1054:12	1132:24	<b>di</b> 1043:9
<b>departs</b>	1048:24	1055:7	<b>destined</b>	1135:24
1240:4	1051:18,19	1069:11	1131:21	<b>diesel</b>
<b>depen</b>	,22,23	1100:25	<b>detail</b>	1205:10,13
1008:12	1057:25	1121:22	1113:10	<b>difference</b>
<b>depend</b>	1068:4	1160:8	1209:23	969:17
1043:22	1069:17,20	1183:1	<b>detailed</b>	971:24
1044:16	1071:19	<b>depends</b>	1181:10	980:21
<b>dependable</b>	1082:22	973:19	<b>details</b>	1020:23
973:10,14,	1083:3	1234:5	962:13	1026:6
16,18,25	1098:12	<b>depicted</b>	1212:24	1044:15
974:13,15,	1103:3	962:18	1213:18	1101:18
19	1122:7,8,1	968:12	<b>deteriorates</b>	1113:23
975:4,5,12	9 1123:3,4	988:9	983:3	1176:2,21
,18,23	1124:19,25	1067:8	<b>determinatio</b>	1177:17
977:1	1125:2,4	1154:4	<b>n</b> 1152:24	1178:13
978:6,18,2	1126:15	1156:1	<b>determine</b>	1199:20
3 980:8	1131:1,5	1186:20	973:21	1212:5
983:8	1132:9,15	1213:10	978:16,22	1215:14
985:4,10,1	1135:6,19	1214:1	1065:21	1229:1,7
5	1136:20	<b>depicting</b>	1086:23	<b>differences</b>
986:16,19,	1137:1	1021:4	1107:1	969:16
20 989:5	1138:21,25	<b>depicts</b>	1163:6	<b>different</b>
993:9	1140:18	1065:12	1167:3	969:11
994:1	1152:11	<b>depreciation</b>	1218:15	972:7
995:2,14,2	1175:7,17,	1180:16	<b>determined</b>	996:22
0,21	23 1176:19	1239:16,18	963:12	1003:11
996:25	1188:18,24	<b>derived</b>	1219:6	1029:23
1001:14,21	1189:5,13,	1115:19	<b>determines</b>	1034:25
1006:8,15,	21 1197:23	1121:23	1160:1	1113:11
18,23	1198:12	<b>describe</b>	<b>determining</b>	1114:18
1008:12,15	1199:5	1216:22	1237:7	1120:12
1009:13	1200:24	<b>described</b>	<b>develop</b>	1137:2
1012:4,8	1216:18,24	1057:1	1084:17	1143:15
1013:16	1227:16,18	1154:5	1085:5	1160:22
1015:23	,22	<b>Description</b>	<b>development</b>	1170:11
1016:25	1228:7,18,	960:2	1003:13	1183:1
1017:6	20	961:2	1076:18	1185:4
1019:12,20	1229:5,8,2	962:2	1084:1	1215:4
1020:4,25	3	<b>design</b>	1093:18	<b>differently</b>
1021:10,15	1231:10,25	974:20	1151:18	1101:2
1027:13	<b>dependable-</b>	<b>designed</b>	1236:13	<b>difficulty</b>
1029:5	<b>sale</b>	1012:24	<b>deviated</b>	1057:18
1032:1	1122:13	1056:3	1170:12	<b>digest</b>
1035:12	<b>dependable-</b>	1225:4	<b>deviations</b>	1100:20
1039:19	<b>sales</b>	<b>destination</b>	1167:24	<b>dilute</b>
1040:19	1122:12	1113:22		1135:24
1041:18	<b>dependent</b>			1189:20
1042:6,10,	977:11			
17 1044:13	<b>depending</b>			
1045:1	976:12			

1316				
<b>diminish</b> 1014:13 1147:25 1153:5	1102:9 <b>discussing</b> 1152:4 1185:15	999:7,16 1000:10 1022:13,19 ,22,23 1023:4,16, 17,24 1024:14 1025:24 1026:16 1027:16 1032:20,25 1033:7 1035:9 1036:1 1042:22 1043:11,14 ,19,20 1044:5,20 1046:13 1047:1,16 1071:7,8 1072:9 1122:14 1192:24 1193:7,12, 15,19 1194:14	1216:6 <b>documents</b> 962:6,11 964:7,14 968:7 971:2,11,2 3 994:8,17 995:1 996:20 1007:15 1025:2 1026:18 1032:3 1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	1238:17 <b>dollars</b> 1011:12 1086:2 1091:19,25 1092:22 1115:1 1123:17,18 1124:3 1129:17 1137:5,7 1139:7,11, 16 1149:19 1150:1 1151:5,6 1158:23,24 1159:4,11 1171:16 1196:3,5 1212:10 1218:18 1221:14 1223:9,11, 12 1238:13,15
<b>diminished</b> 1212:8	<b>discussion</b> 987:25 988:6 1001:5 1160:14 1172:2 1239:18	1036:1 1042:22 1043:11,14 ,19,20 1044:5,20 1046:13 1047:1,16 1071:7,8 1072:9 1122:14 1192:24 1193:7,12, 15,19 1194:14	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	<b>domestic</b> 974:2 993:15 1063:16 1117:17 1174:21 1200:15 1203:22
<b>dip</b> 1143:3	1026:2,4 1070:24 1074:1 1076:11	<b>divert</b> 1063:12	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	<b>done</b> 1011:25 1038:15 1040:1 1065:18 1078:19,21 1085:1 1086:4 1182:15 1184:21 1210:1 1217:3 1225:24 1239:3 1240:25 1241:2
<b>dips</b> 1190:4	<b>dispatch</b> 1167:1,18	<b>divided</b> 1156:1	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	<b>Dominion</b> 1074:20
<b>direct</b> 1175:20 1195:12	<b>dispatchable</b> 1227:22 1228:1	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>direction</b> 967:19	<b>dispatched</b> 1105:4 1163:20 1170:10,15	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>directions</b> 1208:18	<b>dispatching</b> 1159:24	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disagree</b> 1203:17 1233:25	<b>displace</b> 1202:5	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disappeared</b> 1211:5	<b>displacement</b> 1232:11	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disappears</b> 1037:3	<b>disproportionate</b> 1086:9,10	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disaster</b> 1063:13	<b>distribute</b> 963:13 1240:5 1241:1	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disclose</b> 1155:9	<b>distributed</b> 1180:1 1240:5	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>disclosing</b> 1079:3	<b>diversities</b> 1044:11	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discount</b> 1086:5 1160:8	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discovered</b> 1063:11	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discovery</b> 1063:15	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discretion</b> 1070:6 1156:25 1163:5	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discuss</b> 1041:17 1093:16 1214:23	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	
<b>discussed</b> 964:15	<b>diversity</b> 961:6 997:10,19	<b>document</b> 971:1 988:3 995:1 1002:16,17 1003:11 1007:22 1037:13 1039:16 1050:17,20 1093:24 1098:20 1108:7,14 1149:1 1180:25 1181:22 1183:18,22 1184:25 1185:3	1039:18 1040:7 1057:23 1059:7 1064:22,23 1068:8,18 1093:22 1098:15,21 1108:4,22 1111:22 1120:14,25 1122:6 1131:10 1136:9 1137:25 1141:5 1143:13 1166:11 1173:1 1174:1,7 1180:2,8 1182:4 1183:20,24 1185:5,6 1187:12,16 1192:12 1199:9 1200:7 1203:10 1208:6 1214:22 1226:20 1237:22	

1316				
<b>Dorsey</b> 1054:2,8 1055:10,14 ,22 1056:8,13, 21	1189:24	1207:14,21	1138:16	1000:4
<b>doubling</b> 1081:20 1227:2	<b>drought</b> 981:18 982:5,13 991:4 992:25 993:3	<b>Duluth</b> 1091:22,23	<b>easy</b> 1236:16	<b>effort</b> 1187:17 1208:14
<b>downgraded</b> 1019:21,23 1072:16 1073:19	1017:9 1027:8 1034:14 1051:4,11, 15 1052:17 1054:13,18 1057:19	<b>duplication</b> 1239:10	<b>economic</b> 982:24 983:1,5,14 992:12 1013:7	<b>efforts</b> 1084:16
<b>downturn</b> 1205:21	1058:1,5,7 ,9,10,18,2 1	<b>dur</b> 1123:24	<b>economical</b> 1086:13 1191:8	<b>eight</b> 1002:8,10 1019:11 1033:25 1034:13 1118:16 1195:19 1215:14 1238:14,19
<b>Dr</b> 1058:16	1059:6,14 1095:18 1096:8	<b>duration</b> 1060:10 1130:18	<b>economically</b> 983:18	<b>eighteen</b> 966:9 974:25 991:24 992:1,18 993:4 1212:13,14 1215:14
<b>drastic</b> 1051:15	1119:11,17 ,18,20,22	<b>during</b> 961:18 975:16 998:24 1031:22 1061:3,23 1062:25 1064:17 1123:25 1140:4 1181:2 1190:5 1221:4	<b>economics</b> 983:10 1231:4	<b>edification</b> 990:8 1109:7
<b>drastically</b> 1147:25			<b>effect</b> 985:23 1034:16 1069:13 1072:11,19 1074:4 1090:24 1114:7,9 1136:4 1139:14 1151:16 1223:22	<b>effect</b> 1212:13,14 1215:14
<b>draw</b> 986:10 987:6	<b>droughts</b> 1059:17		<b>effect</b> 985:23 1034:16 1069:13 1072:11,19 1074:4 1090:24 1114:7,9 1136:4 1139:14 1151:16 1223:22	<b>eighty-eight</b> 1149:25
<b>drawing</b> 975:16	<b>dry</b> 983:16 1210:6	<hr/> <b>E</b> <hr/>	<b>earlier</b> 968:13 996:20 997:9 1022:14 1025:1,8 1027:12 1065:13 1070:22 1154:5 1178:4 1207:17 1226:12 1233:14	<b>eighty-nine</b> 1113:18
<b>drew</b> 985:24	<b>DSM</b> 1021:15,21		<b>earliest</b> 1003:25	<b>either</b> 969:22 973:4 1023:19 1063:16 1104:25 1105:22 1120:16 1126:17 1128:18 1208:14 1214:16 1220:20
<b>drive</b> 980:14,17 1094:3	<b>du</b> 960:6 1005:18 1007:2,4 1008:8,10 1009:4,19 1010:4,21 1012:1,4,6 ,16,23 1053:13 1180:16 1181:5,18 1182:14,20 1183:3 1235:4		<b>early</b> 967:15 1025:19 1166:24	<b>elapsing</b> 1120:18
<b>driven</b> 1223:25			<b>ease</b> 994:19	<b>elec</b> 1134:2
<b>drivers</b> 1148:18	<b>due</b> 999:23 1062:5 1114:22 1115:6 1136:4 1148:1 1180:10 1201:19		<b>east</b> 1056:3 1110:23	<b>electric</b> 990:13 1145:12
<b>drives</b> 1093:24 1148:4			<b>eastern</b>	<b>electricity</b> 980:10
<b>driving</b> 1221:5				
<b>drop</b> 1136:2 1206:24 1207:14 1214:6 1219:16			<b>efficiency</b> 1000:6,15, 24	
<b>dropped</b> 1137:4,6,8			<b>efficient</b> 999:22 1032:22	
<b>drops</b> 1030:4			<b>efficiently</b>	

1316				
992:6	<b>email</b>	1001:14,21	1082:9,23	1216:18,24
1032:23	1184:16	1004:6	1083:2,3,4	,25
1039:14	1241:1	1006:6,8,1	1086:5	1218:16,19
1100:18	<b>emails</b>	0,15,18,23	1087:19	,20
1105:13,15	1184:15	1008:12,15	1097:5	1219:2,14
,17	<b>embedded</b>	1009:9	1103:17	1220:4,18
1106:1,9	1234:21,24	1011:3	1104:6,19	1221:14
1107:7,9	<b>embody</b>	1012:4,8	1109:14	1222:9,11,
1113:15,16	1084:1	1013:16	1120:2	16,25
1127:11	<b>emergencies</b>	1014:4,5,1	1122:9,12	1224:9,19
1130:7	1049:25	0,12,17,18	1124:19	1225:17
1133:20	<b>emergency</b>	1015:24	1126:6,13	1226:1,8,1
1134:1,12	1017:8	1016:17	1127:3,6	4,21
1148:19	1054:24	1019:12,20	1128:23,24	1227:15,16
1151:13	1055:3	1020:4	1130:5	,18
1156:15	1171:4	1021:1	1135:6	1228:20
1197:17	<b>emission</b>	1022:3,7,1	1138:1,25	1229:6,15,
1226:2,7	1150:22	9	1140:21	21,23,25
<b>electronic</b>	<b>empty</b> 976:18	1023:3,5,1	1141:23	1230:3,8,2
1157:10	1024:24	9	1142:5,25	2,25
<b>electrons</b>	<b>en</b> 1069:10	1024:12,23	1146:22	1231:8,11,
1034:23	1193:16	1025:4,16	1152:19,21	25 1238:8
1046:15	<b>enable</b>	1026:1	1154:23	<b>energy-</b>
1106:2	979:24	1027:2,6,7	1155:18	<b>related</b>
1134:3	<b>ener</b> 1065:4	,14,16	1156:7	1185:23
<b>element</b>	1071:18	1028:5,8,1	1158:8	<b>engage</b>
1202:8	<b>energies</b>	1,23	1159:22	1236:6
<b>eleven</b>	1020:12	1029:4,5,9	1161:7,9	<b>engineering</b>
987:10,13	<b>energy</b> 961:5	1030:2,13	1162:11	1053:22
1030:24	962:15	1031:10	1166:12,15	1089:8
1050:9	973:10,14,	1032:1,14,	1167:5	<b>engineers</b>
<b>Elie</b> 1056:19	24 974:1	25	1168:1	1180:19
1057:14	975:6,13	1034:8,24	1169:24	<b>enhancement</b>
1059:25	976:6,8,16	1035:12	1170:1	1005:17
<b>eliminate</b>	978:14	1041:18	1171:7	<b>enlarged</b>
998:8	986:3,10,1	1042:10,11	1175:2,24	994:18
<b>else</b> 970:17	6 987:6	,17 1043:5	1177:22	1109:8
979:8	988:8,14,2	1044:10,21	1185:17	1200:9
1049:4	1,23 990:4	1045:4	1186:12	<b>enous</b> 1059:1
1052:11	991:5	1046:15,25	1188:13,18	<b>ensure</b> 992:6
1080:23	993:15,18	1047:7	,24	1133:23
1161:23	995:2,6,11	1048:22	1189:13,14	1203:22
1185:17	997:11,12,	1049:8	,21	<b>ensures</b>
1207:8	13,24	1054:23	1190:8,10	981:17
<b>elsewhere</b>	999:11,19,	1065:5	1191:9,16	1164:5
1045:13	25	1067:10	1193:23	<b>enter</b> 998:12
<b>eluding</b>	1000:5,22	1068:4,14	1196:17	1083:7
1101:23		1069:17,20	1198:16	1128:19
		1070:19,24	1199:22	
		1071:7,19	1208:19,21	
		1081:12,18	,23 1209:6	
		,24	1213:1,21	



1316				
1139:18	1147:5	1053:17	<b>example</b>	1213:20
1154:25	<b>especially</b>	1055:3,24	966:6	<b>exclusions</b>
1241:1	1150:20	1059:25	976:13	974:9
<b>entered</b>	<b>essence</b>	1060:1,6,1	986:15	<b>Excuse</b>
1085:25	978:19	8 1062:5	987:10	1089:2
1086:12	1000:5,6,1	<b>events</b>	1106:9,15	1237:19
1139:25	9 1014:6	1053:18	1123:12	<b>exercise</b>
<b>entertain</b>	1020:15	1056:7	1128:25	978:21,22
1125:22	1041:3	1221:12	1151:1	1046:18
<b>entire</b>	1066:9	<b>eventually</b>	1160:14	1163:14
1184:25	<b>essentially</b>	1235:2,8	1161:13	<b>exhausted</b>
1185:3	976:17	<b>everybody</b>	1165:2	980:3
<b>entirely</b>	986:23	1161:10,23	1170:3,5,2	<b>exhibit</b>
977:11	999:18	1162:5,8,9	3 1183:16	960:2
1070:3	1013:21	1170:21	1188:3	964:9
1237:15	1030:23	<b>everybody's</b>	1189:9	966:17,19
<b>entities</b>	1105:4	963:4	1232:5	967:6
990:9,22	1128:12	<b>everyday</b>	<b>Excellent</b>	971:4,13
<b>entitles</b>	1143:14	1222:25	1067:19	988:1
1046:1	1150:18	<b>everyone</b>	<b>except</b> 974:9	992:23
<b>entity</b>	1157:13	1055:4	1162:23	994:15,17
1085:16	1206:13	1240:3	<b>exception</b>	1040:7
<b>envisioned</b>	<b>est</b> 997:22	1241:9	1068:13	1098:22
1021:5	<b>establish</b>	<b>everything</b>	1131:3	1108:13
1079:4	1222:22,25	1020:14	<b>excess</b>	1149:1,10,
<b>envisioning</b>	<b>established</b>	1070:1	1162:17	16
1080:16	1228:12	<b>evidence</b>	<b>exchange</b>	1180:9,12
<b>EPA</b> 1148:2	<b>estimate</b>	1079:5	997:25	1181:1,15,
<b>epic</b> 1154:19	1005:25	1195:12	1046:1	25 1182:1
<b>equal</b>	1011:15	1204:13	1101:16	1240:6,15,
1165:10	1094:24	<b>ex</b> 995:15	1124:3	19
<b>equivalent</b>	1095:15	1144:18	<b>exchanged</b>	<b>Exhibits</b>
974:1,2	1209:25	<b>exact</b> 1016:8	1047:4	959:3
976:6	<b>estimates</b>	1088:4	<b>exchanges</b>	960:1
985:17	1089:8	1182:17	997:11	<b>exist</b> 1202:6
1080:12	1174:17	<b>exactly</b>	1032:14	<b>existence</b>
1144:23	<b>et</b> 999:24	1012:5	<b>exchanging</b>	1123:10
1151:5	1046:3	1106:4	1106:6	1135:12
1225:4	<b>evaluate</b>	1190:17	<b>exciting</b>	<b>existing</b>
<b>error</b>	1153:12	1196:25	1239:17	996:4,17
1191:20	<b>evaluates</b>	<b>exaggerated</b>	<b>excluded</b>	1001:4
1238:8,21	1236:3	1091:20	1075:2	1004:17
<b>errors</b>	<b>evaluation</b>	<b>examination</b>	1176:11	1005:9
969:13	1094:4	963:8	<b>excluding</b>	1027:21
<b>escalator</b>	<b>eve</b> 1170:21	<b>examining</b>	962:14	1028:4
	<b>event</b> 978:1	971:1	1212:25	1029:17
				1030:9,14
				1052:2,9,2
				4

1316				
1071:13,20	1199:13	<b>explained</b>	1146:4	1068:3
1072:21	<b>expensive</b>	984:21	1149:8,18	1099:25
1081:24	981:14	995:15	1153:24	1103:5
1096:24,25	1036:8	1049:18	1155:25	1108:24
1097:2	1039:3,7	<b>explaining</b>	1163:11,13	1114:20
1165:20	1125:10	1001:16	1164:11,13	1120:2
<b>exists</b> 977:1	1150:25	<b>explains</b>	,15	1136:10
<b>expand</b>	1159:25	1119:10	1177:11	1175:23
1106:17	1167:16	1177:17	1188:15	1205:1
<b>exparts</b>	1198:4	<b>explanation</b>	1193:3,8	1209:6
1215:9	1220:22,23	1031:8	1194:3	1214:24
<b>expect</b>	<b>experience</b>	1153:15	1200:21	1215:10
991:19	1056:19	1177:6	1201:6,16	1233:23
1041:23	<b>experienced</b>	<b>exploding</b>	1203:1,5,1	1237:14
1079:19	1057:14	1140:4	4,19,24	<b>exposed</b>
1085:8	1066:15	<b>explore</b>	1205:21	1140:14
1147:10	1119:3	1018:16	1206:2,11	1198:18,22
1169:18	<b>experiencing</b>	1033:7	1207:14	<b>expressing</b>
1193:20	1169:18	1087:5	1208:10,15	1124:2
<b>expectation</b>	<b>expire</b>	<b>exploring</b>	,22	<b>extended</b>
1084:18	1071:22	1076:8	1210:23	1026:13
1087:11	1082:24	<b>export</b>	1214:25	<b>extending</b>
1140:17	1235:3	973:1,4,8	1215:1,5	1027:24
1143:1	<b>expires</b>	992:8	1216:16	<b>extension</b>
1148:17	1070:20	1025:15	1226:15	1025:24
<b>expectations</b>	<b>expiring</b>	1029:21,22	1229:3	1026:23
1121:3	1068:19	1034:5	1230:5	1027:16
<b>expected</b>	<b>expiry</b>	1035:13	1234:1	1070:7
1046:3	1030:8	1039:6,11	1236:25	1071:11,16
1088:7	<b>explain</b>	1042:6,21	1237:4,10,	,17
1095:17	997:4,18	1043:19	16 1239:18	<b>extent</b>
1102:10	1004:21	1059:2	<b>exportable</b>	1005:6
1150:12	1013:17	1061:3	1048:10	1039:6
<b>expecting</b>	1022:2	1062:4	1050:2	1044:7
1004:6	1028:13	1063:16,21	1067:6,23	1059:22
1006:7	1033:17	1068:9	1124:16	1119:10
1072:6	1048:14	1078:25	1125:4	1125:3
<b>expects</b>	1065:13	1086:18	<b>exported</b>	1168:4
998:24	1074:16	1098:23	1048:8	1199:2
1029:23	1103:6	1103:4	1050:1	<b>external</b>
<b>expenditure</b>	1105:8,11	1109:3,11	1067:11	1106:23
1084:4	1116:24	1112:17	1109:14	<b>extra</b> 967:24
1089:16	1117:1,2	1117:18	1189:16	971:15
<b>expense</b>	1179:21	1118:21	<b>exporting</b>	1009:13
1089:3	1190:18	1119:22	1193:11	1068:24
1199:9	1192:4	1120:16,17	<b>exports</b>	1140:13
<b>expenses</b>	1214:22,23	1123:3	1041:16,18	1167:8
	1224:18	1144:17	,21,22	<b>extracts</b>
		1145:23	1042:25	
			1047:21	
			1067:24	

1316				
996:21	1150:10,13	1233:11	<b>February</b>	,16
<b>extraprovinc</b>	<b>facility</b>	<b>fairly</b>	962:9	1209:23
<b>ial</b> 962:17	1010:4,7	1181:10	999:3	<b>figures</b>
967:7	1012:25	1208:18	1191:14	1113:25
972:23	1040:23	<b>fairness</b>	1192:9	1187:19
1174:2	1053:19	1180:17	<b>Federal</b>	<b>filed</b>
1176:17	1055:23,25	<b>fall</b> 982:6	1018:25	1025:17
1177:21	1056:1,8,2	985:24,25	<b>fee</b> 1234:22	1180:6
1185:15,18	4	1118:3	<b>feel</b> 1090:18	1181:23
,22	1057:8,10	1139:20	1108:22	1182:18
1186:6,9,2	<b>fact</b> 989:24	1140:4,9	<b>fell</b> 1224:4	1184:10,13
5 1187:21	1018:18	1210:21	<b>felt</b> 1164:19	<b>files</b>
1203:2,12	1117:1	<b>fallen</b>	1211:20	1188:10
1204:3,6,1	1142:9	968:18	<b>Fernandes</b>	<b>filing</b>
1 1205:23	1152:4	989:4	958:5	1184:17
1207:20	1170:1	1003:15	1017:24	<b>filings</b>
1208:8,25	1209:1	1136:17,22	<b>fifteen</b>	1215:2
1213:2,24	1219:10	1224:5	984:21	<b>filling</b>
<b>extra-</b>	<b>factor</b>	1225:20	991:18	980:13
<b>provincial</b>	1020:21	<b>falling</b>	993:1,4,6,	<b>final</b>
1098:12	1113:6	1136:16	10 1113:25	968:15,24
1145:17	1115:8	<b>falls</b>	1196:4	<b>finally</b>
<b>extraprovinci</b>	1119:11	1017:10	1198:15	1011:20
<b>cial</b>	1152:6	1231:23	<b>fifty</b> 985:4	<b>finance</b>
1109:17	1212:7	<b>familiar</b>	1008:22,24	1086:3
<b>extreme</b>	<b>factored</b>	994:9	1027:22	<b>financial</b>
1017:9	1020:1	996:1	1078:1	1039:24
<b>extremely</b>	<b>factors</b>	1075:6	1080:5	1051:15
1139:23	1113:1	1130:20	1097:10	1053:3
1142:22	<b>factually</b>	1191:22	1139:10	1059:10
1167:16	969:22	<b>fancy</b>	1158:24	1060:16,24
<b>eyeglasses</b>	<b>failure</b>	1176:15	1159:4	1063:23
994:20	1053:13	<b>farm</b> 1227:5	1196:3	1105:6,10
<hr/>	1063:5,9,1	1228:10	<b>fifty-five</b>	1145:11,13
F	0 1064:6	<b>farms</b> 1019:8	1136:20	1155:12
<b>face</b> 1009:6	<b>failures</b>	1020:8,24	<b>fifty-nine</b>	1190:24
1101:15	1059:8	<b>fav</b> 1198:1	1238:12	1206:18
1228:19	<b>fair</b> 984:25	<b>favourable</b>	<b>fifty-seven</b>	1236:4,6
<b>faced</b> 991:4	1009:4	1051:5	1139:11	<b>financially</b>
1051:6	1042:15	1117:20	<b>fifty-six</b>	992:9
<b>facilitated</b>	1124:5	1119:24	1196:5	1034:5,17
1157:11	1137:1	1139:24	<b>fifty-two</b>	1035:14
<b>facilities</b>	1170:19	1193:13	1149:19	1039:13
961:17	1177:25	1198:1	<b>fight</b> 994:19	1044:18
997:1	1192:20	<b>feature</b>	<b>figure</b>	1164:15
999:8	1204:5,7	1023:11,12	1032:13,15	1190:6
1062:24	1205:1			1197:7
1064:17	1231:13,18			1199:21
	,19			

1316				
1221:19	<b>first</b> 969:3	15 1195:13	1051:19	1119:12
<b>fine</b> 1014:23	1009:23	1196:8	1058:14	1121:1
1207:5	1060:12	1219:6,8	1065:6,9,1	1188:13
1222:6	1066:10	1229:9,13	9,20	1202:3
<b>fire</b> 1199:13	1067:8	1233:14,23	1066:14	1231:12
<b>firing</b>	1068:11	1238:15,16	1067:11	<b>fluctuate</b>
1204:14	1073:14	,19	1072:21	1123:19
<b>firm</b> 976:12	1085:24	<b>fix</b> 1054:11	1083:1	1228:13
995:2,6,11	1096:9	1125:25	1094:17	<b>fluctuates</b>
1028:16	1109:12	<b>fixed</b> 1042:1	1095:20	1228:8
1029:1,24	1113:11	1047:12	1102:17	<b>fluctuations</b>
1030:12,21	1114:12	1122:9,13	1105:22	1190:19
1031:6,14,	1143:21	1123:21	1113:3	1220:5
18,22	1176:22	1135:6	1114:14,16	<b>flux</b> 1073:24
1039:3	1180:2	1142:25	,17	<b>fly</b> 1075:19
1041:17	1215:10	1147:5	1116:3,4,8	<b>flying</b>
1042:6	1233:23	1147:5	,17	1055:25
1051:24	1236:21	1189:4	1128:16,17	<b>fo</b> 1000:21
1081:15	1237:23	1195:2	1198:14	<b>focus</b>
1082:21	<b>Firstly</b>	1232:14	1202:2	1182:21
1083:8	1166:15	<b>fixed-price</b>	<b>flowing</b>	<b>focussed</b>
1109:3,11	<b>fiscal</b>	1226:13,16	984:17	1183:3
1111:21	968:18	<b>fixed-term</b>	1014:5,10,	<b>focusses</b>
1112:17	1001:19	1152:8	12	1183:1
1133:10	1211:22	1190:25	<b>flows</b>	<b>focussing</b>
1134:6,25	<b>five</b> 994:3	<b>flat</b> 986:25	973:16,19	968:1
1141:9,13,	1015:19	<b>fleet</b> 1148:1	974:14	<b>follow-up</b>
16 1142:10	1030:9	<b>Fleming</b>	975:4,12	1061:7
1144:4	1045:21	1239:15	977:12	1094:16
1146:13	1052:18	<b>flipping</b>	979:1	<b>footprint</b>
1147:1	1055:15	1036:24	980:11	1077:2
1150:16	1070:12,14	<b>flips</b> 1008:8	981:9,11	1162:25
1162:17,24	1073:11,12	<b>flood</b>	984:1	1223:24
1163:11	,23 1074:2	1059:16	985:10	<b>forced</b>
1175:7,17,	1090:13	1154:19	986:18	1198:4
23	1092:22	<b>flow</b>	987:18	<b>forces</b>
1187:18,23	1112:19	974:17,19,	991:14	1055:7
1188:4,22	1113:18	24	993:9	<b>forecast</b>
1192:20	1118:9,10	975:5,8,17	994:1	964:18,24
1193:1,4,1	1119:13,14	976:5,7	996:25	966:6,23
4 1195:2	,17	977:1,23	1046:3	972:18
1196:8	1130:24	978:15,23	1058:4,5	977:12,21
1200:24	1135:19,21	981:10	1065:24,25	1020:1,2,2
1216:15,23	1137:5	984:17,19	1066:24	2 1036:25
,24 1228:4	1138:1,22	987:14	1095:22	1037:1,3
<b>firm-fixed</b>	1139:11	991:13,19	1096:12	
1152:17	1158:23	992:17	1101:14,20	
<b>firmness</b>	1159:10	993:18	1102:11,12	
1031:17	1161:8,10,	1014:4	,15	
	15		1116:14	
	1175:9,14,		1117:14	
			1118:7	

1316				
1040:7,8	1163:8	1033:16	1226:3	
1047:19	<b>forever</b>	1037:19	<b>fulfilling</b>	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>
1052:3	995:16	1040:25	1191:11	G
1069:11	1235:14	1085:21		<b>GAC</b> 958:9
1089:3,16		1120:24	<b>full</b>	<b>gain</b>
1101:21	<b>forewarning</b>	1121:21	975:21,25	1000:20,21
1102:4	965:21	1125:18,21	976:1	,24
1114:13	<b>forgot</b>	,22	977:6,7,8,	1014:18
1119:23	1049:23	1126:5,13	11	1128:2
1120:15,19		1128:12	981:1,7,14	<b>gal</b> 1088:20
1121:7,17	<b>form</b> 1145:4	1139:19,25	985:24	<b>gaming</b>
1125:23	<b>formally</b>	1140:11,17	1052:17,20	1164:5,8
1145:12,13	1071:2	1154:8,21,	1066:13	<b>Gange</b> 958:9
1146:21	<b>forms</b>	25 1174:12	1084:11	1239:22
1149:8	1230:12	1214:7,9	1097:11	
1150:3		1222:20	1165:25	<b>Gannett</b>
1174:16,22	<b>formula</b>	<b>four-fifty</b>	1166:3	1239:15
1177:12	1228:12	1079:12	1198:19	<b>gas</b> 967:12
1178:15	1235:20	<b>fourteen</b>	1231:17	975:25
1197:23	1237:3,4	989:14	1233:17	976:1,8
1205:25	1238:1	1150:1	1239:24	980:1,13,1
1206:19	<b>formula-</b>	<b>fow</b> 1203:3	<b>fully</b>	5,19
1209:20	<b>based</b>	<b>fraction</b>	1078:5,13	1015:8,12
1210:12	1237:5	1099:19	1082:15	1016:9,16,
1211:2,6	<b>fortunate</b>	<b>framed</b>	1084:14	22
1212:14	1118:20	1059:10	1116:1	1147:14,15
1214:11	1139:18	<b>fray</b> 1101:11	1140:14	1150:11,21
1230:8	<b>fortunately</b>	<b>frees</b> 1232:9	<b>function</b>	1161:7,9
<b>forecasted</b>	1056:8	<b>front</b> 988:3	1120:18	1163:23
971:25	1061:22	1196:25	1131:16	1191:7
1144:1,2	1211:4	1201:14	<b>fundamental</b>	1204:15
<b>forecasters</b>	<b>forty</b>	1220:1	1148:18	<b>gas-fired</b>
1147:23	1008:20,22	1222:18	<b>funding</b>	1016:19
1150:3	1032:13	1237:5	1077:10,11	<b>Gawne</b> 1179:1
<b>forecasting</b>	1033:24	<b>fuel</b> 962:17	,14,15	<b>general</b>
968:12	1034:12	1129:25	1081:1	957:7
977:15	1067:17	1130:4	1084:25	964:15,21
978:2	<b>forty-five</b>	1199:7,11,	<b>furnace</b>	965:9,20
979:1	1067:13	24	1181:21	969:2,20
1118:10	<b>forty-four</b>	1203:3,12,	<b>future</b> 966:7	970:11
1147:14	1033:25	18	982:20	971:20
<b>forecasts</b>	1034:13	1204:8,22	983:3,4	1018:23
966:14,21	1066:12	1205:10,11	1013:15	1136:16
967:1,17,2	1067:17	,13	1046:5,6	1143:21
0 1084:4	<b>forum</b>	1206:3,10,	1118:22	1216:16
1120:12	1151:15	11,12	1122:3	1217:3,6
1121:22	<b>forward</b>	1208:9,20	1149:8	<b>generally</b>
1150:6	970:19	1210:21	1169:19	976:3
1174:9	1009:21	1213:2,25		993:24
<b>foregoing</b>				1125:7,13

1316				
1128:10	1055:18	1162:11	23	1070:19,24
1129:25	1065:22,25	1168:10	980:11,23	<b>greater</b>
1131:1	1066:1,13	1182:19	984:14,18	1059:3,7
1137:14	1069:3,9,1	1184:12	988:15	<b>grey</b> 1194:16
1142:20	2 1117:13	1225:17	1000:19	<b>gross</b> 1001:6
1163:8	1118:8,17	1228:22	1010:10	1129:17
1166:19	1148:4	1229:14,15	1047:20	1203:1
1187:22	1151:17	1236:11	1053:10	<b>grows</b> 1014:9
1194:19	1162:16	<b>gigawatt</b>	1083:17	<b>guara</b>
1200:10	1163:2	975:5,13	1103:15	1157:23
1222:4	1167:1	976:6,8	1137:16	<b>guarantee</b>
1225:9	1200:11	977:2	1150:20	1157:24
1228:23	1218:9	978:5	1170:3	1167:12
1230:8	1221:5	979:13	1180:8	1169:10
<b>generate</b>	1223:17	984:3,5	1181:1	1202:20
983:4	1231:22	985:10,12,	1185:19	1219:2
992:13	1234:22	17 986:3	1208:11	1225:11
997:1	<b>generator</b>	988:24	1236:5	<b>guess</b> 979:6
1000:2,3,4	1107:4	992:19	<b>gives</b> 1059:1	982:11
,8 1083:5	1127:10,12	993:25	1082:5	988:11
1211:7	,14	996:4	1205:3	998:17
<b>generated</b>	1159:25	997:2,5	<b>giving</b>	1012:12
1146:9	1160:9	1000:22	963:15	1014:18
1234:4	1161:16	1001:20	1015:23	1017:9
<b>generates</b>	1162:25	1009:6,15	1231:16	1018:23
1169:3	1163:23,24	1015:23	<b>glad</b> 1074:7	1028:19
1226:8	1167:16,22	1016:25	<b>gone</b> 984:8	1036:14
<b>generating</b>	1171:6	1020:6	1057:5,20	1041:11
976:25	<b>generators</b>	1027:13	1174:22,23	1042:8
984:9,16	985:11	1032:3	1203:4	1048:20
987:2	1106:23	1040:8	1216:16	1050:15
1001:8,9	<b>gentlemen</b>	1047:22	<b>Gordon</b>	1051:16,18
1015:5	963:22	1048:22	1038:25	1061:7
1034:10	<b>gets</b> 1025:16	1067:9	<b>Gosselin</b>	1075:11
1095:20	1049:7	1081:17	957:14	1084:18
1096:25	1162:9	1083:2	<b>gradually</b>	1094:13,15
1151:4	1167:8	1109:13,18	1054:25	1117:9
1177:15	1167:8	1111:1,23	<b>grandfathered</b> 1194:13	1119:10
1203:20	1178:11	1118:2,24	<b>granted</b>	1141:6
1219:23	1189:15	1119:2,3	965:1	1142:9,14,
1220:2	1220:25	1155:19	<b>graph</b> 988:9	16 1153:21
1231:7	<b>getting</b>	1189:11	<b>great</b> 973:20	1183:24
1235:14	1054:5	1198:13,20	1025:25	1235:1,4
<b>generation</b>	1075:11	1200:12,16	1027:16,22	<b>guy</b> 1088:20
983:4	1077:3	,20	1028:5	<hr/>
991:21	1089:24	1215:12	1068:14	<b>Hacault</b>
999:22	1093:14	1217:18		958:12
1002:21	1095:14	<b>gigawatts</b>		
1017:16	1099:24	1144:10		
1020:16	1152:21	<b>given</b> 976:21		
	1159:4	978:14,16,		

1316				
1239:22	1088:16	1181:21	981:9,10	983:20
<b>half</b> 980:19	<b>having</b>	<b>heating</b>	987:17,21	1133:9,11
1011:12	976:15,16	999:12	1014:2,3	1134:25
1042:23	981:24	<b>he'd</b> 1026:10	1046:3	1221:17
1043:6	987:3	<b>he'd</b> 1026:10	1094:18,20	<b>holding</b>
1059:11	989:10	<b>hedge</b> 1140:3	,22	1091:2
1138:23	993:5	<b>heel</b> 1056:14	1121:3,5,7	1175:18
1160:17	1000:7	<b>held</b> 957:19	1138:24	<b>home</b>
1161:6	1019:18	1186:5	1158:13,15	1153:7,11
1172:11,12	1034:10,16	<b>he'll</b>	1164:12	<b>homework</b>
1174:8	1035:23	1183:24	1166:19	1001:16
1175:1	1038:21	<b>help</b> 1066:17	1168:9,12	<b>hook</b> 1180:23
1176:8,9	1045:20	1086:3	1172:4	<b>hope</b> 1050:5
1189:25	1052:23	1108:24	1194:19	1089:9
1208:7	1055:14,24	1153:2	1228:21	1102:12
1224:2	1056:9,12	1160:14	1234:13	1191:18
1225:25	1060:18	<b>helpful</b>	<b>highest</b>	1241:9
1229:9,10,	1074:1	997:17	1041:21	<b>hopeful</b>
13 1234:12	1076:3	1062:5	1042:14	1005:2
<b>hand</b> 1212:23	1082:6	1189:3	1065:25	<b>Hopefully</b>
<b>handed</b>	1086:19	1190:21	1113:16,21	1066:17
1149:1	1097:4	<b>helps</b> 1038:2	1124:22	1102:17
<b>happen</b> 982:9	1120:1	<b>he's</b> 1026:10	1162:5	<b>hoping</b>
1054:24	1136:4	1052:3,8,1	1202:2	1182:4
1059:22	1154:24	2 1239:23	<b>highest-flow</b>	<b>horizon</b>
1083:23	1167:9	<b>hesitant</b>	1201:21	1005:20
1086:14,17	1188:25	1101:10	<b>high-flow</b>	1018:16
1092:15	1222:17,20	<b>high</b> 974:8	1202:3	1021:6
1193:17	1229:4,18	975:16	<b>highly</b>	1113:8
1194:5	<b>head</b> 991:22	993:18	1219:11	<b>hour</b> 1042:23
<b>happened</b>	1098:13	1042:10	<b>historic</b>	1086:2
1061:23	<b>headed</b>	1053:5,10,	984:6	1089:1
<b>happens</b>	1205:7	22	1054:19	1097:11
977:24	<b>heading</b>	1083:1,3	1058:19,25	1119:2
1201:17	995:1	1112:19	<b>historical</b>	1123:18
<b>harden</b>	<b>hear</b> 1093:10	1119:6	1058:11	1126:21
1057:7	1207:5	1136:4	1059:14	1138:16,23
<b>hardening</b>	<b>heard</b> 973:4	1139:23	1135:9	1157:17
1056:23,25	1007:13	1142:22	<b>historically</b>	1159:8
1057:10,13	1074:15	1156:21	1066:15	1160:18,21
<b>haven't</b>	1223:8	1191:6	<b>history</b>	1161:2,6,8
997:16	<b>hearing</b>	1197:1	961:19	,11,16
1007:11	1058:16	1199:4	1110:16	1165:23
1071:2	1076:7	1202:4	1119:7	1168:20
1078:13	1087:7	1208:18	1120:11	1179:11
1081:2	1114:21	1221:5	1122:2	1195:14,19
1082:15	1185:3	1231:13	1151:3	1196:4,5
1083:22	<b>heat</b> 1044:22	<b>higher</b>	1171:19,23	1198:20
	<b>heater</b>		<b>hold</b> 981:20	

1316				
1219:7	1138:2,11	1091:20,23	983:2	1080:7,20
1223:11,12	1155:19	1112:20	985:16	1081:10,11
,14	1161:3	1122:19	986:10	1082:3,18
1225:12	1165:14,23	1144:11,21	988:1,8	1083:12,17
1230:9	,25	,22 1148:7	989:2,12,1	,18,19
1232:15,16	1166:2,5	1151:4	9,24	1084:8,23
1238:10,18	1189:11	1175:25	990:5,15	1085:4,5,8
,20	1190:15	1189:12	991:13	,12,19
<b>hourly</b>	1194:4	1215:11	993:14,18	1086:22
1168:21	1198:13,21	1235:9	995:6,20	1087:6,16,
1219:9	1200:12,16	1238:12,15	996:4,18	20,21
	,20	,16	997:5,18,2	1090:9,25
<b>hours</b>	1215:12	<b>hundreds</b>	5	1093:9,12,
975:6,13	1217:18	1054:20	998:9,14,2	15 1099:8
976:6,8	<b>house</b>	1112:19	0,23	1100:14,17
977:2	1011:19	<b>HVDC</b> 1013:12	999:15	1103:8,11,
978:5	<b>hu</b> 1005:16	<b>hydraulic</b>	1000:5,15	22
979:13	<b>huge</b> 981:16	978:6	1001:4,13,	1104:1,10,
984:3,5	1054:11	991:21	19 1004:2	13
985:10,12,	1220:4	1034:10	1017:4	1105:20,25
17 986:3,7	<b>humour</b>	1035:14,20	1018:17	1107:5,13
987:12	1088:18	,24 1069:8	1019:6	1108:13
988:24	<b>humorous</b>	1118:17	1020:16	1115:2
989:7	967:15	1198:8	1021:3,11,	1119:19
991:17,18	<b>hun</b> 1073:25	1222:8	14 1024:9	1123:8,15
992:19	<b>hundred</b>	1223:7	1029:3,23	1124:12
994:1,4	985:2	1228:3	1031:9	1125:5,8,2
996:4	992:2	1232:9,10	1032:13,22	1 1126:4
997:2,6	1000:21	<b>hydraulicall</b>	1034:6,24	1127:3,6
1000:22	1008:20,21	<b>y</b> 997:1	1036:3	1128:5,6,2
1001:20	,22,24	1032:23	1038:12,14	3
1009:6,15	1010:20	1226:7	,24 1039:9	1130:8,11
1015:23	1019:12	<b>hydro</b> 957:6	1040:19	1133:24
1016:25	1027:22,23	958:4	1041:22	1134:23
1019:12	1030:4,10,	959:6	1043:4,10	1137:16
1020:6	24 1031:1	960:4	1044:19	1139:18
1027:13	1032:13	961:3,11,1	1045:11	1140:9
1031:22,24	1048:6	9,21,23	1046:21,25	1141:23
1032:4	1059:13,16	962:3,7,12	1052:13	1142:24
1035:6	1066:12	963:24	1058:22	1149:1,16
1040:8	1072:20	967:6,8	1062:4,15	1150:4,19,
1047:22	1073:12,13	970:2	1064:12	24
1048:22	,23,25	971:4	1068:11,13	1152:6,7,2
1051:8	1074:2,7,8	972:24	1069:1,10	1,25
1067:9	,11,12	973:19,20	1070:1	1153:2
1081:17	1078:1	974:6,13	1071:22	1154:15
1083:2	1080:3	975:4,12,1	1075:15,23	1155:3,9,1
1086:2	1086:7	9,20 976:7	1076:17	0,12,20
1109:14,18	1088:1	977:17	1077:12,15	1156:7,23
1111:2,24		978:5	,21	1157:14
1118:2,24			1078:4,11,	1158:5,20,
1126:17,18			15,25	21
1137:3				



1316				
1159:2,10	1230:4,15,	1176:17	1093:24,25	1205:20
1160:16,23	16	1187:21	1096:2,9,1	1207:1
,25	1231:10,19	1188:3	0 1101:1	1208:2
1162:16	1232:4,13,	1196:15,16	1102:16	1210:14,17
1163:2,10	24 1233:13	1200:11	1115:18,20	1240:10,11
1164:6,11,	1235:23	1217:25	1120:12	,14,20
18	1236:3,12	1221:6	1121:3	<b>IFF3</b> 1203:9
1165:2,3	1237:22	1226:21	1134:18	<b>IFF9</b> 1120:22
1166:12	1240:4,9	1227:15	1143:15	<b>IFFMH12</b>
1167:4,8,2	<b>Hydro-</b>	1234:22	1150:2	964:12
0,21	<b>generated</b>	<b>hypothetical</b>	1176:1,18	966:5
1168:6	962:15	1160:17	1179:3	<b>I'll</b> 970:18
1169:9	1212:25	<b>hypothetical</b>	1185:15	978:7
1171:8,19,	1213:21	<b>ly</b> 1161:5	1199:7,9	1004:19
22	<b>hydro-</b>	<hr/>	1203:2	1017:20
1172:16,20	<b>generation</b>	<b>I</b>	1205:11	1037:14
1173:19	1066:4,11	<hr/>	1206:25	1048:16
1176:18	<b>Hydros</b>	<b>ice</b> 987:15	1209:21	1088:25
1178:7,11,	972:25	999:23	1210:2	1089:1
14 1180:9	1153:13	1039:8	1211:12	1090:6
1181:1,3,7	1156:25	1054:10	1213:1,22	1093:5
,15,25	1188:23	1201:19	1226:4	1098:20
1183:22	<b>Hydro's</b>	<b>I'd</b> 982:1	<b>IFF10</b>	1100:20
1184:16,22	965:22	1009:17	1206:24	1143:14
1187:8	966:17,24	1018:16	<b>IFF11</b>	1145:9
1188:9	970:9	1092:24,25	1148:16	1177:23
1192:6	973:16	1098:10	1200:6	1184:11
1193:14,20	975:11	1106:16	<b>IFF11-2</b>	1186:17
1194:7	985:15	1144:24	964:9	1188:25
1197:7	986:15	1153:15,16	966:6	1233:1
1198:8,21	989:12	1214:21	972:14	1236:19
1199:12	990:17	<b>idea</b> 1097:16	1067:3	1239:8,21
1200:20	992:22	<b>ideal</b>	1101:19	<b>illustrated</b>
1201:6,9	998:18	1032:15,16	1102:8	992:22
1205:20	999:11	,17 1033:3	1108:5	<b>im</b> 1025:15
1208:19	1000:14	<b>ideally</b>	1149:25	<b>I'm</b> 966:25
1213:17	1002:17,21	1033:10	1177:10	967:25
1216:10,20	1034:23	<b>identified</b>	1186:8	969:22
1217:10,17	1035:11	1238:8	1203:9	970:24
1218:4,12,	1064:21	<b>IESO</b> 1105:24	1207:1	971:14,19
17 1219:13	1068:9	1141:24	1208:9,24	972:22
1220:11,18	1070:3,6	<b>IFF</b> 962:16	<b>IFF12</b> 960:10	974:21
,25	1092:19	964:12,17,	966:10	977:9
1222:2,9,1	1099:25	20	972:14	980:18
6	1108:13	968:1,19	1092:9	982:4,11,1
1224:12,25	1120:12	972:22	1101:13,19	4 995:16
1225:2,8,2	1134:10,14	1036:17	1102:2,14	1007:22
4	1149:8	1039:23	1108:16	1011:17
1226:7,13	1150:14	1088:12	1143:14	1016:15
1227:23	1152:19		1148:15	
1228:22	1170:6		1149:3	
1229:13,18				

1316				
1021:12	1188:8	1030:3	1185:22	<b>increasing</b>
1022:6	1189:19	1043:5	1210:25	971:13
1036:17	1191:22	1065:25	1217:5	979:17
1037:5,8,1	1195:6,8	1066:1,6	<b>including</b>	1027:23
0 1038:10	1201:24	1214:24	1002:22	1033:16,25
1040:18	1205:7,19	<b>imprecise</b>	1058:4	1114:9
1041:8	1216:3	1208:12	1106:23	1146:4,10,
1044:21	1223:5	<b>impression</b>	1211:3	12,22
1048:2	1226:11	1051:18	1228:7,18,	1152:5
1050:17	1232:4	1141:7	20 1236:13	<b>increment</b>
1054:14	1236:9,11	<b>improve</b>	1237:11	1006:23
1058:7	1239:9	1096:24	<b>income</b>	<b>incremental</b>
1063:5	1240:14	<b>improved</b>	1096:3	1009:10
1066:23	<b>imme</b> 1117:2	1214:11	<b>incorrect</b>	1090:12
1068:25	<b>immediate</b>	<b>improvements</b>	1217:11	1158:22
1071:15	1103:7	1000:24	1238:14	1218:9
1074:3	<b>immediately</b>	<b>incentive</b>	<b>increase</b>	1231:22
1075:6,11,	963:13	1163:7	965:11,18	<b>increments</b>
12 1076:1	<b>imp</b> 1198:1	<b>incentives</b>	966:7	1219:6
1077:20	<b>impact</b>	1168:6	968:2,4,17	<b>incur</b>
1082:16	1053:3	<b>incident</b>	971:14	1090:25
1088:19	1060:16,17	961:14	979:16	<b>incurred</b>
1090:5	,24	1062:19,20	1000:6,14	1064:8
1093:20	<b>import</b>	1064:14	1006:8,9	1084:16,21
1101:9,22	1027:2,5	<b>include</b>	1014:1	,23 1088:7
1102:7,12	1028:16,20	996:5	1032:19,20	1204:2
1106:16	,23	1026:3,5	1144:21,22	<b>independent</b>
1111:18	1029:4,9,2	1029:5	1146:2	1105:13
1114:21	4	1042:22,25	1147:15	<b>Indiana</b>
1115:3,25	1043:20,24	1064:10	1150:12	1160:7
1116:24	,25	1212:12	1174:23	<b>indicate</b>
1117:22	1055:18	1224:14,15	<b>increased</b>	969:18
1121:10	1215:1	1229:22	1010:19	1032:18
1122:16	<b>important</b>	<b>included</b>	1033:11	1086:18
1130:20	995:1	969:25	1086:18	1120:3
1134:10	1052:17	994:7	1146:16	1226:23
1140:24	1101:21	996:8	<b>increases</b>	964:25
1141:10	1108:22	1005:24	965:25	966:9
1142:8	1152:5	1017:6	1143:22	1144:2
1143:12	1207:13	1071:1	1145:3,4,1	5 1148:7,9
1144:7,16	<b>importing</b>	1089:3	1150:9	1209:11
1145:5,16,	980:1	1177:20	<b>indicated</b>	979:10
18 1147:8	1233:18	1185:18	992:2	1001:13
1148:10	<b>imports</b>	1186:6		
1153:23,24	1022:2,3,8	1205:10		
1158:3,14	1024:23	1209:15		
1168:10,13	1025:4,16,	<b>includes</b>		
1176:20	18 1027:15	1092:4		
1177:3	1028:8,11			
1180:1				
1184:5,22				
1185:3				

1316				
1010:4	976:19	<b>inspect</b>	<b>interconnect</b>	1057:8
1058:16	978:12,16	1185:1	<b>ion</b>	1083:13
1059:14	983:8	<b>inspection</b>	1081:25	1090:17
1085:7	986:6	1063:11	1083:25	<b>investment</b>
1116:3	991:16	<b>installed</b>	1084:17	1011:13
1118:13	1096:7,8,1	1019:11	1089:19,24	1082:6,7
1149:6	1 1198:16	<b>instance</b>	1099:14	1090:15,21
1169:11	<b>infor</b>	1143:19,25	<b>interconnect</b>	1091:2
1175:8	1214:25	1144:7,20	<b>ions</b>	<b>involve</b>
1204:16	<b>information</b>	1233:16	1061:12	1035:19
1233:11	965:25	<b>instances</b>	<b>interest</b>	1141:8
<b>indicating</b>	966:15	961:18	970:6,9,10	1202:8
997:23	967:1	1063:1	1110:19	<b>involved</b>
1081:8	1089:10	1064:18	1153:13	1105:7,23
1144:1	1091:12	1184:19	<b>interested</b>	1202:21
1145:2	1092:8	<b>instead</b>	1079:9,12	<b>involves</b>
1193:6	1093:20	1056:9	1164:7	1042:10
<b>indication</b>	1101:20	<b>instructions</b>	<b>interests</b>	<b>involving</b>
989:19	1115:19	1170:16	1236:4	1141:20
1027:13	1139:8	<b>insufficient</b>	<b>interface</b>	<b>IR</b> 960:9
1112:8	1152:7	987:14	1129:11	1240:7,8,1
1113:4	1154:4	1052:23	1141:25	9
1185:8	1182:17	<b>insurance</b>	<b>interim</b>	<b>IRs</b> 1240:14
1204:9	1186:17,19	1090:18	968:14	<b>isn't</b> 1061:5
1206:15	1188:8,22	<b>integrated</b>	970:5	1188:15
<b>indicative</b>	1215:1,20	1145:11	<b>internal</b>	<b>isolate</b>
965:24	1217:11	<b>integrity</b>	1192:2	968:2
<b>indicator</b>	1232:23	1181:9	<b>interpret</b>	1204:1
990:3,4	1239:11	<b>intended</b>	1018:1	<b>issue</b> 983:15
<b>industrial</b>	1240:10	974:8	<b>interrupt</b>	1005:7
1040:14	<b>infrastructu</b>	1090:9	997:15	1054:14,15
<b>inefficiency</b>	<b>re</b> 1053:15	<b>intending</b>	<b>interrupting</b>	1074:15
1035:19	1057:5	1093:16	1033:13	1075:15
<b>inevitably</b>	<b>initial</b>	<b>intent</b>	<b>interruption</b>	1151:16
966:3	982:5	1043:14	1060:25	1169:14
<b>inferim</b>	<b>initially</b>	1239:21	<b>inter-ties</b>	<b>item</b>
968:14	1077:24	<b>intention</b>	1099:4	964:17,23
<b>infinite</b>	1152:18	1091:2	1107:19,22	965:8
1220:6	<b>input</b>	1093:9	<b>introduced</b>	972:23,24
<b>inflation</b>	1039:23	1175:2	1011:11	1024:23
1147:11,16	1108:7	1207:2	<b>inventory</b>	1028:10
,18 1151:7	<b>inputs</b>	<b>inter</b>	1223:3,4	1042:21
<b>inflow</b>	1150:11	1060:24	<b>investigatio</b>	1049:13
1001:7	<b>inserted</b>	<b>interconnect</b>	<b>n</b> 1181:11	1176:17
1051:8	1180:10	<b>ed</b> 1099:2	<b>investing</b>	1177:16
<b>inflows</b>	<b>in-service</b>			1186:10
975:17,19	1003:14,25			1199:12,24
	1005:8			

1316				
<b>items</b>	1032:22	1111:7,16	1194:11	1227:5
1185:16,22	1033:24	1113:20	1196:25	<b>judgment</b>
,24	1035:4,6,7	1114:5,8,2	1198:2,3	1145:4
1199:10	,20,21,22	4,25	1199:19	<b>judgments</b>
1204:22	1038:19	1115:2,9,1	1200:8	1117:9
1209:10	1039:3,5	2,13,17	1202:10	<b>jump</b> 1005:4
1210:22	1041:10,12	1116:11	1204:7,9	1101:10
<b>iterative</b>	1042:17,25	1117:4,16,	1205:1	1190:14
978:22	1043:15,17	17,19	1207:13	1214:13
979:10	1044:18	1118:1,4,6	1210:5,6	1239:17
<b>it'll</b>	1049:25	1119:20	1212:10,15	<b>jumped</b>
1036:17	1051:11	1123:11,23	1215:14	1161:10
1143:1	1052:22	1124:20	1217:6	<b>jumping</b>
<b>it's</b> 964:22	1054:2,3,1	1125:10	1218:16,19	1100:24
971:4,20	0,23,24	1126:7,21	1219:11,12	<b>June</b> 1071:24
972:17	1055:13,22	1127:12	,23	1080:18
974:2,8,16	1056:11	1129:16	1221:19	1081:9
,18,23,25	1066:22	1132:15	1222:4,7,8	<b>jurisdiction</b>
977:6	1069:13,18	1133:9	,9,10,15	1034:25
978:21	1070:5,25	1134:11,17	1223:6,11,	<b>justificatio</b>
979:12,20,	1071:3,17	1136:16,22	22	<b>n</b> 1143:17
22,24	1072:5,11,	,25	1224:11,22	1145:3
980:9,13	16,19,24	1137:1,15	1225:3	<b>justify</b>
981:2,25	1073:7,11	1138:5	1227:21,22	1212:11
984:23	1075:16	1140:7	,25	<hr/>
985:1,7	1076:18	1142:4	1228:25	<b>K</b>
986:12	1078:21	1143:8	1230:1,2,9	<b>Keeyask</b>
987:5,20	1083:3	1144:3	,10	1002:22
989:18,19	1084:4	1145:2	1231:13,18	1003:1
990:4	1085:1	1146:1,11	1232:11,13	1037:3
994:3	1088:12,14	1151:21,22	1233:19,22	1040:24
995:2	,21	1153:16,22	1234:2,13,	1070:2
996:9,13	1089:25	1154:8,17	18 1235:7	1081:18
998:20	1090:2,23	1157:12,16	1236:4	1082:25
999:17	1091:22	1158:6,23	1237:5,15,	1087:21
1000:6,19,	1092:11	1159:7	23	1096:20
22 1006:14	1093:9,11,	1160:9	<b>I've</b> 1051:17	1097:1,5,7
1008:21	14	1165:23	1053:7,8	,8 1146:15
1010:13	1094:2,17,	1166:14	1097:19	1236:14
1011:12,13	23	1169:15,25	1102:22,23	<b>Kelsey</b>
1013:2,14	1095:6,7,1	1171:16,17	1169:1	1005:17,23
1015:22,24	0	1172:11	<hr/>	1006:6,10,
1016:17	1097:15,17	1174:23	<b>J</b>	14,17
1017:7	,18	1178:13	<b>January</b>	<b>Kennedy</b>
1019:23	1099:19	1181:10	961:15	1239:14,23
1020:3,5,1	1100:15	1183:18,19	1062:21	<b>Kettle</b>
1,12,15,25	1101:21	1184:10	1063:6	
1023:4	1103:21	1185:3	1064:7,15	
1026:4	1105:3,4,2	1188:19	1190:23	
1031:4,5,2	3	1189:3	<b>job</b> 1153:10	
3,24	1106:5,14,	1190:1	<b>Joseph</b>	
	15 1108:22	1191:7,21		

1316				
1151:3	1011:3	1053:15	1171:11	1200:19
<b>Kewaunee</b>	1017:12	1065:2	1177:12	1201:10
1074:4,15	1018:13	1075:1	1182:14,20	1219:18,21
<b>KGS</b> 1183:18	1032:8,11	1080:9	1184:21	<b>leaving</b>
<b>kilometres</b>	1033:3,10,	1081:25	1193:11	1088:19
1056:20	15,22	1119:10	1209:20	<b>led</b> 1076:11
<b>kilowatt</b>	1034:3	1125:1	1212:8	<b>ledger</b>
986:7	1036:23	1147:25	1221:3	1204:22
987:12	1037:8,10,	<b>larger</b>	1233:10	<b>left-hand</b>
1086:1	20,24	1081:7	1235:14	1109:2
1138:23	1038:1,4	<b>largest</b>	1239:7,11	<b>legacy</b>
1160:18	1045:25	990:18	<b>lasting</b>	1146:8
1161:6,8,1	1046:14	<b>Larry</b> 957:16	1055:19	<b>legal</b>
1,15	1054:7	1096:19	<b>lastly</b>	1087:13
1195:14,19	1056:15	1182:13	1172:15	<b>legislation</b>
1223:14	1089:2	1183:5,11	1181:20	1017:22
1234:17	1106:16	1234:10	<b>lasts</b>	1018:1,4,1
1238:10,18	1112:12,15	1235:1	1054:13	5,24
,19	1113:1,24	1239:14	<b>late</b> 1060:1	1019:1
<b>knew</b> 989:9	1114:19	<b>last</b> 963:5	1076:13	<b>less</b> 969:13
1180:23	1115:3,11,	973:22	<b>later</b> 996:8	979:7
1211:9	13 1117:22	974:22	1017:20	1014:5,18
<b>knowledge</b>	1118:12	981:23,24	1041:17	1056:11
1092:9	1119:9	983:12,13	1092:15	1114:11
<b>known</b>	1120:5,24	993:10	1101:5	1116:3
1002:17	1143:11	994:3	1174:21	1131:17
1219:7	1145:8,16,	995:17	1201:11	1148:3
<b>Kubursi's</b>	22 1146:23	1003:11	<b>latest</b>	1159:12
1058:16	1147:8	1005:25	1024:25	1169:18
<b>kV</b> 1027:4	1148:6,21	1018:14	1025:17	1196:6
1080:6,11,	1149:21,22	1028:10	1108:23	1218:9
13 1085:24	1150:23	1033:17	<b>Lavigne</b>	1223:11,14
	1151:9,25	1042:23	1241:22	1235:8
	1152:3	1052:14	<b>layer</b> 1036:4	<b>let's</b>
	1233:4,9,2	1054:18	<b>layered</b>	979:12,15
	5 1235:16	1058:1,10	1039:18	995:25
	1236:11,22	1076:7	<b>least</b> 975:12	996:2
	1237:9,13	1077:20	977:1	1013:12
		1082:22	982:10	1014:24
		1102:22	994:3	1045:3
		1110:19	995:16	1048:12
		1118:9,14,	1073:25	1050:8
		18 1121:2	1096:3	1074:14
		1133:22	1122:18	1079:25
		1135:5	1157:21	1099:22
		1143:9	1158:7,11,	1109:12
		1149:7	16	1125:19
		1153:16	<b>leave</b> 1173:1	1158:21,23
		1159:25		1160:16
		1160:10		
		1161:21,22		
	<b>Lafond's</b>			
	1017:21			
	1108:3			
	1148:25			
	1174:10			
	1238:2			
	<b>Lake</b>			
	987:10,12,			
	16			
	990:11,17			
	<b>landed</b>			
	1081:2			
	<b>large</b>			

1316				
1165:23	986:22,24	19,23	<b>lines</b> 964:20	972:18
1179:14	987:1	1077:1,4,8	1013:23	974:6,7
1192:16	1151:1	,16,23	1014:10,12	975:24
1213:9	1231:23	1078:2,5,1	,16,17	976:14,22
1217:17	1234:11	3	1029:9,25	978:15,18
<b>letter</b> 960:4	<b>limit</b> 991:11	1079:1,4,9	1032:15	979:1,12,1
1181:1,15	1163:17	,24	1048:11	4 980:23
<b>lev</b> 1119:11	1235:24	1080:3,5,6	1050:25	982:20
<b>level</b> 985:15	<b>limitation</b>	,9,11,15,1	1060:7,25	987:21,22
1054:3	1163:19	7,22	1061:9	989:9
1079:21	<b>limitations</b>	1081:7,10	1063:18	998:3,4
1208:18	1107:21,23	1082:9,13,	1067:25	999:11,12
1222:22	<b>limited</b>	14,17	1080:1,8,1	1013:25
<b>levels</b>	1032:15	1083:12,15	1 1112:7	1014:9
978:19	1070:14	,20,23	1143:15,25	1020:1,2,2
1001:7	1099:16	1084:2,11,	1144:13,14	1 1030:20
1053:24	1107:19	12,14	,15,20	1031:16,17
1121:5	1227:8	1085:6,24	1145:18	1035:18
1201:14	<b>limits</b> 987:9	1086:3,7,9	1206:18	1036:24,25
1215:5	1142:10	,12,17	1216:13	1037:1,3
1222:18	<b>line</b>	1087:25	1217:1	1039:4,5,7
<b>licence</b>	964:16,20,	1088:5	<b>list</b> 959:3,4	,8
987:8,9	23 965:8	1089:8	960:1	1040:7,8
1188:17,19	968:1	1090:4,9	961:1	1041:6,11
1189:16	969:3,25	1091:6,18,	962:1,3	1046:21,22
1193:16	970:12	21 1092:2	1098:22	1047:19
1216:16	971:7,12,1	1109:2	1187:9	1051:24
1217:4,6	6,17	1111:20	<b>listed</b> 962:5	1052:3
1238:11	972:22,23	1117:6	1067:24	1055:19
<b>licences</b>	988:18,19	1118:25	1068:3	1061:4,8,2
1192:22	996:10	1125:4	1129:17	0 1065:19
1193:3	1004:15	1143:21	1187:10	1069:11
1216:15,23	1013:12,16	1145:10,13	<b>listing</b>	1070:3
,24	,21	,17,25	1068:9,10	1075:10
<b>life</b> 1055:17	1014:1,2,4	1169:24	1187:3	1105:18
<b>lifetime</b>	,5 1019:25	1176:17,24	<b>little</b>	1114:10
1053:18	1024:23	1177:16,21	969:11	1117:17
<b>light</b> 1177:4	1027:4	1185:16,18	971:6	1160:1,10
1179:11	1028:19	1186:10	973:23	1171:6
<b>likely</b>	1030:16	1188:1	984:23	1191:6
1010:13	1031:3,4	1190:21	999:22	1201:14
1051:3,12	1042:21	1192:17	1049:6,11	1221:7
1056:11	1043:5	1193:23	1075:22	1223:21
<b>likewise</b>	1048:5	1199:9,12,	1093:15	1232:9
1065:1	1054:5,9	24 1203:2	1097:19	<b>loading</b>
1157:3	1055:4,5	1205:11	1119:1	1063:18
<b>Limestone</b>	1060:12,13	1207:21	1133:5	<b>loadings</b>
	1070:12	1208:22	1147:3	1014:3
	1073:2,5	1216:8	1156:21	<b>local</b>
	1076:9,14,	1224:4	<b>load</b> 964:17	1107:11
		1226:3		<b>locate</b>
		1228:7		

1316				
1108:12	1130:16	1174:11	974:17	1010:10
<b>located</b>	1150:8,14	<b>lot</b> 997:16	976:5	<b>major</b> 972:25
1109:4	1152:11	1077:3	977:23	973:9
<b>location</b>	1187:23	1090:23	981:10	1056:22
1055:8	1189:4	1131:17	991:19	1081:25
1056:1	1192:22	1136:2	1065:24	1146:18
<b>lock</b> 1140:5	1193:1	1171:16	<b>low-flow</b>	<b>majority</b>
<b>locked</b>	1195:4,12	<b>lots</b> 1117:15	982:18,19	990:6
1139:23	1215:23	1168:5	1115:24	1110:2,4,9
1140:5	1216:10,19	1210:17	<b>lucky</b> 994:12	1111:1
<b>logic</b> 1007:2	<b>loo</b> 1045:18	<b>low</b> 974:14	<b>lucrative</b>	1115:6
<b>long</b> 963:6	<b>loose</b> 1102:7	977:22	1113:19	1122:11
996:10	<b>lose</b> 1056:11	982:21	1137:20	1141:8
1011:24	1119:25	986:1	1139:19	1158:20
1035:5	1120:2	987:7	<b>lumped</b>	1173:4
1052:3	1146:8	988:23	1189:7	<b>Man</b> 1051:14
1054:9,13,	<b>loses</b>	1048:18	<b>lump-sum</b>	<b>manage</b> 981:8
15,18	1019:25	1053:6,8	1178:13	1061:8
1055:19	1045:17	1056:18	<b>lunch</b>	1166:16
1082:22	<b>losing</b>	1095:12	963:13,14	1220:9
1117:12	1054:8	1112:18	1089:1,15	<b>management</b>
1119:7	<b>loss</b> 961:12	1119:11	1093:7	1021:10
1123:9	1014:6,7,8	1147:14	1116:2	1178:8
1135:11	,12,18	1191:15		1185:25
1154:9,11,	1051:12,13	1221:7,23		1210:25
23 1155:3	1054:1,2	1234:23		1211:18
1164:7	1055:2,22	<b>low-cost</b>		1214:8
1188:3	1056:8	1220:22		
1205:23	1061:3	<b>lower</b>		<b>manages</b>
1211:1,11,	1062:3,4,1	1030:16		1105:14
13 1212:12	7	1068:20		<b>mandatory</b>
1221:24	1063:15,20	1086:20		1018:3
1235:13	1064:13	1115:20		<b>Mani</b> 1216:9
<b>longer</b>	1143:4	1120:16		<b>Manitoba</b>
974:24	1207:20	1135:5		957:3,6,22
979:18,22	<b>losses</b>	1140:18		958:4,7
1052:2	1014:1,3	1152:13		959:6
1054:21	1020:4	1166:21		960:4
1055:9	1160:5,8	1174:16		961:3,11,1
1088:5	1161:13	1176:8		9,21,23
1097:19	<b>lost</b> 961:11	1218:4,5		962:3,7,12
1124:1	1051:17	1222:21		,14 963:24
<b>long-</b>	1051:17	<b>lower-cost</b>		965:22
<b>standing</b>	1060:18	1198:1		966:17,24
1023:12	1061:2,6	<b>lowering</b>		967:5,8
<b>long-term</b>	1062:16	1148:17		970:2,9
1012:2	1064:12	<b>lowers</b>		971:3
1054:15	1105:9	1107:8		972:24,25
	1119:22	<b>lowest</b>		973:16,19,
	1143:6			20

1316				
974:6,13	1061:4,20	1129:10,11	1191:6	1233:15
975:3,11,1	1062:4,15	1130:8,11	1192:6	1237:13
2,20 976:7	1064:12,21	1133:4,6,2	1193:14,19	<b>Manitoba-</b>
977:17	1068:9,13	4	1194:2,7,2	<b>Ontario</b>
978:4	1069:1,10	1134:10,14	0	1129:9
979:12	1070:1,3,5	,23	1196:15,16	<b>manner</b>
983:2	1071:22	1137:16	1197:7	981:17
985:15,16	1075:15,23	1138:15	1198:8	<b>March</b>
986:10,15	1076:17	1139:18	1199:12	1072:12
988:1,7	1077:11,14	1140:9	1200:10,20	1074:21
989:2,12,1	,21	1141:23	1201:6,7,9	1125:21
9,24	1078:4,11,	1142:24	,13	1190:3
990:5,15,1	14,25	1148:25	1205:20	<b>margin</b>
7 991:4,13	1080:7,19	1149:8,16	1208:19	1218:19,21
992:22	1081:9,11	1150:4,14,	1212:25	1231:14,21
993:14,18	1082:2,18,	19,24	1213:17,20	<b>marginal</b>
995:6	23	1152:6,7,1	1216:9,20	1230:3
996:17	1083:12,17	8,21,25	1217:10,17	1231:6,9
997:18,25	,19	1153:2,6,1	,25	1233:12,21
998:8,14,1	1084:8,23	2 1154:14	1218:4,12	1234:2
8,20,23	1085:4,5,7	1155:3,9,1	1219:13	1236:24
999:11	,12,19	0,12,20	1220:11,25	<b>mark</b> 1159:15
1000:15	1086:22	1156:7,23,	1221:6	<b>marked</b> 964:8
1001:19	1087:6,16,	25 1157:13	1222:2,16	1240:15
1002:17,21	20,21	1158:5	1224:12,25	<b>marker</b>
1004:2	1089:20	1159:1,10	1225:2,24	1009:25
1017:1,3	1090:3,9,2	1160:16	1226:13,20	<b>market</b>
1018:17	5 1092:19	1161:5	1227:15,23	993:25
1019:6,8	1093:9,12,	1162:16	1228:22	1029:3
1020:20	15	1163:1,10	1229:12,18	1031:5,9,1
1021:3,11,	1099:8,25	1164:6,10,	1230:4,15,	3
14 1024:9	1100:14,17	18	16 1231:19	1034:8,14
1029:3,23	1103:8,11,	1165:2,3	1232:3,24	1038:14
1031:9,16	22,23,25	1166:12	1233:13	1042:6,13
1032:17,22	1104:1,10,	1167:4,8,2	1234:22	1047:12,13
1034:6,23	13,15,17,1	0 1168:6	1235:23	,14
1035:11,22	9	1169:9	1236:3,12	1081:22,24
1036:2,9	1105:1,18,	1170:5	1237:22	1082:10
1038:14	20,25	1171:8,18,	1240:4,9	1083:4,6
1039:5,11	1107:3,5,1	22	<b>Manitoba/</b>	1099:12
1040:14,19	3	1172:16,20	<b>Saskatchewan</b>	1100:10,13
1041:13,22	1108:12,13	1173:19	<b>an</b> 1104:11	1104:20
1043:4,10	1114:10	1176:17,18	<b>Manitobans</b>	1105:3,4,1
1044:19	1119:19	1178:7,11,	992:6,8	9,21,23
1045:11	1120:11	14 1180:8	998:24	1106:8,11,
1046:21,25	1123:8,15	1181:1,3,7	1000:17	20,22
1052:13	1124:11	,15,25	1035:15	1107:1,8
1053:11	1125:5,21	1183:22	1051:14	1110:20
1054:23	1126:4	1184:16,22	1055:16	
1055:8,9	1127:3,6	1187:8,21	1083:1	
1058:22	1128:1,5,6	1188:3,9,2	1155:4	
1059:25	,23	3 1190:6		



1316				
1113:9,19, 21 1117:18 1118:22 1122:15 1125:14,18 ,24 1127:4,6,2 1 1128:6,7,9 ,14 1130:7 1132:17 1133:23 1134:5,11 1135:12,15 ,17 1138:16 1139:15,22 1140:1,3,6 ,8,15,21 1141:15 1142:6,21, 22 1143:8 1146:22 1147:24 1148:4 1155:25 1156:1,8,1 1,12,17,19 ,24 1157:10,13 ,20 1158:5,6,8 ,24 1159:2,7,1 4,16,17,20 ,23 1160:1,3,7 ,15,19 1161:9,19 1162:4,7,1 5 1164:3,4,6 1165:4 1166:7,18, 19,20,21,2 2 1167:2,5,1 5,20,25 1168:2,7,9 1169:3,16 1187:18 1197:17	1198:2 1199:2,21 1201:16 1202:5,8,1 3,14,19 1205:3,22 1217:13,19 1218:7,13 1219:3,5,2 1 1220:5,7,1 3,15,19,20 ,25 1221:1,9 1222:3,14, 21 1225:15 1226:9,16 1229:6,10, 21,25 1230:5,17, 23 1232:4,6,8  <b>market-based</b> 1123:20 1125:17  <b>marketplace</b> 1029:1  <b>markets</b> 1100:10 1113:13 1128:7,9,2 0 1170:12 1212:8  <b>market's</b> 993:21,22  <b>match</b> 1229:20  <b>material</b> 971:3 1097:12,14 1108:23 1111:16  <b>materials</b> 1109:9 1180:3,20 1181:13  <b>math</b> 1092:18 1176:3,15 1238:17	<b>mathematical</b> 1049:14 1165:1  <b>matter</b> 996:12,14 1078:19 1102:22 1117:19 1184:13 1224:20 1228:8  <b>matters</b> 963:6 964:15,18 1005:18 1135:9 1241:6  <b>maximize</b> 981:2 1230:23 1235:22 1236:10  <b>maximized</b> 1052:24  <b>maximum</b> 980:2,9 985:25 1052:10,15 1053:17 1081:19  <b>may</b> 965:6 1026:18 1037:14 1042:12,14 ,18 1044:5,16 1056:16,19 1060:15 1066:1 1069:10 1077:15 1082:16 1084:13 1096:14 1097:19 1104:5,18, 20 1107:2,3 1109:7 1123:19,20	,21 1125:17,19 ,20 1127:6,11 1128:16,17 1133:24 1136:16 1138:14 1151:21 1159:9,10 1160:25 1161:1,2 1184:10,14 1185:17 1188:17,18 1189:10 1195:4 1200:9 1208:12 1209:1 1215:22 1217:11 1219:13 1221:8,21 1232:24,25 1240:23,25  <b>maybe</b> 977:10 1010:1 1022:5 1029:20 1033:16 1040:3 1050:22 1089:16 1091:20 1093:1 1131:2 1136:7 1145:8 1154:8 1197:16 1218:5 1238:6  <b>mean</b> 981:4 1000:19 1010:3 1046:1 1047:11 1054:11 1056:24 1082:17 1094:2,18,	19,22,25 1095:1 1106:17 1117:1,4 1142:13 1146:25 1147:11 1205:8 1216:4 1224:24  <b>meaning</b> 1174:16  <b>means</b> 1000:15 1094:21 1131:22 1132:16 1148:9 1197:6 1198:7 1231:1 1236:16  <b>meant</b> 967:15 1095:3 1145:16,17  <b>measured</b> 1212:9  <b>mechanisms</b> 1042:17 1081:1  <b>median</b> 1095:1,4,6 1096:7,8,1 1 1101:14,20 1102:15,17 1114:14 1116:4,14, 16 1121:24  <b>meet</b> 976:2,14 978:14,17 979:25 980:23 985:15 986:15,20 987:22 989:9 1126:13

1316				
1154:16,24	1165:8	<b>merchant</b>	1137:4	0,18,25
1155:3,11,	1167:21	961:23,24	<b>mid-60s</b>	1016:4,13,
21 1161:9	1223:23	1127:25	1137:7	16,23
1198:9	<b>member</b>	1128:25	<b>middle</b>	1017:2,7,1
1202:5	957:15,16	1130:1	1067:7	4
1219:24	988:7	1131:2,16,	1123:17	1018:10,22
<b>megawatt</b>	1001:5	18,19	1124:6	1019:9,13,
1011:7	1011:2	1141:6,8,1	1125:12	19,22
1026:24	1017:21	1,12,17,20	1135:3	1021:7,12,
1051:8	1018:13	1142:17	1199:10	16,20,25
1070:2	1033:13,15	1173:1,7,1	<b>miles</b> 959:9	1022:4,15
1071:24	1037:7	1,12,20,21	964:2	1025:2,8,1
1073:19	1046:14	1175:3	978:7	3,23
1079:16	1108:3	1176:6,11,	979:6,10,1	1026:10,15
1080:11	1120:24	23 1177:23	9	1027:15
1086:2	1148:25	1185:25	980:15,17	1028:6,7,1
1092:20	1152:3	1212:3,20	994:7,11,2	5
1107:16	1174:10	<b>merit</b> 1153:9	4	1029:11,16
1123:18	1184:20	1156:12,18	995:4,11,1	1032:1,5
1158:23	1238:2	1159:1	9,24	1033:14
1160:1,10	<b>members</b>	1163:8	996:7,13	1037:5,17,
1165:3	963:21	1230:16	997:3,7,21	21,25
1190:15	996:19	<b>merits</b>	998:2,10,1	1038:3,7
1191:3	1002:16	1093:17	5,22	1040:11,13
1196:3,5	1065:2	<b>messaging</b>	999:1,4,9,	,15,22
1223:9,11,	1068:8	1167:14	13,17	1041:10,14
12 1225:12	1098:7	<b>met</b> 1190:8	1000:10,12	,19
<b>megawatts</b>	1108:25	<b>method</b>	,18	1042:22,24
1010:24	1109:7	1186:22	1001:10,22	1043:7,10,
1011:8	<b>memory</b>	<b>MH-18</b> 960:3	1002:1,10,	13,21
1027:20	991:15	1180:12	13,19,24	1047:19
1056:13	1063:4	<b>MH-19</b> 960:4	1003:3,8,1	1048:15,16
1068:24	<b>mention</b>	1181:15	6,22	1049:16,21
1069:7	1002:15	<b>MH-20</b> 960:8	1004:4	1050:3
1070:8,20	1049:23	1182:1	1005:22	1051:25
1071:21	1102:2	<b>MH-21</b> 960:9	1006:5,12,	1052:7
1072:15,19	<b>mentioned</b>	1240:19	16,21,25	1056:10
,21,24	1039:20	<b>MI</b> 1141:23	1007:3,8,1	1064:19
1073:20	1060:19	<b>Michael</b>	2,16,21,24	1065:4,8,1
1074:13	1068:14	958:14	,25	1
1075:4	1092:8	<b>Michigan</b>	1008:3,5,7	1066:19,22
1077:25	1093:23	1141:24,25	,19,24	1067:4,12,
1078:2,5	1142:8,9	<b>microphone</b>	1009:2,8,1	16,19,21
1079:5,10,	1152:10	1092:18	4,16,24	1068:1,6
16,24,25	1191:2	<b>mid</b> 1060:1	1010:1,22	1086:7,9
1080:10,24	1204:14	<b>mid-30s</b>	1011:5,9,1	1088:1
1081:9,15	1206:19		4,22	1090:3
1085:7,9	<b>mentioning</b>		1012:6,13	1091:20,23
1092:20	1138:22		1013:17,19	1093:22
1133:9,10			1014:20,23	1094:2,10,
1144:10			1015:3,6,1	13 1098:20
1159:7				1100:21

1316				
1123:5	976:8	1156:20	1239:8	1097:20
1206:23	984:1	1157:11	1241:2,8,1	1100:23
1207:2,4,7	987:17,22	1159:1	0	1122:17
,12,18	<b>Minneapolis</b>	1160:3	<b>money</b> 969:21	1138:3,8
1211:2	1044:22	1162:25	970:4,6	1152:10
1226:12	1045:4	1165:15	982:1	1227:19
1227:18	1134:1	1166:25	1009:5	1239:19
1229:22	<b>Minnesota</b>	1167:6	1013:3	1241:2,8
<b>Miles's</b>	1005:9	1168:2	1077:2	<b>Morrison</b>
1057:22	1071:20	1170:16	1085:18	1021:23
1197:23	1072:8	1219:7	1090:23	1040:9
<b>Miller</b>	1074:22	1221:6	1106:6	1047:20
958:10	1076:16	1223:23	1143:6,7	1179:21
<b>million</b>	1077:7	1226:8	1171:16	1180:1
972:3	1079:13	<b>MISO-</b>	1198:6	1181:22
1013:6	1085:1	<b>sponsored</b>	1221:20	<b>mostly</b>
1051:7	1087:18	1076:4	<b>monies</b>	1055:23
1089:18	<b>minor</b> 1013:1	<b>missing</b>	1085:6	1114:3,5,2
1090:3	1199:19	1224:11	<b>monitor</b>	2 1237:10
1092:4	1204:16	<b>misspoke</b>	1164:4	<b>mouth</b> 1184:8
1144:17,18	<b>minus</b>	1095:3	<b>Monsieur</b>	<b>move</b> 972:22
1146:1	1206:12	1158:4	1149:21	979:20
1151:5	<b>minute</b>	1207:2	<b>month</b> 962:9	1009:21
1171:16	1143:9	<b>misunderstan</b>	1130:22	1020:14
1175:22,24	1209:20	<b>ding</b>	1189:11	1074:7
1176:2,7,8	1219:6,8	1110:5	1191:13,25	1082:2
,18,20	<b>minutes</b>	<b>misunderstoo</b>	1192:9	1107:23
1177:4,11	993:10	<b>d</b> 1158:4	1195:1,22	1113:15
1179:3	1045:22	<b>mix</b> 1135:21	<b>monthly</b>	1114:20
1186:7,8,1	1097:10	1189:13	1130:23	1124:1
0 1203:13	1136:9	<b>MKO</b> 958:14	<b>months</b>	1144:19
1205:2	1179:15	<b>mobilize</b>	974:25	<b>moved</b> 1113:7
1208:24	1204:13	1055:7	979:23	<b>moving</b>
1209:11,18	<b>MIPUG</b> 958:12	<b>model</b>	998:25	970:16,18
,19	<b>mis-asked</b>	978:10,13	1140:13	1013:12
1210:20,21	1029:20	979:11,20,	1154:8	1031:2
1211:18,19	<b>MISO</b> 1030:21	24 1065:21	1190:5,23	<b>multi</b> 1076:9
1212:10,20	1031:16	1085:21	1191:10	<b>Municipal</b>
1238:15	1076:10,11	1113:9,20	1193:7	1072:8
<b>millions</b>	1077:2	<b>models</b>	1194:19	<b>must-offer</b>
1144:17	1128:6,17,	978:9,11	<b>morning</b>	1165:6,21
1171:18	18	1177:15	963:3,10,1	1166:4
<b>mind</b> 970:20	1129:4,10,	<b>moment</b>	6,21	<b>myself</b>
1073:18	11	1177:13	964:20	966:25
<b>mindful</b>	1130:7,12	1182:6	967:16	
964:11	1132:17	1223:3	1040:5	
<b>minimal</b>	1134:11	<b>Monday</b>	1050:7	
1058:9	1135:12		1064:20	
<b>minimum</b>	1141:23		1068:15	

1316				
1147:7	1209:15	<b>Nelson</b>	1112:18	1199:19
<b>namely</b>	1221:23,24	987:15	<b>nineteen</b>	1201:20
1144:1	1229:6,20	1220:3	1019:12	1210:18
<b>narrowing</b>	1236:8	<b>NEP</b> 1216:13	1196:3	<b>normally</b>
1137:13	<b>necessary</b>	<b>net</b> 1000:24	<b>ninety</b>	1044:10
<b>nat</b> 1201:19	961:17	1001:4,6,8	1002:8,10	1110:25
<b>National</b>	975:24	1020:3,4,2	1215:13	1184:3
1087:19	976:1,21	4 1049:8	<b>ninety-four</b>	<b>north</b>
1196:17	977:6,8,11	1096:3	1238:16	1020:15
1238:8	980:22	1129:18	<b>ninety-six</b>	1027:7
<b>Nations</b>	987:1	1179:8	973:22	1035:18
1236:21	992:5	1203:13,14	995:17	1036:7
<b>natural</b>	1062:23	1206:2,10,	1058:1,11	1056:8,21
1147:15	1064:16	16,18	1065:20	1060:2
1150:11,21	1087:14	1208:10,22	<b>nodding</b>	1128:16
<b>nature</b>	1167:7,19	1209:10	1184:6	1133:14
1083:18	<b>needs-for</b>	1212:9,20	1240:17	<b>northbound</b>
1143:8	1087:6	1214:6	<b>nom</b> 1147:15	1030:11,19
1194:13	<b>negative</b>	<b>netted</b>	<b>nominal</b>	1031:11
1201:19	1048:14	1134:15,20	1147:16	<b>Northern</b>
<b>nearby</b>	1159:10	1169:21	<b>non</b> 1028:10	1055:8
1053:3	1221:10,13	1173:7	1186:24	1068:19
1096:2,3,7	,20,21,23	1187:1	1209:5	1069:5
<b>nearly</b>	1223:16,20	<b>netting</b>	<b>non-</b>	1085:24
1137:19	<b>negotiate</b>	1206:3	<b>committed</b>	<b>note</b> 1008:8
<b>NEB</b>	1152:7	<b>neutral</b>	1040:17	1013:15
1188:9,13	1193:13	1163:14	<b>non-</b>	1109:1
1189:7	1235:17	<b>NFAAT</b> 1087:2	<b>dependable</b>	1135:17
1190:10	<b>negotiated</b>	1091:8	<b>non-</b>	1199:8
1192:2	1078:19,20	1093:10	<b>energy-</b>	1216:25
1193:16	1123:21	1151:16	<b>related</b>	<b>noted</b> 965:13
1194:4	1146:25	<b>nice</b> 1153:21	1124:11	968:9
1195:8	1224:20,23	<b>night</b>	<b>non-energy</b>	1016:10
1196:15	1228:9	1003:12	962:4	1033:14
1216:10,13	<b>negotiating</b>	1191:3	1186:23,24	1068:13
1224:10	1152:12,17	1201:22	1187:9	<b>notes</b> 1160:6
<b>NEB's</b>	1235:22	1204:4	1209:6,10	1214:17
1188:22	<b>negotiation</b>	1218:20	<b>non-energy-</b>	<b>nothing</b>
<b>necessarily</b>	1072:25	1222:11	<b>related</b>	1013:13
998:9,16	<b>negotiations</b>	<b>nine</b> 1112:20	1209:4	1043:12
1018:24	1073:15	1113:25	<b>non-engineer</b>	<b>notice</b>
1043:23	<b>neighbourhood</b>	1118:14,18	1014:14	1004:15
1100:11,15	1088:1	1121:2	<b>non-firm</b>	1030:3
1134:8	<b>neighbouring</b>	1175:14	1146:5	1045:11,15
1144:3	1061:13	1238:12	<b>norm</b> 1135:9	,22
1168:23	<b>neighbours</b>	1241:8,10	<b>normal</b>	1094:17
1188:20,23	1103:7	<b>nine-fifteen</b>	1102:15	1124:25
		1110:7	1168:7	<b>noticed</b>

1316				
1215:3	1198:9	1241:8,11	1136:1,4,1	1028:9
<b>noticing</b>	1219:24	<b>October</b>	7	1031:25
1141:10	1226:16	1178:20	1137:2,5,9	1038:7
<b>notionally</b>	<b>obligations</b>	<b>odd</b> 1131:3	,13,17	1042:15
969:22	1042:11	<b>Odette</b> 958:5	1138:23	1048:12
995:17	1044:15	<b>offer</b>	1195:24	1050:8
<b>November</b>	1045:23	1106:24	1196:6	1059:23
1102:16	1162:17	1107:6	1202:11	1062:12
1175:10,12	1190:24	1156:7,16,	1223:24	1067:20,21
1190:2	1191:4,11	19,20	<b>off-peak/on-</b>	1092:6
1195:20,22	1193:22	1157:21	<b>peak</b>	1094:7,12
1196:2	<b>obtain</b>	1158:11,17	1136:10	1095:10
<b>np</b> 958:14,16	1208:15	,18,20	<b>offset</b>	1098:5
<b>NSP</b>	<b>obtained</b>	1159:4	1030:15	1104:22
1030:9,13	1066:13	1160:21,22	1049:19	1110:17
1069:15	<b>obvious</b>	,23,24	1150:11	1138:13
1146:7	1154:18,20	1162:23	<b>offsetting</b>	1145:6
<b>nuclear</b>	<b>obviously</b>	1163:1,7,1	1020:2	1197:6
1074:4,15,	1141:15	5,17,18	1085:18	1207:4
20	<b>occ</b> 1062:3	1164:2,18	<b>oh</b> 970:22	1208:17
<b>numerical</b>	<b>occur</b> 977:16	1165:5,10,	972:5	1210:8
1160:14	981:18	14,17	1045:14	1223:13
<hr/>	1051:9	1166:1,23	1151:2	1226:18
<hr/> 0 <hr/>	1059:18,19	1188:25	1158:19	1238:24
<b>O&amp;M</b> 1158:23	1128:11	1202:14	1160:20	<b>one-quarter</b>
1218:17	1215:8	1218:15	1162:1	1037:2
<b>objective</b>	<b>occurred</b>	1220:19,21	1184:5	<b>ones</b> 969:11
1235:21	961:15	1232:13,14	1202:1	1015:7
<b>obligated</b>	966:19	<b>offered</b>	1205:7	1132:1
1022:24	1061:22	1102:19	1233:24	1217:4
1048:19,20	1062:20	1230:9	1240:5	<b>ongoing</b>
1155:12	1064:15	1232:10	<b>oil</b> 1139:17	1073:16
1221:19	1122:2	<b>offering</b>	<b>ointment</b>	<b>online</b>
<b>obligation</b>	1123:3	1163:9	1075:19	1020:19
995:12	<b>occurring</b>	1202:15	<b>okay</b> 969:18	1081:19
1034:14	981:10	<b>offers</b>	972:8,11	<b>on-peak</b>
1044:4,5,2	1028:12	1106:22,25	978:7	1136:1,21
0 1045:19	1053:20	<b>office</b>	991:25	1137:6,8,1
1046:16	1114:17	1184:12	995:24	3
1070:1	1146:3	1210:5	1006:19	1138:7,20
1071:19	<b>occurs</b> 978:1	<b>officer</b>	1007:12,16	1139:5
1162:23	989:2	1181:10	,25	1195:17,25
1163:1,3,1	1030:3	<b>off-peak</b>	1008:3,5,2	1196:7
8	<b>o'clock</b>	1028:24	2 1009:2	1202:11
1165:7,13,	1050:9	1029:4	1011:5	1222:12
21	1097:22	1031:22,24	1014:21	<b>Ontar</b>
1166:1,3,4	1138:6,8	1126:18	1016:9	1111:11
1190:7,9		1135:22,23	1024:6	<b>Ontario</b>
			1025:13	990:11

1316				
1099:3,23	<b>operating</b>	1128:8	1005:10	1043:15
1100:2	981:13,15	1135:3,4,2	1034:17	1086:20
1103:7	1010:6,8	0,25	1046:18	1093:17
1104:23,25	1015:11,20	1136:10	1056:24	<b>ourselves</b>
1105:2,5,6	1113:7	1140:10,17	1069:6	992:13
,10,13,16,	<b>operation</b>	1144:4	1083:22	1000:8
17,18	989:16	1146:4,12,	1084:1	<b>outflow</b>
1106:5,10,	1019:2	16,22	<b>optionality</b>	1001:8
14,19,22	1167:14	1147:10	1044:8	<b>output</b>
1107:4	<b>operations</b>	1153:25	<b>options</b>	980:25
1109:20	978:10	1154:5	1034:4	1074:24
1110:4,12,	987:4	1155:6,11,	1085:12	1108:7
21	1145:13	17,25	<b>oranges</b>	<b>outside</b>
1111:2,10	<b>operator</b>	1159:19	1230:2	1040:2
1128:5,17,	1074:20	1174:23,24	<b>order</b>	1105:16
18,24	1105:13	1175:22	970:5,8	<b>outstanding</b>
1129:4,9	1106:8	1176:19	987:17,22	1001:16
1130:8,12	1142:21,22	1183:24	1012:1	1180:5
1132:2	1162:7	1187:18	1035:24	<b>overall</b>
1141:24,25	1167:22	1188:18	1056:4	1057:9
1142:6	<b>operators</b>	1189:6,14,	1077:5	1141:12
1178:5,6,1	1228:10	20 1190:1	1083:5	1234:24
4 1186:1	<b>opportune</b>	1194:16,18	1086:3,11	<b>overnight</b>
<b>Ontario/</b>	1179:12	1195:5,18	1106:25	1201:13,15
<b>Manitoba</b>	<b>opportunitie</b>	1201:2	1112:2	<b>overoptimist</b>
1104:24	<b>s</b> 1063:21	1211:4	1133:22	<b>ic</b> 1097:20
<b>onto</b> 1145:4	1129:14	1215:23	1171:10	<b>owner</b>
1171:8	1137:19	1216:25	1185:23	1083:23
<b>open</b>	1149:9	1228:21	1186:11	<b>ownership</b>
1103:20,22	1163:9	1232:22	1204:4	1084:12
1104:16,17	1201:22	<b>opposed</b>	1209:2	1134:11
1220:8	1202:6	963:15	1220:8	<b>owning</b>
<b>opened</b>	1211:9	992:9	1222:11	1083:20
1106:22	<b>opportunity</b>	999:12	1240:11	1133:4
1184:8	973:11	1000:7	<b>orderly</b>	<b>owns</b> 1133:6
<b>open-water</b>	993:11,25	1031:10	1167:1,14	1134:3
999:20	994:5	1077:11	<b>orders</b>	<hr/>
<b>operate</b>	1091:5	1079:25	968:14	<b>p.m</b>
977:20	1098:13	1102:4	1087:19	1097:24,25
978:9	1101:3	1115:21	1167:18	1179:17,18
981:16	1109:3,11	1118:9	<b>organization</b>	1241:13
1017:8	1111:21	1142:3	1236:3	<b>pack</b> 1110:13
1018:25	1112:17	<b>opposite</b>	<b>others</b>	<b>package</b>
1035:23	1123:13	1190:2	989:15	960:9
1038:21	1124:6,7,2	<b>optimization</b>	1023:20	1240:7,13,
1052:13	1	978:11	1123:21	
<b>operated</b>	1125:7,11	979:20	1153:12	
989:15	1126:2,15,	<b>optimize</b>	<b>otherwise</b>	
1052:20	16 1127:4	978:10	1000:16	
		<b>option</b>		

1316				
15,19	1149:24	1077:10	1235:17	1007:6
<b>page</b> 959:2	1153:17,22	1105:23	<b>partners</b>	1008:17
960:2	,23	1164:4	1082:12	1012:10,20
961:2	1166:11	1168:7	1084:22	1018:8,20
962:2,5,10	1168:13	<b>participant-</b>	1236:12	1019:16
964:14	1173:1	<b>funded</b>	<b>partnership</b>	1023:8
965:8	1174:6	1076:22	1227:8	1025:6,21
966:18	1175:1	1077:8	1236:21	1026:21
967:5	1176:1	<b>participants</b>	1237:7,8	1027:10
968:7	1181:24	1100:10,14	<b>party</b> 998:12	1028:1
971:2,9,23	1187:4,11,	1128:7	1077:1	1033:20
988:2	16 1192:10	1167:2	1104:9,24	1034:1
990:1	1200:7	<b>participate</b>	<b>pass</b> 987:18	1035:1
991:3	1208:3,6,7	1077:14,15	<b>passed</b>	1036:11,21
992:22	1214:22	,21 1168:6	1171:8	1038:17
994:8,14,2	1224:2	1220:7	<b>past</b> 965:19	1046:9
5 1007:17	1226:19	1221:8	966:20	1060:21
1008:9	1237:24	<b>participates</b>	984:19	1069:22
1025:1	<b>pages</b> 957:24	1105:20	1005:19	1077:18
1028:12	1143:18	<b>participatin</b>	1020:9,10	1081:4
1032:2	<b>paid</b> 1076:15	<b>g</b> 1107:8	1137:20	1091:15
1037:2,8,1	1106:9	1169:16	<b>path</b> 1014:4	1096:17
0,18,20,21	1156:19	<b>particular</b>	1106:3,4	1098:17
,22,23	1157:18,20	982:8	<b>pathways</b>	1101:7
1039:16,17	1158:10,11	996:3	1013:22,23	1108:18
1040:6	1160:8	1000:22	<b>Patti</b> 958:4	1109:23
1048:2	1161:15,23	1028:24	963:9	1111:5
1057:23	1162:9	1050:20	1097:13	1112:23
1059:7	1221:16,22	1057:10	1098:3	1116:20
1064:22,24	1225:17	1095:25	1179:25	1126:25
1065:3	<b>painful</b>	1110:12	1180:15	1129:6
1067:7	1050:5	1117:20	1181:20	1130:14
1068:7,17	<b>Pambrun</b>	1168:20	1182:3,16	1132:7
1093:21	958:16	1219:14	1183:7,15	1136:12
1098:15,21	<b>pamphlet</b>	1231:14	1184:2,14	1141:2
1100:5	1179:21	<b>particularly</b>	1185:2	1145:20
1108:21	<b>panel</b> 957:13	971:5,9	1214:13	1147:20
1109:2,8	959:6	1120:21	1240:3,22	1149:13
1111:22	963:24	1143:20	<b>PAUSE</b> 969:7	1153:19
1112:11,16	1093:11	<b>parties</b>	979:4	1157:7
1120:24	1098:11	999:6	992:15	1158:1
1122:6	1239:15	1073:2,7	994:22	1162:20
1125:12	1240:1	1076:21	995:9	1164:24
1127:25	<b>paper</b>	1078:9	1001:1	1168:16,25
1131:10,18	1184:12	1103:16	1002:6	1171:1
1135:3	<b>pardon</b>	1239:7,12,	1003:20	1174:4
1136:8	982:15	19	1004:9	1177:8
1137:25	<b>participant</b>	<b>partner</b>	1006:3	1178:1,23
1139:8				1179:5,23
1143:12				1182:11
1144:6				1183:13
1145:12				1185:10

1316				
1186:14	1191:3	967:8,13,2	1184:11	<b>perspective</b>
1194:23	1192:25	1 968:17	1191:23	1006:6
1196:12,22	<b>peak/off-</b>	969:1,19	1214:24	1010:16
1200:3	<b>peak</b>	970:3	1215:4	1011:23,25
1202:23	1137:19	972:1	1233:1	1051:1
1205:17		990:16	<b>period</b>	1059:10
1206:7,21	<b>peaking</b>	1010:14	967:13	1095:24
1207:10,24	998:14,20	1022:24,25	974:19,24	1096:1
1212:1,17	999:8	1023:3	1027:8	1131:6
1215:17	1001:11	1035:5	1061:3	<b>pertaining</b>
1216:1	<b>peaks</b> 998:8	1055:13	1083:9,13	1183:21
1218:23	<b>peek</b> 1019:19	1111:8,10	1084:7,10	<b>pertains</b>
1227:11	<b>penalizes</b>	1116:8	1090:13,24	1121:17
1228:15	1231:15	1118:4	1091:1	1145:14
1232:18	<b>penalties</b>	1119:15	1092:7,22	<b>Peter</b> 958:10
1233:7	1167:13,15	1122:20	1119:6	<b>Peters</b> 958:2
1234:8	<b>penalty</b>	1143:7,22	1123:25	959:12
1239:1	1170:7,13	1144:14,21	1138:7	963:10,20
<b>pay</b> 1047:8	<b>pencil</b>	,22,23	1144:2	964:5,6
1076:16,20	1156:22	1148:7,9,1	1189:10	965:5,15,1
1080:22	1239:9	0 1166:22	1191:16	6 966:4,11
1083:10	<b>penny</b>	1172:3,10	1205:25	967:4,10,1
1084:13	1160:17	1196:16,18	1235:10	4,23
1106:9,18	1161:6	1197:5,8	<b>periods</b>	968:6,13,1
1107:6	1223:14	1198:18	981:9	6,25
1110:21	<b>people</b>	1207:19,22	1061:24	969:5,9,17
1142:15	963:14	<b>percentage</b>	1168:23	970:2,10,1
1147:6	1039:14	1147:9	1221:4	5,18,22
1159:9	1082:20	<b>percentile</b>	<b>permanent</b>	971:1
1221:10,11	1117:5	1095:7	1012:25	972:20,21
1230:19,21	1162:7	1116:9,15,	<b>permit</b>	973:3,7,12
1235:25	1164:5	17	1194:4	,13,18
<b>paying</b>	1167:10,24	<b>perfect</b>	<b>permits</b>	974:11,19,
1078:8,10	1168:1	1161:14	1087:20	21
1134:23	1241:3	1162:3	<b>permitted</b>	975:3,10,2
1229:16	<b>per</b> 972:1	1210:12	1017:8	0 976:3,24
1230:15	994:1	<b>perhaps</b>	1104:1	977:9,15
<b>payments</b>	1014:5	987:24	<b>perpetuity</b>	978:4,8
1169:9,10	1118:2	999:2	1083:13,16	980:7
1178:7	1123:18	1012:14	1086:19	983:22,23
<b>peak</b> 982:21	1144:23	1047:13	1090:9	984:8,11,2
998:3,4,19	1148:10	1062:1	1091:3	0,25
,20,24	1200:17	1063:5	<b>persisted</b>	985:3,8,14
1061:24	1223:14	1068:13	983:17	,21
1126:17	1238:10,18	1073:19	<b>persistent</b>	986:9,14
1136:5	,19	1089:15	1052:6	987:5,24
1137:17	<b>percent</b>	1097:14	<b>person</b>	988:5,13,1
1138:1,15	966:8,9	1098:14	1009:23	7,21
1140:17,23		1100:5		989:1,11,2
,24		1108:11		2
1165:15,18		1120:10		991:1,2,8,



1316				
12,20,25	1022:1,12,	4,19,22,25	25	1138:5,10,
992:7,17,2	17,21	1064:1,5,1	1102:7,19,	13,19
1,25	1023:10,15	9 1065:10	21	1139:3,6,1
993:7,13,1	,22	1066:18,21	1103:1,14,	0,17
7,21,24	1024:3,6,2	,25	21,25	1140:16,23
994:4,6,12	1,22	1067:5,15,	1104:4,9,2	1148:23,24
,16,24	1025:12,14	17,20,22	2 1105:3	1149:6
995:5,13,2	1026:7,12,	1068:2,7,1	1108:1,2,1	1152:1,2,1
2,25	16,23	7,23	1,20	6,25
996:9,19	1027:1,12,	1069:16,24	1109:6,17	1153:5,14,
997:4,15,2	19	1070:7,11,	1110:1,3,8	21
2	1028:3,9	18	,11,17,24	1154:3,11,
998:6,11,1	1029:7,12,	1071:3,6,1	1111:8,9,1	14,18
8,23	19	2,15,20	4,17	1155:1,8,1
999:2,5,10	1030:1,6	1072:2,7,1	1112:1,6,1	6,24
,14	1031:7,21,	1,13,25	0,12,14	1156:5,10,
1000:9,13	25	1073:17,24	1115:16,17	23
1001:3,12,	1032:6,10	1074:14	,25	1157:3,9
24	1033:12	1075:1,5,8	1116:7,13,	1158:3
1002:2,8,1	1034:20,21	,14,20	18,22	1160:12,13
2,14,20,25	1035:10	1076:2,3	1120:8,9,2	1161:4
1003:5,10,	1036:4,19	1077:9	0,23	1162:13,14
17	1037:7,12	1078:17,18	1121:8,12,	1163:10,22
1004:2,5,1	1038:9,10	1079:2,8,1	15,21	1164:10
1,14,19	1039:15	4,19,23	1122:4,16,	1165:1,9,1
1005:1,14	1040:3,12,	1080:2,14,	22,23	6 1166:9
1006:11,19	17	19	1123:2,7,1	1169:7,8,1
,22	1041:8,12,	1081:2,6	6	3,17,21,24
1007:1,9,1	15,20,25	1082:16	1124:5,10,	1170:3
1,14,17,23	1042:3,15,	1083:19	14,22,25	1171:9,13,
1008:1,4,6	20	1085:3,4,2	1125:11	17,25
,14,21	1043:2,9,1	0,23	1126:4,11,	1172:1,13,
1009:1,3,1	6	1086:21	16,21	24,25
1,15,22,25	1044:19,25	1087:4,12,	1127:1,15,	1173:6,10,
1011:1,2,6	1045:3,10	24	19,24	14,17,24,2
,10,16	1046:11,12	1088:6,12,	1128:21	5
1012:3,12,	,20,24	17,21,25	1129:2,13,	1174:6,18,
22	1047:10,18	1089:13,14	16,24	25
1013:4,11	1048:2,12	,22	1130:6,11,	1175:6,13,
1014:14,22	1049:11,17	1090:2,8	18,25	21
,24	,22 1050:4	1091:9,18,	1131:9,15,	1176:5,10,
1015:4,7,1	1057:16,17	24	22	13,15
5,22	1058:6	1092:3,6,1	1132:3,9,1	1177:3,18,
1016:1,5,8	1059:4,10,	1,17,24	5,21	19
,9,15,20,2	23	1093:4	1133:3,8,1	1178:3,16,
4	1060:6,9,1	1098:6,9,1	3,16,19	19,25
1017:3,18,	4,23	0,19	1134:13,22	1179:10
19 1018:12	1061:15,16	1099:1,7,1	1135:2,8,1	1180:17,22
1019:4,10,	,19	3,21	1,14,18	1184:7,8,1
14,18	1062:1,9,1	1100:4,6,8	1136:6,14	8
1021:3,9,1	2	,19	1137:10,23	1185:7,12,
3,14,17,22	1063:3,4,1	1101:9,23,	,24	13 1186:16

1316				
1187:2,6,1	,24	1185:14	,23 1090:6	<b>play</b> 1127:16
4,15	1221:21	1217:17	1093:18	<b>please</b>
1188:1,2,6	1222:1	<b>picked</b>	1100:24,25	970:22,23
,8,11	1223:5,13	1139:3	1112:16	974:11
1189:2,17,	1224:1,7,1	1195:22	1123:5	1051:21
19 1190:20	5,18,24	<b>picking</b>	1124:17	1105:11
1191:13,23	1225:7,13,	1122:23	<b>planned</b>	1107:5,6
1192:4,14,	18,23	<b>picture</b>	1009:5	1108:23
15	1226:6,11,	1095:15	<b>planning</b>	1171:9
1193:5,18	18,25	<b>Pine</b> 1231:23	992:25	1173:15
1194:6,9,1	1227:6,13,	<b>placeholder</b>	1005:20	1179:15
5,25	21	1009:20	1010:15	<b>plus</b> 970:11
1195:10,17	1228:2,6,1	1011:10	1011:21,23	1010:24
,21	7	1012:15,17	,24 1012:2	1144:10,21
1196:6,10,	1230:4,10,	1088:8	1020:12	1156:16
14,20	14 1231:1	<b>plan</b> 973:15	1021:5	1158:22
1197:2,6,1	1232:2,20	993:8	1052:1,22	1165:10
1 1198:7	1237:18,19	994:9	1059:1	1189:13
1199:6,23	1238:5,6,2	996:18,25	1113:8	1218:18,21
1200:5,15,	1,24	1001:18,23	1168:2	<b>point</b> 966:22
19,23	1239:4,5	1002:18	1197:21	969:5
1201:1,5,9	<b>phone</b> 1162:4	1003:2,9,1	<b>plans</b> 993:6	970:21
,13,24	<b>phonetic</b>	4	1010:5	977:9
1202:7,25	964:13	1005:15,19	1021:7	979:18
1203:8	1169:25	1006:1	1151:18	980:4
1204:12,19	<b>photocopied</b>	1007:10	1168:3	983:14,17
1205:6,12,	1003:11	1010:5,15	<b>plant</b>	989:3
19	<b>physical</b>	1019:11,19	1009:9,10	990:7
1206:1,9,1	992:10	1020:13	1010:8	991:13
3	1034:7	1023:11	1011:7	996:15
1207:1,6,1	1105:7,11,	1025:10,11	1012:1,18	997:17
8	14,21	,15	1013:7	1001:17
1208:1,4,1	1106:3,7	1026:1,5,9	1015:14	1005:7
7	1188:15,16	1028:4	1016:10,14	1006:13
1209:5,8,1	1190:16	1029:10	1017:16	1010:9,17
3	1191:9	1033:14	1018:4	1011:18
1210:8,13,	1196:17	1037:9,19	1052:25	1015:19
19 1211:15	1215:15	1039:17,19	1074:4,15,	1018:13
1212:3,10,	1217:2	,23 1045:6	20,24	1026:2,3
22	<b>physically</b>	1051:1	1075:4	1045:12
1213:4,6,8	986:13	1057:20,24	1117:14	1049:4
,9,12	987:5	1058:3,9	1161:8	1052:1,19
1214:4,5,1	1035:17	1059:6,20	1203:21	1059:24
4,18,20,21	1106:2	1064:21,23	1236:17	1063:11,12
1215:19	1190:8,16	1071:1	<b>plants</b>	1067:22
1216:5,7,1	1215:13	1073:22	996:4,18,2	1070:25
7	<b>pick</b> 996:2	1074:10	2 1038:6	1075:25
1217:8,23	1047:12,13	1076:18	1220:3	1093:2
1218:3,11,	1160:16	1084:1	1235:18	1127:10
25	1163:23,24	1088:10,22	1236:13	1133:6
1219:12,20				1134:12,25
1220:10,16				

1316				
1136:14,19	1032:12	1081:14	1055:14	1226:3,17
1137:11	1042:9	1094:20	1057:19,24	1227:8
1139:11	1043:3	<b>potentially</b>	1058:8	1228:9,12
1143:2	1046:15	1065:24	1059:6,20	1229:22
1152:3	1048:21	1074:5	1061:17	1230:19
1160:3	1078:9	1081:17,21	1064:20,23	1233:12,13
1175:9,14,	1081:1	1082:13	1068:19	,18
16 1190:2	1084:5,12	1083:23	1069:5,15	1234:12,16
1195:13,19	1085:12	1084:6	1071:1,21	,19
1204:19	1119:21	1094:22	1072:8	1235:7,17
1205:10	1125:1	<b>pow</b> 1089:15	1073:3,22	<b>powerhouse</b>
1217:20	1142:11	<b>power</b> 962:18	1074:10,19	1012:25
1218:1,5,6	1146:24	973:15	,23	<b>powers</b>
,10 1221:7	1147:25	977:21	1076:16	1107:18
1224:5,6	1177:17	979:13,25	1077:7	1128:16
1233:19	1190:6	980:9,10,2	1079:13	<b>PPAs</b> 1229:17
1238:10,18	1230:13	2 981:15	1085:1,25	<b>practices</b>
,19	<b>portions</b>	982:7,15	1087:18	1053:23
<b>Pointe</b> 960:6	1028:18	992:12	1088:10,22	<b>pre</b> 1118:5
1005:17	<b>pose</b> 1239:22	993:8	,23 1090:6	<b>pre-ask</b>
1007:2,4	<b>position</b>	994:9	1094:20	963:11
1008:8,10	963:5	996:18,25	1100:24	<b>pre-asks</b>
1009:4,19	1102:22	1001:18,23	1104:13	960:3
1010:3,21	1130:22,24	1002:18	1107:23	1097:16
1012:1,4,6	<b>positions</b>	1003:2,9,1	1120:3	1180:4,9,1
,16,23	1112:7	4	1123:5	3,16
1053:12	<b>positive</b>	1005:9,13,	1124:16	<b>precedent</b>
1180:16	1069:25	15,25	1125:9	1069:2,8
1181:5,18	<b>possibility</b>	1007:9	1127:8	<b>precipitatio</b>
1182:14,20	1076:12	1010:5	1129:25	<b>n</b> 989:4
1183:3	<b>possible</b>	1011:19	1152:11	<b>precise</b>
1235:4	986:13	1019:10,19	1157:18	1236:23
<b>pointed</b>	987:6	1020:13	1162:4	<b>precisely</b>
1183:16,21	1052:15	1023:11	1190:9	1147:5
1207:13	1054:6	1025:10,11	1191:5,8,2	<b>precision</b>
<b>points</b>	1061:23	,14 1026:1	0	1204:20
988:22	1085:21	1028:4	1198:2,4,5	<b>predictabili</b>
1002:15	1097:8	1029:10	1199:7,11,	<b>ty</b> 1131:7
<b>point-to</b>	1127:3	1032:1	20,25	<b>predicted</b>
1134:24	1153:11	1035:17,19	1201:7	982:9
<b>poles</b> 1061:9	1162:6	1037:9	1202:15	<b>predominatel</b>
<b>policy</b>	1219:12	1038:21,23	1203:3,12,	<b>y</b> 973:5
1164:8	<b>possibly</b>	1039:3,16,	18	<b>prefer</b>
<b>populated</b>	986:2	23	1204:4,8,2	1093:17
1131:17	<b>posted</b>	1040:18,20	2 1205:11	1108:21
<b>Portage</b>	1184:16	,25 1041:4	1206:3,11,	
957:21	<b>potential</b>	1044:3	12	
<b>portion</b>	1053:2	1045:23	1208:10,21	
1022:23		1048:4,6	1210:22	
		1049:3,15	1213:2,25	
		1051:1	1220:21,22	
			1222:10	

1316				
<b>preferred</b>	1112:20	1156:8,11,	2 1115:7	1222:25
963:17	1114:3	19	1117:20	<b>primarily</b>
1083:25	1117:24	1157:1,14,	1130:25	967:6
1084:1	1119:13	21,23	1136:16	1237:3
1093:17	1120:11	1158:7,11,	1137:3,6,1	
	1174:17	17,18	4	<b>primary</b>
<b>preliminary</b>	1176:6	1159:2,11,	1138:20,23	1182:21
1093:1	1201:3	13,15,20,2	1139:24	<b>principal</b>
<b>premium</b>	1204:12	1,24	1140:19	970:11
1090:18	<b>previously</b>	1160:2,7,2	1144:2,22	
<b>preparation</b>	997:8	1,24,25	1146:17,22	<b>print</b>
1113:4	1040:21	1161:22,23	,25	1097:15
<b>prepare</b>	1064:3	1162:6	1147:4,10,	<b>printouts</b>
1115:18	1077:10	1163:12,19	14,17	1172:5
1216:5	1156:6	,20,22,25	1148:5,16	<b>prior</b> 963:13
	<b>pri</b> 1047:13	1164:2,12,	1149:2	986:22
<b>prepared</b>		21	1150:21	1182:5
966:14	<b>price</b>	1166:16,17	1159:9,21	
1026:9	1042:1,11,	,20	1160:4,23	<b>pro</b> 1236:15
1044:7	12,13,14	1168:20,21	1168:9,12,	<b>probabilitie</b>
1059:19	1046:25	1174:14,15	13	<b>s</b> 1053:4,8
1159:8	1047:9,11,	1175:12	1172:3,4,1	
1209:22	12,13,14	1185:24	8,22	<b>probability</b>
1232:24	1083:7	1186:11	1174:16	1053:5,6,2
1239:19	1086:5	1189:5,23	1190:18	0 1056:17
	1106:7	1190:13,19	1196:1	1095:17
<b>present</b>	1107:1,8	1191:15,22	1202:9	<b>probable</b>
984:7	1108:5	,25	1215:21	1053:17
1091:7	1113:16,21	1195:24	1217:13	
1093:10	1122:9,13,	1202:16	1219:8	<b>probably</b>
1128:20	15 1123:18	1207:19,21	1221:4,10,	976:14
<b>presentation</b>	1124:23	1215:24	12,21,23,2	985:1
965:7	1125:13,15	1217:15,25	4	1008:2
996:12,14	,21,22,24	1218:12	1223:16,20	1050:15
1099:4	1126:1,6	1219:2,5,9	1224:3	1051:11
1118:13	1128:15	,10,11,16	1228:11,19	1053:11
1181:2	1131:7	1220:5	,21 1229:2	1054:25
	1135:4,6,2	1221:6,20	1230:15	1055:5
<b>presented</b>	4	1222:2,14	1237:10	1059:13,22
969:12	1136:3,21	1223:17		1113:23
1037:13	1137:5,8,9	1224:10,16	<b>price-taker</b>	1137:15
1205:20	1139:5,18	1225:20	1114:24	1151:16
	1140:1,6	1228:7	1157:15	1180:20
<b>presently</b>	1142:25	1229:10,17	<b>pricing</b>	1200:16
1121:4	1143:3,10	1237:11	1042:17	
<b>pretty</b>	1145:3,4		1047:16	<b>problem</b>
1031:1	1146:8	<b>priced</b>	1123:20	1054:9,10,
1102:9	1147:15	1041:22	1146:8	11 1151:10
1136:25	1149:8,18	<b>prices</b>	1164:8	<b>procedures</b>
1211:10	1150:2,3	961:22	1175:8	1210:18
	1152:8,24	967:12	1186:19	<b>proceed</b>
<b>previous</b>	1153:3	1042:2	1187:18,19	1076:17,18
1058:15		1114:3,5,2	1195:2	
1078:8				

1316				
,25	<b>production</b>	1206:15	,22	1225:7
1090:20	1019:6	<b>proportion</b>	1172:6,17,	<b>prudent</b>
1098:4	1020:25	1154:19	20	1054:4
<b>proceeding</b>	1158:21	1197:1	1173:11,19	<b>PUB</b> 960:3
1077:7	1198:23	<b>proportional</b>	1177:5	964:9
<b>proceedings</b>	1219:16	1137:8	1187:3,8	971:23
997:8,9	<b>products</b>	<b>proportionat</b>	1192:6	994:17
1097:22	1136:24	<b>e</b> 1079:21	1200:8	1040:7
<b>process</b>	<b>proficiency</b>	<b>proposed</b>	1212:24	1098:22
1052:1	1199:17	964:25	1213:15,17	1180:4,12,
1077:6	1203:20	1024:23	<b>provided</b>	17 1237:23
1102:15	1204:13	1025:4,18	961:5	<b>public</b>
1177:14	<b>profit</b>	1027:14	964:12	957:3,20
1240:8	1143:2	1091:21	974:10	965:22
<b>produce</b>	1156:17	<b>proposing</b>	1024:12	1072:14,18
977:5	1202:20	1029:8	1068:11	1074:5,18,
980:11	<b>profitabilit</b>	1036:6	1108:14	22 1075:17
984:18	<b>y</b> 1197:19	1151:19	1109:9	1076:15
1032:22,25	1212:9	<b>protect</b>	1175:20	1077:7
1152:19	1236:15	977:14	1184:9	1079:13
1154:23	<b>profitable</b>	989:5	1187:22	1087:1
1156:16	1194:12	1059:18	1214:15	1184:9
1182:7	<b>profits</b>	1208:15	1215:1,6,2	<b>publicly</b>
1183:3	1107:15	<b>protected</b>	1 1217:10	1184:10
1234:12	1129:21	1140:12	1238:9	<b>pulled</b> 994:8
<b>produced</b>	<b>program</b>	<b>protecting</b>	<b>provides</b>	<b>purchase</b>
1066:5	1021:21	1053:16	1043:4	992:12
1182:25	<b>project</b>	1058:14	1085:5	1005:13
1229:7	1006:7,14,	<b>provide</b>	<b>providing</b>	1022:20
1230:9	17,24	961:3,19,2	998:7	1023:17
<b>producer's</b>	1012:23	1,23	1000:7	1038:13
1161:9	1076:4,5,9	962:3,7,12	1134:13	1046:2
<b>produces</b>	1091:11	986:19	<b>province</b>	1069:6
1231:7,25	<b>projecting</b>	997:12,23	1055:20	1073:3
<b>producing</b>	1122:3	999:19,25	1089:19	1074:19,23
1114:18	<b>projections</b>	1017:22	1103:9,16	1099:11
1151:13	966:24	1023:19,23	1107:20	1104:24
1234:16	<b>projects</b>	1024:9	<b>provinces</b>	1126:13
1235:7	1005:17	1029:14	1111:3	1127:3,7,1
<b>product</b>	1075:21	1034:9	1114:5	3 1128:23
974:3,8	<b>promises</b>	1036:2	<b>provincial</b>	1130:8
1042:5	1240:24	1043:11	1018:24	1142:25
1131:5	<b>promising</b>	1044:3,21	1049:24	1169:24
1150:14	1096:1,4	1046:16	<b>provision</b>	1173:8
1152:15	<b>proper</b>	1080:12	1049:20	1190:9,11
1153:3	1168:2	1109:18	<b>provisions</b>	1191:5,8
1163:7		1112:7	1023:20	1198:1,5
1164:22		1171:10,19	1045:15	1202:18
			<b>proxy</b> 1089:9	1203:18
				1204:23

1316				
1205:11	1199:7	<b>quantified</b>	1237:23	1120:10,20
1206:4,11	1225:25	1061:2	1238:2	1129:19
1208:21	1230:24	1119:19	1240:10	1153:8
1210:22	<b>purpose</b>	<b>quantify</b>	<b>questions</b>	<b>Rainkie's</b>
1222:10	1216:16	961:11	970:21	1067:3
1226:2,17	1217:6	1021:11,18	1017:20	<b>raise</b>
1227:2	1233:25	1038:12	1032:12	1148:19
1228:9,12,	<b>purposes</b>	1062:15	1050:6	1208:15
20 1229:22	968:12	1064:3,12	1075:20	<b>raised</b>
1230:19	1001:18	1091:10	1093:6,19	1136:7
<b>purchased</b>	1011:21	1108:24	1108:4	<b>Ramage</b> 958:4
1025:15	1103:17	<b>quantities</b>	1153:16	963:9
1035:21	1233:22	1068:21	1179:13	1017:23
1120:3	1236:25	1094:3	1232:25	1097:13
1127:12	1239:5	<b>quantity</b>	1233:5	1098:3
1130:1,7	<b>pursuant</b>	1000:10	1239:6,20,	1099:5
1131:23	1193:9	1155:18	23 1240:9	1108:14
1132:1	1216:10	1157:4	<b>quick</b>	1179:25
1142:5	<b>push</b> 1081:23	1160:19	1019:18	1180:15
1164:14	1111:18	1165:3	1092:18	1181:20
1199:25	<b>pushed</b>	1174:8	<b>quickly</b>	1182:3,13,
1204:4	1004:24	<b>quantum</b>	1048:12	16
1206:12	<b>pushing</b>	971:25	1177:13	1183:7,15
1218:19,20	1136:5	<b>question</b>	1224:1	1184:2,14,
1226:22	<b>putting</b>	971:4,20,2	<b>quite</b> 972:6	20,23
1227:15	1087:12	1 1012:13	1010:2	1185:2,8
<b>purchaser</b>	1235:23	1015:16	1065:11	1214:13
1075:24	<b>puzzled</b>	1017:21	1068:25	1232:22
1104:18	1101:15	1018:6,14	1082:16	1233:2
<b>purchasers</b>	<hr/>	1021:13	1110:18	1240:3,22
1225:4	<b>Q</b>	1029:20	1154:17	<b>Ramage's</b>
<b>purchases</b>	<hr/>	1033:17,23	1180:24	1239:13
961:24	<b>qualificatio</b>	1036:19,23	1239:10	<b>ramp-up</b>
1129:25	n 989:23	1038:5	<hr/>	1005:5
1173:7,12,	1042:16	1050:14	<b>R</b>	<b>ran</b>
20	<b>qualificatio</b>	1061:8	<b>radar</b> 965:22	986:23,24
1199:3,11,	ns 1122:17	1076:2	<b>rain</b> 1051:6	<b>range</b> 988:9
20,22,24	1208:11	1094:16	<b>raining</b>	1047:11
1202:11	<b>quality</b>	1115:4	1210:5	1051:8
1203:4,12	974:8	1117:24	<b>Rainkie</b>	1066:14
1204:8	<b>quantificati</b>	1127:2	959:8	1119:2,3
1208:10,23	on 961:4	1145:10	964:1	1175:9,17
1213:4	1023:23	1174:10	1089:16	1189:12
1222:13	1024:11	1182:19	1098:2	1200:13
1226:1,3,2	1062:3	1184:20	1101:9	<b>rare</b> 1053:20
1	1090:7	1206:10	1102:2,6,2	1198:3
1227:7,16	1109:19	1207:5	0,21	1220:18
1228:7,18	1110:12	1226:12	1103:2	<b>rarely</b>
1230:6		1233:9	1108:6	
<b>purchasing</b>		1236:23		

1316				
1044:11	957:15	<b>real</b> 1128:12	1232:6	1037:2
1220:20,23	972:12,16	1143:10	<b>reason</b>	1182:23
<b>rate</b> 957:7	978:24	1147:14	1003:17	1217:19
964:25	994:14	1168:10	1102:2	<b>receives</b>
965:11,18,	1010:18	1221:5	1121:7	1178:14
20,25	1017:12	1225:14	1144:5	<b>receiving</b>
966:6,8	1032:8,11	1230:13	1164:18,21	1089:7
968:2,4,17	1033:3,10,	<b>reality</b>	1170:9,24	1164:13
,21	22 1036:23	988:18	1203:19	<b>recent</b>
970:5,9	1037:10,20	<b>realize</b>	1214:6	1063:4
971:25	,24	1015:16	1215:7	1110:16
1093:13	1038:1,4	<b>really</b>	<b>reasonable</b>	1183:18
1124:3	1045:25	1020:3	1156:17	<b>recently</b>
1145:14	1054:7	1024:24	1209:24	1019:1
1146:4,5,1	1056:15	1041:25	<b>reasoning</b>	1136:2
0 1224:20	1089:2	1055:22	1144:25	<b>receptive</b>
1234:13	1106:16	1061:11	<b>reasons</b>	993:22
<b>rate-base</b>	1112:12,15	1082:18	1013:8	<b>recess</b>
1083:8	1113:24	1090:10	<b>rebuild</b>	1040:5
<b>rates</b> 968:23	1114:19	1093:11,14	1005:18	1050:7
969:3,20	1115:3,11,	,20	1008:11,15	1064:20
970:1,13	13 1117:22	1101:10	1009:4,9,1	1068:15
971:13,14,	1119:9	1204:9	2,19	1089:15
15 1086:20	1120:5	1212:8	1010:20	1093:7
1137:2	1143:11	1220:21	1055:15	1179:12
1143:21	1145:16	1233:15,16	<b>rebuilding</b>	1185:14
1146:12	1146:23	,22	1011:19	<b>recessing</b>
1147:12	1147:8	<b>realtime</b>	1012:3	1050:11
1233:21	1148:6,21	1166:13,15	<b>rebuilt</b>	1097:24
<b>rather</b>	1149:22	<b>real-time</b>	1012:7	1179:17
982:1,20	1150:23	961:22	<b>rec</b> 1114:13	<b>reciprocal</b>
1033:24	1151:9,25	1140:21	<b>recall</b>	999:6
1034:9,22	1233:9	1156:3	991:21	<b>reciprocating</b> 998:1,17
1076:3	1235:16	1157:10	1006:12	1043:3
1092:25	1236:11,22	1159:6,15,	1056:19	<b>recognize</b>
1093:2	1237:9,13	16	1060:10,24	1038:20
1107:11	<b>re</b> 957:6	1166:19,21	1061:1	1209:20
1110:23	1082:11	1167:5	1063:22	1232:22
1114:3,5,2	1190:10	1168:12	1073:18	<b>recognizes</b>
2 1119:2	1222:21	1169:3,16	1108:6	1113:9
1130:23	<b>reach</b> 998:24	1170:10	1195:15	<b>recommence</b>
1177:14	<b>reading</b>	1172:4,17,	<b>receivable</b>	963:7
1191:6	1037:4	22 1216:15	1046:4	<b>recommended</b>
1198:25	1073:18	1217:1,14,	<b>receive</b>	1002:18
1209:22	1089:1	19	1186:1,2	1003:13
1216:21	1097:12	1219:3,5	<b>received</b>	1037:19
1237:10	<b>ready</b> 963:4	1220:24	964:25	
<b>rating</b>	1082:7	1221:4		
1142:22	1097:9,20	1229:2		
<b>Raymond</b>	1098:1,5	1230:10,17		

1316				
1064:21	<b>reduction</b>	1023:21	<b>related</b>	<b>relevant</b>
<b>reconcile</b>	1021:2	1118:20	961:6,9	1230:21
1176:16	1148:15	1171:7	964:18	<b>reliability</b>
1177:4	1150:5	<b>reflecting</b>	999:16,18	981:25
1188:20	1207:19,21	989:16	1024:1,14,	983:11,15,
<b>reconciliati</b>	1211:19	1034:15	18 1025:24	19 1096:24
<b>on</b> 1215:6	<b>reductions</b>	1035:7	1087:8	1097:2
<b>reconfirm</b>	983:16	<b>reflects</b>	1091:12	<b>reliable</b>
1051:20	999:23	1000:5,14	1144:15	1203:22
<b>record</b>	1174:14,15	1001:11	1160:4	<b>relieved</b>
974:17	<b>refer</b> 964:8	1066:12	1184:13	1045:18
976:5	1047:6	1114:13	1186:23,24	<b>rely</b> 1058:19
977:23	1208:2	1190:7	1207:22	1199:1
1054:19,20	<b>reference</b>	1192:19	1209:6	<b>relying</b>
1058:11,14	994:19	1227:7	1225:14	1017:15
,19,20,25	1200:8	1229:18	1239:15	<b>remaining</b>
1059:14	1217:9	<b>regard</b>	<b>relation</b>	1080:24
1062:2,6	1237:2	1230:20	971:1	1150:17
1093:3	<b>referenced</b>	<b>regardless</b>	1096:19	1210:20
1199:13	1145:14	1114:25	1236:23	<b>remember</b>
1214:16	<b>referencing</b>	1123:14	<b>relationship</b>	986:21
<b>recorded</b>	1207:17	<b>regards</b>	1083:15	992:24
1058:20	<b>referred</b>	1115:5	1096:22	1060:15
<b>records</b>	964:7	1119:11	1164:2	1063:24
972:24	1181:2,3,6	<b>regime</b>	1187:17	1102:11
<b>recover</b>	,22	1012:24	1214:24	1116:4
1090:15	<b>referring</b>	<b>region</b>	<b>relative</b>	1118:12
<b>recovery</b>	980:7	1159:25	1053:22	1139:17
1080:23	1015:13	1160:10	1057:19	1202:13
<b>red</b> 988:19	1121:11	1221:5	1058:8	<b>remind</b>
1188:1	1187:25	<b>regionalized</b>	1059:6	974:12
1192:17	1238:1	1076:9	1112:6	1123:2
<b>red-shaded</b>	<b>reflect</b>	<b>Regis</b> 957:14	1117:2	1239:7,12,
1192:17	964:24	<b>regulation</b>	1171:17	19
<b>reduce</b>	1044:9	984:14	1195:1	<b>reminding</b>
1063:18	1074:10	1049:24	1199:4	1108:6
<b>reduced</b>	1096:3,4	1150:22	<b>relatively</b>	<b>remove</b>
1149:9	1114:14	<b>regulatory</b>	1013:1	1175:3
1174:9	1139:24	1087:15	1023:10	1176:6
1186:24	1140:1	<b>reinvested</b>	1053:6,10	1185:16,24
1205:23	1218:20	1235:15	1094:23	<b>removing</b>
1209:19	1222:12	<b>reiterate</b>	1191:15	1239:10
1234:19	1224:8	966:13	1204:16	<b>renegotiated</b>
<b>reduces</b>	1225:6	<b>relate</b>	1208:17	1070:21
1134:6	1229:3,6	1023:16	1212:23	1071:23
1186:25	<b>reflected</b>	1143:14	1234:23	<b>renegotiatio</b>
	968:19,23		1236:16	
	989:25		<b>release</b>	
			982:25	
			983:18	



1316				
n 1068:14	25	1156:12	981:2	996:18,25
<b>renewal</b>	1183:2,6,8	<b>required</b>	982:8	998:9
1029:22	,9,19	978:14,20	1148:3	1001:18,23
<b>renewed</b>	1184:21	992:1	<b>reserves</b>	1002:18
1068:20	1189:7	1034:7	982:16	1003:2,9,1
<b>rental</b>	<b>reported</b>	1048:17	<b>reservoir</b>	4 1004:7
1158:22	1196:16	1066:6,7	976:21	1005:15
1218:17	1208:20	1077:4	977:6,18	1006:1
<b>rentals</b>	1216:9	1082:13	978:19	1007:10
1036:6,8,1	<b>reporting</b>	1087:14	979:21	1010:5
6	1196:15	1155:15	981:21	1011:22
1206:11,12	<b>reports</b>	1190:10	982:2	1017:6
<b>re-occurring</b>	1177:15	1221:15	988:8	1019:10,19
1169:14	1180:18,19	<b>requirement</b>	989:25	,25
<b>repaid</b>	<b>represent</b>	959:6	990:3,18	1020:12,13
1085:8	1000:9	963:24	1126:7	,19
<b>repair</b>	1114:15	1047:22	1201:10	1021:10,15
1055:11	1216:13	1155:21	1219:18,22	1023:11
<b>repeat</b>	<b>represented</b>	1239:8	,23 1220:3	1025:10,11
974:22	1113:10	<b>requirements</b>	1221:18	,14 1026:1
1201:25	<b>represents</b>	976:14	1222:21	1028:4
<b>repeating</b>	965:11	979:2	1223:1	1029:10
966:25	968:4	985:16	<b>reservoir-</b>	1037:9
<b>replace</b>	1014:7	986:20	<b>controllin</b>	1039:17,19
962:8	1022:23	987:23	<b>g</b> 990:22	,23 1041:4
1075:11	1040:8	989:5,9	<b>reservoirs</b>	1048:5
1192:8	1041:6	998:3,4	975:15,21	1051:1
1221:15,16	1066:7,17	1102:24	976:18	1057:20,24
1222:16,23	1159:21	<b>requires</b>	977:7,24	1058:8
1235:8	1193:3	1080:5	981:7,13,1	1059:6,20
<b>replaced</b>	<b>request</b>	<b>requiring</b>	8 985:24	1064:21,23
966:8	1089:15	1087:14	986:24	1071:1
1235:6	1217:11	<b>re-runnering</b>	987:21	1073:22
<b>replacement</b>	<b>requested</b>	1005:17,23	989:13,14,	1074:10
1012:23	1214:14	1006:7,10,	20 990:6,8	1088:10,22
1120:2	1240:10	17,24	1052:14,16	,23 1090:6
<b>replacing</b>	<b>require</b>	<b>rese</b> 981:4	,20	1100:24,25
1009:9	1018:15,24	<b>resell</b>	1198:19	1123:5
1181:21	1022:11	1128:24	1220:1	1124:16
1222:12	1043:23	1226:9	<b>residential</b>	1223:7
<b>report</b>	1065:23,24	<b>reser</b>	1040:13	1229:4,15,
996:22	1066:1	1222:17	<b>residual</b>	18
1181:7,8,1	1069:6,14	<b>reservations</b>	1058:13,23	1231:6,9,1
2	1074:12	1130:17	<b>resort</b>	4,16,17
1182:14,18	1080:10	1133:11	1153:1	1232:10,15
,20,21,22,	1082:5	1134:20	<b>resource</b>	1234:1,2,2
	1087:19	1205:1	973:15	4
		<b>reserve</b>	993:8	<b>resources</b>
			994:9	978:18
				989:8
				995:3,14,2
				0,21

1316				
1000:16,20	1046:13	1012:8	959:6	1239:8
1011:24	1069:25	1027:15	961:12	<b>revenues</b>
1014:25	1071:9	1029:12,21	962:17	962:13
1016:11	1097:18	1062:18	963:24	964:16,22,
1017:1	1240:12	1063:14	964:21,24	23
1021:5	<b>responded</b>	1064:6,9,1	965:9	967:7,25
1032:1	1240:9,11	3 1075:2	968:8,23	968:2,4,5
1034:23	<b>response</b>	1082:11	969:1	969:20
1035:14	960:8	1086:18	970:3	970:12
1040:19	1017:21	1107:3	971:8	973:1,4
1044:13	1033:17	1118:17	972:25	982:13
1045:1	1181:9,23	1133:16	1061:2,3,6	1040:1
1048:6	1182:1	1174:13	1062:16	1062:4
1049:15	1217:10	1181:10	1064:12	1065:14
1052:5,8,1	1220:4	1211:22	1083:6	1086:18
0,21,23,24	1237:22	<b>results</b>	1093:25	1094:5,21
1057:25	1238:2,3	981:15	1095:23	1098:12
1059:1	<b>responses</b>	1053:4	1102:24	1099:20
1065:22	960:9	1169:20	1108:15	1120:16,17
1074:6,25	1240:7,13,	<b>resume</b>	1113:22	1121:3
1094:20	19	1097:22	1119:22	1129:18,22
1123:4	<b>responsibili</b>	1098:2	1123:9,14	1134:16,18
1124:12	<b>ty</b> 1132:23	<b>Resumed</b>	1128:2	,21
1125:2,4,6	1184:11	959:6,7,8,	1145:25	1143:12
,9 1126:10	<b>responsible</b>	9,10	1146:9,19,	1146:13
1127:9,16,	1078:12	963:24,25	21 1149:2	1148:17
21	1079:20	964:1,2,3	1163:9	1153:25
1155:4,20	1203:24	<b>resuming</b>	1167:11	1169:22
1162:16	<b>restore</b>	1050:12	1169:4,10,	1173:2,3,5
1163:1,4	961:17	1097:25	25 1174:11	1174:2
1198:8,19,	1062:24	1179:18	1176:17	1175:22
25 1220:19	1064:16,17	<b>retail</b>	1178:10,13	1176:12
1222:8	<b>restricted</b>	1104:6	1179:9	1177:11,16
1223:21	1099:14	<b>retain</b>	1185:16,18	,21
1228:3	<b>restrictions</b>	1104:1	,22	1179:2,8
1231:20	987:16	<b>RETIREES</b>	1186:10,19	1186:1,2,6
1234:18	999:21,24	1240:1	,25	,7,23
1235:2	1000:2	<b>retrospect</b>	1190:17	1187:21
<b>respect</b>	1148:2	1210:1	1203:2,13	1193:9
1050:19	1201:20	<b>return</b> 961:5	1207:20	1197:18
1084:16	<b>restricts</b>	997:13	1208:10,15	1203:1,12,
1149:3	1019:2	1009:7	,22,25	14 1204:6
1159:19	<b>result</b>	1022:25	1209:18	1205:23
1190:24	961:13	1023:19	1211:9,19	1206:2
<b>respecting</b>	970:4	1024:12	1212:20	1207:14
1109:1	1006:24	1043:12,14	1213:2,24	1208:24
1206:4	1008:15	1193:20	1224:12	1209:4
<b>respective</b>	1009:12	<b>revenue</b>	1225:12	1210:23
998:7			1233:12	1211:7
<b>respond</b>			1236:10,17	1212:4,24
1018:14			1237:6	1213:15,19
			1238:11,17	1214:6

1316				
1224:13,16	1106:6	1050:9	1203:19	1155:11
1233:21	1119:10	1180:20	1205:23	1165:3
1234:2,3	1123:12	1182:7	1211:1,11,	1186:2
1235:19	1133:1,2	1185:4	14 1212:12	1189:15
1236:18,24	1134:6	<b>rotating</b>	1235:13	1190:12
1239:18	1140:3	1055:19	<b>running</b>	1191:4,7,1
<b>revenue-</b>	1142:11,23		979:25	2
<b>sharing</b>	,24	<b>round</b>	981:13	1197:14,15
1236:20	1150:20,21	1068:11	1054:22	1202:11
1237:2	1159:13,16	1089:10	1177:15	1219:2,14
<b>review</b>	1166:16	1193:12	1191:7	1222:12
1087:7	1235:24	1194:10	1198:25	1225:1
1224:2	<b>risks</b>	1237:23	1199:17,18	1229:2,8
<b>reviewed</b>	1050:18	<b>rounding</b>	1223:21	1232:16
968:13	1054:17	969:13,15	<b>runs</b> 979:24	1235:24
1123:4	1077:3	1047:24	1203:20	1236:5,9
1227:18	1142:9,12,	<b>route</b>	1204:13	<b>sales</b> 961:5
<b>revised</b>	13,14	1089:6,9		962:14
1070:21	<b>river</b> 977:12	<b>routinely</b>	<hr/>	973:8,10,1
1194:5	980:11	1218:12	<b>S</b>	1,14
<b>revision</b>	986:18	<b>routing</b>	<b>safety</b>	993:13
1193:16	987:15	1073:5	1181:7,8,1	994:5
<b>Riel</b> 1056:2	991:14	<b>row</b> 1066:10	1	1023:19
<b>right-hand</b>	1026:1	1088:15	1182:14,18	1024:13
1127:24	1027:16,22	1145:24	,20,25	1039:25
1174:12	1028:5	1183:15	1183:9,19	1080:16
1237:24	1058:4,5	<b>RSG</b> 961:20	1184:21	1081:11
<b>rightly</b>	1059:16	1167:11	<b>sale</b> 1005:9	1082:19,22
1204:4	1066:24	1169:9,18	1030:10	1098:13,23
<b>rights</b>	1068:14	1170:6	1034:14	1099:2,9,1
1030:11,19	1070:24	1171:19,23	1035:24	8 1103:4
1133:4,22	1117:14	<b>rule</b> 1170:9	1036:2	1104:6
1134:15	1220:3	<b>rules</b> 1031:5	1038:22	1109:1,3,1
1141:10,14	<b>rivers</b> 975:8	1106:11,21	1043:15,24	1 1111:21
,17	1202:4	1110:20	1069:13	1112:17
1142:10	<b>road</b> 1022:6	1165:22	1071:7,24	1119:22,25
<b>risk</b> 1033:12	1042:5	1167:25	1075:1,9,1	1122:7,8,1
1050:19,24	1074:25	1169:17	7 1079:8	9
1051:3,4,1	<b>robust</b>	1170:19,23	1105:1	1123:3,13
0,11,12	1056:5	<b>run</b> 976:18	1115:2	1124:7,11,
1053:21,24	1059:21	979:11,13	1126:2,6,1	15
,25	<b>robustness</b>	1017:4	3,21	1125:7,8,1
1055:24	1059:2	1065:19	1129:22	1
1057:19	<b>rollback</b>	1097:19	1131:2	1126:2,10,
1058:7,9,1	968:22	1101:4	1132:16	15,16
3,23	969:1,19	1164:7	1133:20	1127:25
1059:3,5,8	<b>rolled</b>	1197:14,21	1134:5	1128:1,4,1
1063:21	969:19	,24	1142:3,5	2,13
<b>room</b> 1014:15	<b>room</b> 1014:15	1199:16	1143:2	1130:1
			1146:6,7,1	1131:1,11,
			0,16	12,16,18,1
			1150:8	9

1316				
1132:10,11	1228:21,22	<b>schedules</b>	<b>seek</b> 1040:5	1204:5
1134:16	1229:3	1170:17	1080:22	1216:24
1135:3,4,1	1230:11,13	1171:5	<b>seeking</b>	1219:18
8,19,20,21	1234:14	1221:13,15	1152:12	1221:9,22
,22,23	1237:4,11,	,18	<b>seem</b> 1096:4	1225:12
1136:1,20	16	<b>scheduling</b>	<b>seems</b> 980:25	<b>seller</b>
1138:21,25	<b>Saskatchewan</b>	1045:23	1024:25	1044:4
1139:14,15	990:12,13	<b>screen</b>	1148:6,10	<b>selling</b>
1140:19	1099:3,9,1	965:23	1151:24	982:20
1141:6,8,1	1,15,17,23	<b>sea</b> 1035:8	<b>seen</b> 984:2	1128:5,6,1
1,12,18,20	1100:2,13,	<b>search</b>	1053:8	4 1142:15
1142:2,12,	15	1162:5	1131:18	1143:4
18,20	1103:7,11,	<b>season</b>	1176:1	1154:7,8
1144:4,8,9	16	982:23	1201:2	1166:20
,15,17,18	1104:6,12,	1103:1	<b>segment</b>	1176:19
1145:23,24	14,17,18,2	<b>seasonal</b>	1131:11	1231:3
1146:5,13	0	1035:9	<b>seldom</b>	<b>sells</b> 1226:7
1147:10	1107:18,22	1045:15	1230:16	<b>send</b> 1107:16
1149:18	,23,24	1192:23	<b>selected</b>	1170:17
1150:16	1109:20	1193:6	964:9	<b>sending</b>
1151:23	1110:2,10,	<b>second</b>	<b>Selkirk</b>	1170:22
1155:25	19 1111:8	972:25	1016:9,14	<b>sense</b> 963:19
1161:11	1113:2	1060:12	1204:15	982:19,22
1173:2	1114:4	1096:10	<b>sell</b> 974:1	1047:4
1174:23,24	<b>SaskPower</b>	1101:1,13	993:19	1166:23
1175:2,24	1100:16	1102:4,16	1000:17	1236:6
1176:23	1103:12,17	1113:6	1022:24,25	<b>sensitive</b>
1177:22	<b>satisfy</b>	1115:21	1044:10	1222:3
1178:5	1126:5	1149:7	1045:12	<b>sensitivity</b>
1185:17,25	<b>save</b> 1198:6	1237:21	1049:4,10	1154:21
1186:11	<b>savings</b>	<b>second-last</b>	1085:17	<b>sentences</b>
1188:15	1014:6,7,8	1127:2	1090:14	1233:10
1189:13,20	,12	1227:14	1099:12	<b>separate</b>
1190:1	<b>saw</b> 966:4,12	<b>Secondly</b>	1104:1	1134:3
1194:16,18	996:20	1166:17,18	1124:21	<b>separating</b>
1195:5	1124:16	<b>second-order</b>	1125:20	1217:3
1196:15,16	<b>scenario</b>	1033:8	1127:4	<b>sequence</b>
,17,19	978:25	<b>secured</b>	1128:9	1003:13
1197:8,19,	1037:13,16	1029:2	1129:4,10	<b>sequencing</b>
24 1203:24	,18 1044:9	<b>seeing</b>	1132:16	1002:22
1204:3,11	1127:20	971:10	1137:16	<b>serve</b>
1206:11	<b>schedule</b>	1020:23	1141:23	974:6,7
1208:19	970:16	1110:22	1143:1	975:24
1212:25	1004:14	1146:16	1152:14	979:18
1213:20	1045:16	1150:9,13	1166:12,15	982:20
1215:5,10,	1167:6	1152:13	1193:23	987:21
15,23	1170:13	1211:24	1201:15,22	
1216:5,9,1	1225:25		1202:19	
4,18,23	1232:14			
1217:2,6,7				
1220:12				
1224:13				

1316				
995:12	1130:4	1139:11	1055:19	986:7
1034:14	1133:25	1215:11	<b>sheet</b>	1005:18
1035:18,24	1134:4	1238:10,18	1064:25	1028:5,12
1038:22	1148:1	<b>seven-</b>	1067:2	1043:17
1039:7,12	1173:9	<b>hundred</b>	1072:18	1048:10
1046:20,22	1186:4	1080:4	1073:23	1068:19,24
1051:24	1204:25	<b>seventy</b>	1153:8,9	1071:21
1061:8,20	1227:5	1139:6,15	<b>sheets</b>	1125:3
1069:3,13	<b>services</b>	1238:17	1071:4	1134:18,19
1070:2	1097:15	<b>seventy-</b>	1186:19	,20 1150:4
1105:18	1169:2	<b>eight</b>	1200:9	1173:2,15
1159:25	1186:3	1010:23	<b>shift</b>	1179:3
1160:10	<b>servicing</b>	<b>seventy-five</b>	1110:22	1186:23
1171:6	1232:5	1010:19	1113:22	1187:4
1190:11	<b>serving</b>	1070:17	<b>shifted</b>	1191:14
1191:7	979:14	1080:4	1117:16	1192:8
1197:14,24	1034:4	<b>seventy-six</b>	<b>ship</b> 1201:7	1195:2
1201:13	1039:25	1191:19	<b>short</b>	1208:8
1225:1	1049:2	1192:1	1052:21	1238:11
1232:9	1052:3	<b>seventy-two</b>	1054:15	<b>shows</b> 988:22
<b>served</b>	1191:4	1238:15	1090:24	1019:11
1061:5	1197:15	<b>several</b>	1211:8,10	1038:20
1069:16,19	1236:5,9	1016:8	1212:11	1040:18
<b>serves</b>	<b>setting</b>	1048:10	<b>shortly</b>	1054:19
991:16	1047:11	1080:25	1100:5	1089:17
<b>service</b>	<b>settle</b>	1144:14	1241:7	1111:23
976:14	1034:5,17	1185:22	<b>short-term</b>	1132:1
984:15	1155:13	1191:5	970:9	1188:21
986:23	1164:15	<b>severe</b>	1054:9	1214:16
1003:1	1199:21	1055:24	1113:2	<b>shut</b> 1074:21
1013:14	<b>settled</b>	<b>severity</b>	1130:19	1107:4
1018:15,17	1035:13	1059:3,17	<b>showed</b>	1219:13
1020:9	1190:6	<b>shaded</b>	1177:10	1220:25
1030:20	<b>settlement</b>	988:10	1238:9	<b>shutdown</b>
1055:14	1178:8	1194:17	<b>showing</b>	1075:2
1060:25	1190:24	<b>shape</b> 1039:5	1023:5	<b>sign</b>
1063:15	1210:25	<b>share</b>	1052:4	1092:12,15
1064:16	<b>settling</b>	1079:21	1084:5	1125:25
1072:14,18	1172:4	1083:10	1113:17	<b>signal</b>
1074:5,19,	1197:7	1092:19	1124:4	1052:7
22 1075:17	<b>seven</b>	<b>sharing</b>	1126:1	1131:17
1076:16	987:10,13	1236:15	1146:1	<b>signed</b>
1077:4,8	992:2	1237:6	1149:19	1071:2
1079:13	1054:19	<b>sharpen</b>	1150:2,5	1072:5
1080:15,18	1066:11	1156:21	1169:4	1073:2
1081:16	1114:2	<b>sheds</b>	1191:11,12	1087:8
1087:1	1118:3	<b>shown</b> 962:9	1211:5	1155:22
1099:11	1135:5			<b>significance</b>
1104:11	1138:6			996:11
1105:5				
1106:1				

1316				
1093:23	6 996:3	1088:1	<b>snow</b> 1051:5	1184:25
1191:15	1007:11	1091:20,22	<b>soaring</b>	<b>sometime</b>
<b>significant</b>	1022:13	1113:25	1139:17	998:25
966:19	1023:6	1114:1	<b>society</b>	1010:11
1007:18,20	1030:6	1117:25	1053:15	<b>somewhat</b>
1013:2,8	1040:5	1138:8	<b>sold</b> 973:25	1093:1
1050:19	1042:16	1144:10	1074:1	<b>somewhere</b>
1056:7	1057:21	1224:4	1122:12	1073:18
1058:8	1069:25	1231:2	1124:20	1109:8
1148:15	1070:9	1238:10,18	1125:14,17	1189:11
1155:19	1087:5	<b>sixteen</b>	1126:17,18	<b>sorry</b> 967:25
1177:20	1100:8	985:7	1131:24	971:14
1205:12	1108:9	986:6	1132:2,17,	974:21
1220:3	1109:4	1030:4	19 1140:11	1006:9
<b>significantl</b>	1112:14	1135:20,21	1155:18	1007:13,22
<b>y</b> 967:12	1122:18	1138:2,11	1159:22	1016:15
1019:2	1132:4,10	1165:23,25	1186:12	1017:4
1136:23	1149:3,11	<b>sixteen-</b>	1188:19	1025:15
1226:25	1153:15,24	<b>thirty-</b>	1189:15	1041:9
<b>similar</b>	1172:14	<b>nine</b>	1215:12	1068:25
971:4,10	1174:18	1030:25	1216:23	1077:20
1016:19	1185:15,20	<b>sixteen-</b>	1217:17	1090:6
1020:15,16	1187:6	<b>thousand-</b>	1219:3	1106:16
1087:22	1191:16	<b>five</b> 985:2	1221:14	1117:23
1149:24	1211:16	<b>sixty</b> 1090:3	1222:17,20	1121:10
1180:7	1220:11,16	1231:24	<b>Soldier</b>	1129:19
1229:1	,25 1227:1	<b>Sixty-nine</b>	957:16	1143:12
<b>simple</b>	<b>sit</b> 1006:5	994:16	1096:19	1144:7
1144:3	<b>site</b> 1041:5	<b>sixty-six</b>	1182:13	1145:16,17
1206:18	<b>sitting</b>	1149:19	1183:5,11	1158:14
1208:9	1210:5	<b>sixty-three</b>	1234:10	1189:19
<b>simply</b>	<b>situation</b>	1175:25	1235:1	1201:24
1014:3	982:8	<b>size</b> 1027:19	<b>Soldier's</b>	1203:9
1049:13	989:2,7	1054:12	1184:20	1205:7,9
1099:2	991:4,13	1075:10	<b>sole</b> 1070:6	1232:5
1120:17	1135:15	1085:6	<b>solely</b>	<b>sort</b> 982:5,6
1184:15	1147:24	<b>skewed</b>	1207:13	1011:23
1215:22	1155:10	1095:7,10	<b>solve</b>	1046:4
1231:4	1156:6	<b>slip</b> 1003:6	1057:11	1051:19
<b>Singh</b> 1184:6	1161:5	1017:20	<b>somebody</b>	1053:3
1240:17	1198:24	<b>slipped</b>	1049:4	1065:15,16
<b>single</b> 975:2	1234:6	1003:8	1164:14	1106:25
<b>single-cycle</b>	<b>situations</b>	<b>small</b>	<b>somebody's</b>	1161:20
1016:11,22	982:16	1090:18	1161:7	1185:4
<b>sir</b> 965:3	1056:25	1099:19	<b>somehow</b>	<b>sorth</b>
974:22	1158:18	1141:12	1167:21	1133:13
988:2	<b>six</b> 976:11	1204:18	<b>someone</b>	<b>sought</b>
994:7,10,1	986:4			965:12
	994:3			<b>sound</b> 1005:1
	1052:18			

1316				
<b>sounds</b>	1217:4	1022:14	1040:23	1111:21,24
1090:23	1236:17	1076:7	1041:3	1112:4
1212:22	1237:1	<b>spoken</b>	1052:6	1122:20
<b>source</b>	<b>specifically</b>	1042:23	1053:12	1124:8
972:25	982:4	<b>spot</b> 1125:24	1056:3	1128:24
1001:14	1093:22	1139:15,22	1098:14,20	1131:12,24
1038:23	1140:24	1140:1,6,8	1099:22	1133:5
1055:13	<b>speculate</b>	,14,21	1109:12	1134:14
1152:22	1126:12	1229:10,21	1145:9	1135:1
1173:5	<b>speculation</b>	,25	1161:20	1148:1
1217:12	1202:8,21	<b>spread</b>	1167:4,19	1186:5
1218:15	<b>speculative</b>	1128:15	1171:5	1190:11
1229:23	1093:1	1137:13,14	1233:18	1191:4
1233:11	<b>speed</b>	1168:22	<b>started</b>	1194:3
<b>sources</b>	1003:23	<b>spreads</b>	985:23	<b>station</b>
980:12	<b>spend</b> 1065:3	1212:7	988:15	987:3
1188:21	1136:9	<b>spring</b> 982:4	1167:17	1005:11
1198:4	<b>spending</b>	983:12,13	<b>starting</b>	1015:5
<b>south</b>	1009:5	993:2	975:15	1017:5
1020:11	1197:15	1051:6	1025:19	1040:20
1084:2	<b>spends</b>	1154:18	1102:7	1055:10
1088:7	1013:6	<b>St</b> 1227:4	1119:18	1056:2
1128:17	<b>spent</b> 997:16	<b>stab</b> 1116:24	1138:2	1074:21
1133:14	1102:23	<b>stability</b>	1167:6,10	1151:4
<b>southern</b>	<b>spill</b> 981:16	1116:24	<b>starts</b>	1203:20
1019:24	<b>spillage</b>	1117:3,15	974:19,25	1231:7,10
1020:20	1221:25	1131:7	1138:6,7,1	1233:14
1035:21	<b>spilled</b>	<b>stack</b>	0 1146:7	1235:14
1055:9	981:11,22	1002:21	<b>startup</b>	<b>stations</b>
1072:8	<b>spilling</b>	<b>stacking</b>	1167:23	984:9
<b>spades</b>	981:24	1161:20	<b>statements</b>	999:23
966:5,13	<b>spillway</b>	<b>staff</b>	964:10	1001:8
<b>spare</b> 1055:6	960:7	1084:24	<b>States</b> 973:5	1014:11
<b>speak</b>	1011:18	<b>stand</b>	1031:18	1034:11
1084:16	1012:23	1172:10	1032:21	1056:9
1156:5	1013:6	1233:1	1061:17	1095:20
1236:20	1181:5,18	<b>standard</b>	1068:19	1096:25
1238:7	1220:8	974:15	1069:5	1219:23
<b>speaking</b>	<b>spite</b>	1053:23	1073:9	1220:2
976:3	1150:10	<b>standards</b>	1075:25	1235:18
1194:15	<b>split</b>	974:4	1076:10	<b>statisticall</b>
1200:10	1135:25	<b>start</b> 963:4	1078:6	<b>y</b> 1121:23
1220:14	<b>splitting</b>	975:21	1085:1,25	<b>statistics</b>
<b>specific</b>	1056:4	977:5,7	1087:9	1201:3
1018:16	<b>spoke</b> 963:10	996:1	1088:2	<b>status</b>
1160:9		1024:25	1089:19,24	1068:12
1170:5			1090:5	<b>stay</b> 1003:7
1194:25			1098:24	1131:15
			1104:15	1208:5
			1105:1	

1316				
<b>stays</b> 1190:17	1223:1	<b>submitted</b> 971:3	1195:23	1032:23
<b>steam</b> 1016:17	<b>store</b> 979:22 982:19,22, 25 983:3,9 1220:4	<b>subscribe</b> 1079:15 1082:13 1085:9	<b>sudden</b> 1167:19	1039:8,11 1044:11,22 1045:5
<b>steam-generated</b> 1016:17	<b>storing</b> 983:8,10,1 1,13	<b>subscribed</b> 1078:13 1081:9 1082:15 1084:10,14	<b>suffered</b> 1062:4	1070:9 1193:7 1194:19
<b>step</b> 1030:2 1189:10 1192:16	<b>storm</b> 1054:10,13	<b>subscribes</b> 1080:23	<b>sufficiency</b> 1167:11 1169:10	<b>summertime</b> 1039:4 1192:25
<b>stick</b> 1164:8 1231:21	<b>strategic</b> 1082:2	<b>subscribing</b> 1082:17	<b>sufficient</b> 986:19 987:3 989:8 1004:13 1155:20 1219:21	<b>sunset</b> 1017:22 1018:3
<b>sticking</b> 1075:24	<b>strategy</b> 1137:16	<b>subscription</b> 1079:21 1084:11	<b>suggest</b> 1050:6 1093:6 1097:21 1180:8,25 1187:3	<b>supplier</b> 1105:16 1107:11 1161:22
<b>Stokke</b> 960:5 1181:4,6,1 6 1183:23 1184:4,9,1 5	<b>stream</b> 986:16	<b>subsequent</b> 1021:1 1094:4 1096:12 1113:5	<b>suggested</b> 1184:8 1206:14	<b>suppliers</b> 1161:7 1229:17
<b>Stokke's</b> 1181:2	<b>struck</b> 1056:21	<b>subsequently</b> 1013:7	<b>supply</b> 1199:1	
<b>stood</b> 1158:4	<b>structured</b> 1167:25	<b>subsidy</b> 1223:18	<b>supply</b> 974:4,7 975:15,23 979:19 980:12 981:22 983:2,7 984:5,6 992:6,8,10 1005:16 1019:23 1020:2,14, 17 1023:21 1027:6 1030:21 1031:6,18, 22 1034:16 1039:3 1040:2 1044:7 1045:19 1051:7 1058:23 1064:24 1065:4,5 1105:14 1106:1 1114:8	
<b>stop</b> 1167:4 1239:6	<b>studies</b> 1003:24 1154:21	<b>substantial</b> 1115:6	<b>suggesting</b> 1104:4 1181:25 1217:12 1240:6,14	
<b>stopping</b> 1167:7,10	<b>studying</b> 1086:16	<b>substantiall y</b> 1147:11	<b>suggests</b> 1168:12	
<b>storage</b> 975:13,16, 18,19 976:15 977:18 978:12,17 981:21,25 983:19 985:18 986:4,10,1 7,25 987:4,6,20 988:8,14,2 2,23 989:10 990:3,4,16 991:6 992:5 1126:7 1201:11 1220:6	<b>subject</b> 966:2 968:15,24 1047:23 1050:6 1071:3 1073:1 1123:12 1153:15 1169:9 1170:6 1175:16 1179:12 1195:3 1203:15 1239:13	<b>subtract</b> 1048:23 1050:1 1203:3,11 1208:20	<b>summaries</b> 1180:18,19	
	<b>subjective</b> 1177:24 1210:15	<b>subtracted</b> 1186:9 1208:14	<b>summarize</b> 1214:25	
		<b>subtraction</b> 1049:14 1208:9	<b>summary</b> 1117:8 1183:22 1184:24 1185:5 1186:18	
		<b>successful</b> 978:2 1082:1	<b>summer</b> 981:24 982:6 997:12,13 999:7,20 1022:25	
		<b>successive</b>		



1316				
1123:15	1147:9	1196:25	1126:7,10	1226:19
1124:25	1158:3	1239:24	1127:10,25	1237:21
1125:2	1161:18	<b>sustain</b>	1141:6,8,1	<b>table</b> 959:1
1150:20	1180:1	1119:8	1,17,19	986:8
1154:20,22	1184:5	<b>swap</b> 1047:7	1163:24	996:8
1161:20	1191:18	1071:18	1171:4	1000:22
1164:20	1195:7	<b>swap-out</b>	1185:25	1034:16
1166:8	1205:4	1193:25	1194:20	1044:13
1198:12,18	1223:5	<b>switched</b>	1222:18	1052:5
1199:5	1226:11	1007:10	1229:19,24	1065:12
1203:22	1239:9	<b>system</b>	1231:7,17,21,24	1066:7,10
1211:21	<b>surplus</b>	976:13,18,21	1232:3	1093:23
1229:5	976:16	977:4,12,21	1234:15	1094:3
<b>supplying</b>	993:14	978:8,9,10,12	1235:20	1131:16
1081:14	997:24,25	979:14,17,18,21	<b>systems</b>	1132:1,4
<b>support</b>	998:1	980:2,9,10,17,22	1067:6	1141:5
976:20	1004:14,18	981:15,16		1149:24
1201:5	1048:8,10	984:16,18	<hr style="width: 50%; margin: 0 auto;"/>	1166:11
1203:4	1049:13	995:2	T	1173:11
1222:11	1050:2	996:23	<b>tab</b> 964:6	1176:12
<b>supporting</b>	1052:4	998:21	968:7	1179:9
1185:5,6	1067:6,23	999:21	969:12	1214:25
<b>suppose</b>	1069:11	1014:9	994:25	1238:9,11,22
967:14	1081:18,19,21	1019:25	996:21	<b>tables</b>
969:21	1082:22	1028:17	1032:2	1199:5
1012:4	1083:2,16	1029:6	1039:18	<b>tabs</b> 960:3
1014:20	1113:12	1032:24	1040:6	1180:3,10,12
1045:3	1114:11,18	1035:20,24	1048:3	<b>taking</b>
1153:8	1118:25	1036:2	1057:22	1018:17
<b>suppress</b>	1124:15,16	1038:21	1059:7	1030:20
1215:24	1125:3,4,5,8	1039:9	1064:22,24	1053:5
<b>sure</b> 969:22	1148:3,19	1048:7	1065:4	1082:3
977:25	1155:4	1049:13	1068:7,18	1097:18
996:1	1155:4	1051:24	1093:21	1104:19,20
998:13	1162:18	1052:2,19	1098:15	1106:6
1014:23	1163:6	1054:1	1108:4	1107:3
1021:12	1167:21	1055:2,16	1111:22	1130:23
1036:17	1194:4,20	1056:4	1112:11	1144:9
1037:5	1231:7,11,12,25	1064:24	1120:13	1230:22
1038:11	1232:3	1067:23	1125:12	1234:15
1040:18	<b>surpluses</b>	1081:24	1131:10	<b>talk</b> 973:13
1058:7	1115:23	1083:18	1135:4	996:3
1062:8	1118:21	1097:3	1136:8	1001:3
1074:3	<b>surprise</b>	1105:13	1137:25	1021:23
1090:5	1055:3	1124:20	1173:1	1050:16
1101:12,15,22	<b>surprises</b>		1174:1	1053:14
1115:3	971:11		1180:5	1081:6
1116:1	<b>suspect</b>		1183:8	1091:18
1121:19			1199:8	
1145:5			1203:9	
			1208:6	

1316				
1098:11	19 981:1,4	<b>terms</b>	994:11	1040:11,15
1100:12	<b>tariff</b>	973:8,24	995:4,11,1	,22
1138:1	1076:10	978:25	9,24	1041:10,14
1162:5,7	1103:20,22	979:1	996:7,13	,19
<b>talked</b>	1104:16	991:14	997:3,7,21	1042:24
981:23	<b>technology</b>	1003:23	998:2,10,1	1043:7,13,
995:20	1016:19	1011:19	5,22	21 1048:16
997:9	<b>ten</b> 1010:12	1019:5	999:1,4,9,	1049:16,21
1014:25	1052:19	1022:1	13,17	1050:3
1054:17	1068:21	1024:22	1000:12,18	1065:8,11
1059:25	1086:2	1029:23	1001:10,22	1066:19,22
1075:22	1090:4	1032:13	1002:1,10,	1067:4,12,
1093:22	1179:14	1035:7,25	13,19,24	16,19,21
1131:8	1215:11	1036:7	1003:3,8,1	1068:1,6
1141:6	1223:7,8,9	1038:5	6,22	1094:2,10,
1178:4	,10,11	1043:3,22	1004:4	13 1206:23
1198:12	1233:14,23	1053:1,4	1005:22	1207:4,7
1200:24	1234:17	1056:24	1006:5,16,	<b>test</b> 962:16
1202:13	<b>tenants</b>	1061:2	21,25	965:17
1234:11	1080:10	1088:6	1007:3,8,1	969:3
<b>talking</b>	<b>tend</b> 999:7	1094:20	2,16,21,25	996:2
971:7	1014:1	1099:22	1008:3,5,7	1013:13
993:9	1095:18	1103:5	,19,24	1021:19
1011:18	1096:13	1112:3	1009:2,8,1	1024:23
1012:16	1135:19,24	1121:24	4,16,24	1028:12
1046:16	1154:20	1123:18	1010:1,22	1032:2
1053:5,12	<b>tends</b> 999:22	1124:3	1011:5,9,1	1094:8
1071:10,15	<b>terawatt</b>	1133:3	4,22	1101:13
1090:17	989:7	1135:8	1012:6	1102:3
1092:25	991:17,18	1136:16	1013:19	1109:12
1102:23	994:4	1137:8	1014:20,23	1121:9,13
1103:4	<b>term</b> 1011:24	1144:8	1015:3,6,1	1155:2
1105:24	1054:10,15	1147:9,16	0,18,25	1203:8,11
1108:25	1070:12	1151:10,12	1016:4,13,	1209:9
1111:1	1071:4	1155:17,18	16,23	1210:21
1112:2	1072:17	1171:17	1017:2,7,1	1213:1,23
1116:2	1073:23	1187:20	4	<b>tested</b>
1140:24	1126:2	1193:19	1018:10,22	1058:4
1141:9,13,	1139:14	1204:18	1019:9,13,	<b>testimony</b>
14,15	1153:7,9	1208:18	22	1100:23
1145:2	1188:4	1209:14	1021:7,12,	1181:23
1159:19	1211:9,10	1217:13,14	16,20,25	
1162:15	1212:11	1225:24	1022:4,15	<b>thank</b>
1206:24	1216:4	1228:22	1025:8,13,	963:19,20
1236:14	<b>terminated</b>	1232:4,5	23	993:7
<b>talks</b> 975:4	1075:10	1236:24	1026:10,15	994:24
1111:20	<b>terminology</b>	<b>terrific</b>	1028:7,15	1013:11
<b>tank</b> 975:25	1011:12	1118:9	1029:11,16	1019:5
976:1,9	<b>terminology</b>	<b>TERRY</b> 959:9	1032:5	1028:9
980:13,15,	1011:12	964:2	1037:5,17,	1031:7
		978:7	21,25	1033:22
		979:6	1038:3,7	1037:24

1316				
1038:1	25	1042:15	1133:16	19 1219:5
1048:3	975:7,18	1048:4,9	1135:7	1223:2
1050:9	976:6,21,2	1049:4,13,	1136:5,17,	1224:20
1056:15	2 977:4	16,21	23	1225:1,6,7
1062:12	979:6	1050:3,5	1138:1,12,	,8,17
1067:1	980:4,5,15	1051:8	17 1140:23	1227:4
1093:4	,16	1052:3,7,1	1141:22	1228:5,8
1098:6	983:1,5	5 1054:4	1143:8	1229:15
1100:19	984:25	1057:25	1145:11,12	1231:3,4,2
1102:1,20	985:23	1058:19,20	,14,17	1,24
1103:2	986:2,7	1065:16	1147:24	1235:25
1107:5	988:13,14	1066:1,7,1	1150:5,17	1236:23
1111:18	989:4	6,25	1152:9,23	1240:22
1115:14	991:8	1067:4,6	1153:12	<b>themselves</b>
1116:22	992:22	1068:1,4,6	1155:2,7,2	1232:25
1119:9	995:4	,10,16,22	3 1156:4	<b>theoreticall</b>
1120:5	997:3,21	1072:1,22,	1158:19,22	<b>y</b> 987:19
1122:4	998:4,10	25 1073:21	1160:2	<b>thereabouts</b>
1128:21	999:1,4	1075:18,24	1161:24	1027:24
1132:3	1001:22,24	1079:5,18,	1167:11	<b>thereby</b>
1137:11	1002:11,19	22 1082:24	1168:18	1118:8
1148:21	,24	1085:20	1169:4	<b>therefore</b>
1151:25	1003:3,16,	1087:10	1170:18,23	1118:8
1153:14	24 1005:22	1088:9	1171:6	1151:9
1156:20	1006:25	1089:5,21	1175:16,17	1233:20
1172:15	1009:5,14,	1091:19	,22	<b>there'll</b>
1173:17	16,18	1092:1	1177:24	979:23
1179:10	1010:2,10,	1094:14	1178:11,12	1113:22
1183:11	14,15	1098:25	,16	1148:3
1185:7	1011:14,25	1100:18	1180:22	1174:20,22
1186:16	1013:21	1101:14,21	1186:7,21	,24
1187:6	1014:20,23	,22,23	1188:2,19	<b>there's</b>
1196:10	1015:3,23,	1102:6,18	1189:2,13,	964:12
1208:4	25 1016:23	1103:13,24	14	966:5
1214:18	1017:2,7,1	1104:3	1190:5,20	968:21
1226:18	4 1018:18	1110:15	1191:20,21	982:24
1238:4,24	1019:1,9,1	1111:17	,22	987:19
1241:5	3	1112:5,9	1194:21	988:9
<b>thanks</b>	1020:10,22	1113:14	1195:9	989:18
1038:7	1021:1,8	1114:7,13	1199:2,15	998:16
1241:9	1026:5,15	1115:2,19,	1201:20	1000:23
<b>that'll</b>	1027:2,14,	23 1116:6	1204:5	1004:13
1200:19	15 1029:11	1117:6,10	1205:2,12,	1006:23
<b>that's</b>	1032:5	1118:4,11,	13,15	1009:12,13
965:12,14,	1033:5	20 1119:7	1206:23	1013:13,22
22 966:8	1037:18	1121:18	1207:4	1014:2,5,1
967:11	1039:2,7,1	1122:25	1208:12	1,15
968:18,20	4	1123:6	1209:3	1015:6,10,
969:21	1040:11,15	1124:18,20	1210:1,11	11 1016:24
972:3,15	,22,24	1127:21,23	1213:12	
973:1,2,6,	1041:1,5,6	1129:13,15	1215:12	
	,14,19	1130:1,10	1218:3,11,	

1316				
1018:3	1166:20	<b>they're</b>	1066:11	<b>Tis</b> 1103:1
1020:2,23,	1168:5	967:17,18,	1067:13	<b>title</b>
24 1021:4	1170:13	24	1137:7	1002:16
1022:9	1176:1,21	990:10,12	1198:21	1132:13,22
1023:1	1179:1	998:13	1221:14	1133:1,23
1025:15	1180:4,20	1028:12	<b>thirty-five</b>	1134:9
1028:25	1182:24	1041:25	1115:1	<b>titled</b>
1029:1,2	1183:17,20	1053:8	<b>thirty-nine</b>	1149:16
1035:6,11	1185:3	1056:10	1030:5	<b>today</b> 964:8
1042:13	1187:21,22	1079:11	<b>thirty-seven</b>	966:1
1044:4,8,1	1188:14	1105:10	1114:1	977:1
5 1046:16	1189:10	1106:24,25	<b>thirty-six</b>	983:1
1048:18	1194:1,20	1107:9	1238:13	984:9,15,1
1052:4	1201:1,21	1114:18	<b>thirty-</b>	8 1041:17
1057:9	1202:20	1117:1	<b>thousand</b>	1081:18
1059:18	1208:23	1125:14,16	1198:14	1086:16
1065:16	1215:4	,17	<b>thirty-three</b>	1147:7,24
1067:9	1219:1	1128:10,12	1117:5	1156:21
1077:3	1225:13,16	1137:2	<b>thousand</b>	1182:5
1078:2	1235:5,24	1145:5,6	976:11	1232:23
1080:25	<b>therm</b> 1199:3	1148:12	979:15	1239:6
1082:22	<b>thermal</b>	1169:21	984:21	<b>today's</b>
1086:8,9	1014:25	1178:10	986:5	963:5
1096:7,8,1	1016:11,25	1182:6	992:2	985:11
3 1099:16	1038:5,6	1186:25	1048:5	986:20
1100:13	1055:18	1192:24	1053:16	<b>tomorrow</b>
1104:16	1065:24	1195:8	1066:11	1156:22
1105:15,21	1066:1	1201:18	1081:20	<b>top</b> 964:17
1107:12,21	1096:14	1219:6	1113:25	968:1
,22	1125:2,5,6	1229:14,15	1118:3	971:12
1109:13	,8	<b>they've</b>	1198:15	996:10
1112:1,25	1127:16,21	1023:13	1215:11	1039:18
1113:11,18	1197:24	1110:21	1238:12,15	1043:6
,21	1198:19,23	1220:12	<b>threat</b>	1057:6
1114:11,16	,25	1224:5	1057:9	1074:11
1115:8	1199:14	<b>third</b> 1054:5	<b>three-nine</b>	1109:1
1124:19	1220:19	1076:25	1175:9	1110:13
1125:1,3	1223:21	1096:11	<b>threw</b>	1174:8
1128:8	<b>thermal-</b>	1101:1	1209:19	1176:1,9,2
1129:22	<b>generation</b>	1102:4	<b>thrown</b>	4 1177:21
1131:5	1066:5	1104:9,24	1195:5	1194:17
1133:5	1120:4	1109:2	<b>tied</b> 1222:14	1208:7
1134:8	<b>they'd</b>	1115:20,22	<b>Till</b> 1072:12	1224:2
1140:21	1106:25	1122:7	<b>timeline</b>	1237:24
1142:21,23	1107:11	1166:25	1086:22,25	<b>topic</b>
1143:3,9	1173:6	1198:22	<b>tornado</b>	1012:13
1146:2,9	1189:6	<b>thirteen</b>	1056:19,20	1057:14
1150:15	1203:1	1081:19		
1157:23,24	<b>they'll</b>	1085:25		
1159:15	1162:5	<b>thirty</b>		
1163:17,19		1048:5		
1164:21				

1316				
<b>tornados</b>	<b>trading</b>	1013:16,20	1132:23	1160:24
1057:1	1157:10	1014:1,2	<b>transport</b>	1161:1
<b>total</b> 988:8	1175:3	1028:17,19	1130:6	1167:3
1000:10	1176:6,11	1029:2,3,1	<b>transportati</b>	1191:7
1030:23	1177:23	5,17,24	<b>on</b> 1134:2	1197:14,22
1031:25	1212:3	1030:11,12		1203:21
1048:4,6	<b>training</b>	,19	<b>travel</b>	<b>turn</b> 1014:24
1049:14,15	1199:16	1031:14	983:24	1033:13
1074:8	<b>tran</b> 1142:10	1032:15	<b>treat</b>	1059:24
1079:12,16	<b>tranche</b>	1072:21	1031:17	1093:5
1091:18	1073:14,19	1073:1,8	<b>treats</b>	1098:10,14
1092:2,20,22	<b>trans</b>	1074:13	1031:16	1112:13
1098:22,23	1031:15	1075:16,22	<b>tried</b>	1124:6
1099:20	1193:23	,24	1055:15	1131:9
1103:4	<b>transact</b>	1076:4,5	1065:13	1153:11,16
1116:25	1107:18	1079:4	<b>tries</b> 975:12	1187:16
1117:8,16	1130:1	1080:1,15	979:20	1214:22
1131:11	<b>transaction</b>	1081:24	<b>true</b> 1094:8	1239:21
1144:17	1072:15	1082:4	1174:14	<b>turnaround</b>
1145:24	1073:10	1083:9,15,	<b>try</b> 979:15	1211:23
1147:9	1086:11	20 1084:9	1100:20	<b>turning</b>
1149:18	1125:22	1085:6,13	1101:4	988:1,2
1175:23	1128:11,25	1087:9	1124:22	1112:10
1186:6	1219:17	1091:11	1156:22	<b>twelve</b> 966:7
1215:9,10	1231:4	1092:21	1241:3	985:4
1226:1	1236:7	1096:24	<b>trying</b>	<b>twenty</b> 992:2
<b>totally</b>	<b>transactions</b>	1097:3	970:24	1010:12
1156:25	1072:20	1099:11,14	977:10	1102:23
<b>towards</b>	1105:6,10,	,17 1105:5	982:11,14	1115:1
971:9	25 1106:15	1106:1	1050:17	1137:5
1095:11	1128:19	1130:3,9,1	1051:25	1205:24
1101:12	1143:6,7	2,17	1140:2	1211:12
1116:25	1154:25	1133:4,6,1	1142:8	1240:16
<b>tower</b> 1063:5	1175:3	0,11,22,25	1145:18	<b>twenty-five</b>
<b>towers</b>	1201:18	1134:4,6,1	1148:11	1010:20
1055:6	<b>transacts</b>	4,15,20,23	1176:16	1070:17
1063:11,18	1103:8,11	,25	1177:4	1144:11
<b>town</b> 1239:23	<b>transcript</b>	1141:10,14	1216:8	<b>twenty-four</b>
<b>trac</b> 1106:3	959:14	,17	1230:22,23	1126:21
<b>track</b>	1181:24	1142:10	<b>Tuesday</b>	<b>twenty-one</b>
1110:25	<b>transfer</b>	1173:9,12,	1239:13,19	979:15
1210:18	1084:12	22	<b>turbine</b>	985:20
<b>trade</b>	<b>transferred</b>	1179:2,7,8	1017:4	1240:17
1223:1,3	969:21	1186:4,5	1163:16	<b>twenty-seven</b>
<b>traders</b>	1085:16	1189:14	1167:17	1030:4,25
1162:4	<b>transmission</b>	1193:14,23	<b>turbines</b>	<b>twice</b>
1223:1	961:25	1194:2,10,	1016:12,22	1153:22
		13 1204:25	1125:10	1197:16
		<b>transmission</b>		
		<b>s</b> 1186:4		
		<b>transmit</b>		

1316				
<b>two-thirty</b> 1080:6,7	1021:13 1034:22	1064:8	1061:17 1073:9	<b>unsure</b> 1216:3
<b>type</b> 1104:23	1036:18 1042:4	<b>undertaking</b> 960:8	1075:25 1076:10	<b>unusual</b> 1085:23
<b>types</b> 973:9 1047:16 1072:20 1135:18 1155:5 1220:5	1043:21 1051:21 1054:8 1059:5 1092:19 1093:11 1097:17 1129:2 1144:24 1148:11 1150:23 1154:1 1156:3 1161:18 1177:1 1180:20 1223:6	1013:1 1024:9 1062:10,15 1064:2,11 1171:22 1172:20 1173:19 1181:23 1182:1 1187:8 1192:6 1213:17 1214:14,15 1238:7	1078:6 1084:25 1087:9 1088:2 1089:19 1090:4 1098:24 1104:15 1105:1 1111:21,24 1122:20 1124:8 1128:23 1131:12,24 1134:14 1135:1 1148:1 1186:5 1190:11 1191:4 1194:2	<b>update</b> 1108:22 <b>updated</b> 996:5 1001:24 1003:2,9,1 4 1019:19 <b>upfront</b> 1083:13 1084:14 <b>upgraded</b> 1027:4 <b>upgrades</b> 1064:7 <b>upon</b> 963:1 976:12 1050:11,12 1093:13 1097:24,25 1134:14 1158:6 1167:1,18 1170:16 1179:17,18 1241:13 <b>uprated</b> 1027:4 <b>upset</b> 1050:25 <b>upside</b> 1095:19,21 <b>upstream</b> 984:14 <b>urgency</b> 1054:5 <b>usable</b> 1235:3 <b>US-Canada</b> 1132:11
<hr/> <b>U</b> <hr/>				
<b>ultimately</b> 981:21 1080:5 1081:13 1082:23 1083:11,15 1084:8 1086:17 1113:14 1127:11 1140:6	<b>understandin</b> <b>g</b> 1018:2,5 1022:7 1040:16 1057:18 1082:17 1122:17 1132:10 1145:7 1234:20 1235:11	<b>Undertakings</b> 959:4 961:1 962:1	<b>units</b> 1015:4,11, 12,19,20 1016:2,21 1167:7,10 1199:14	
<b>un</b> 1005:9 1216:3	<b>understood</b> 982:12 1077:9 1078:7 1079:5 1110:3 1128:22 1175:4	<b>undertook</b> 1184:3	<b>unknown</b> 1073:5 1147:3	
<b>unable</b> 979:24	<b>unclear</b> 1102:1	<b>unfair</b> 1017:23	<b>unless</b> 1017:23 1043:25 1112:15 1223:16	
<b>uncertainty</b> 1058:17 1143:9	<b>underestimat</b> <b>ed</b> 1097:14	<b>unfairly</b> 1231:15	<b>unprecedented</b> 1119:6	
<b>unchanged</b> 1150:18	<b>underline</b> 1145:24	<b>unfavourable</b> 1198:11	<b>unshaded</b> 1192:18	
<b>unclear</b> 1102:1	<b>underpin</b> 1108:5	<b>unfortunatel</b> <b>y</b> 1097:13 1211:4	<b>unsold</b> 1124:19 1152:11	
<b>underestimat</b> <b>ed</b> 1097:14	<b>underpinned</b> 1200:6	<b>unit</b> 1015:1,2,1 2,21,23 1016:18 1017:16 1019:2 1049:24 1108:15 1149:2 1167:17 1189:23 1190:18 1224:13	<b>unsubscribed</b> 1081:1 1085:10	
<b>underline</b> 1145:24	<b>understand</b> 970:25 971:12 982:11,14 984:1 989:23	<b>unfortunate</b> 1097:13 1211:4		
<b>underpin</b> 1108:5	<b>undertake</b> 1024:3 1171:19 1172:14 1173:10 1183:25 1187:2 1191:24 1212:24 1213:14	<b>United</b> 973:5 1031:17 1032:21		
<b>underpinned</b> 1200:6	<b>undertaken</b>			

1316				
<b>US-sourced</b> 1173:3	1222:15	965:4,14,2	1136:4	1059:24
<b>usually</b> 1109:25 1122:8,9 1193:7 1223:15	<b>values</b> 1021:20 1065:18 1093:25 1094:6 1096:3 1117:2 1147:6 1221:7	4 966:11 967:9,11,2 0 968:3,11,2 0 969:4,15,2 4 970:7,14 971:22 972:6,9,15 ,17 973:2,6 992:21 1056:16 1057:12 1060:4,8,2 3 1061:11,18 ,21 1062:7,11 1063:8 1064:4,10 1088:14 1089:21,25 1092:24 1121:6,10, 13,18 1122:1 1145:8 1205:9,15, 24 1206:9,17 1207:12 1208:1 1210:11 1237:1,12, 15 1238:4	1144:1 1146:14 1148:8 1160:21 1174:13,19 ,20 1180:24 1190:4	1060:1,4,8 ,14,23 1061:11,18 ,21 1062:2,7,1 1 1063:5,8 1064:2,4,6 ,10 1088:14,16 1089:17,21 ,22,25 1092:17,24 1120:10 1121:6,10, 13,18 1122:1 1145:8 1153:8 1205:7,9,1 5,19,24 1206:9,17 1207:12 1208:1,5 1210:3,11 1234:11 1236:20 1237:1,12, 15,20,21,2 5 1238:4
<b>utilities</b> 957:3,20 990:14 1061:13 1077:11,14 1079:15 1085:8	<b>variability</b> 981:22		<b>volumes</b> 1100:5 1115:7,20 1116:25 1118:6 1136:5 1144:6,7,1 3,21 1160:22 1215:5 1217:15	
<b>utility</b> 1031:20 1082:4 1084:13 1103:18 1104:7	<b>variation</b> 1047:14			
<b>utility-</b> <b>sponsored</b> 1076:5	<b>variations</b> 1117:7			
<hr/> <b>v</b> <hr/>	<b>various</b> 1065:21,22 1185:4,6 1208:8 1215:20		<hr/> <b>W</b> <hr/>	
<b>valuable</b> 1042:5	<b>vary</b> 976:11 1042:18 1188:6		<b>wait</b> 1076:25 1098:2 1156:11	
<b>value</b> 982:21 1061:12 1066:11 1095:17 1117:9 1131:5 1148:19 1156:15 1158:21 1162:10 1189:20 1209:25 1222:25 1223:4 1225:6 1229:4,6,2 1,24,25 1230:3,23 1231:17,20 1235:22	<b>varying</b> 1114:16 1165:20		<b>waive</b> 1069:2	
<b>valued</b> 1076:9	<b>vast</b> 1111:1 1158:20		<b>Warden</b> 959:7 963:25 964:23 965:4,10,1 4,21,24 966:11 967:4,9,11 ,15,20,24 968:3,11,2 0 969:1,4,9, 15,18,24 970:7,14 971:22 972:6,9,15 ,17,24 973:2,6 992:21 1001:15 1011:11 1012:14 1039:20 1055:12 1056:16 1057:12	<b>warned</b> 998:19
	<b>vendor</b> 1151:12	<b>vintage</b> 1165:20		<b>wasn't</b> 987:1 992:5 1008:9 1063:9 1072:10 1086:4 1101:10,11 ,15 1167:19 1192:1 1211:3
	<b>verify</b> 1191:24	<b>volatile</b> 1219:11		<b>wasted</b> 981:12
	<b>versus</b> 961:22 972:14 1001:6 1020:2,14 1098:12 1113:13 1137:13 1144:4 1172:17,22 1217:6	<b>voltage</b> 1080:13		<b>wat</b> 987:6 1181:21
	<b>via</b> 1107:18	<b>volume</b> 1097:14 1114:3,5,7 ,22 1115:10,12 ,13,18 1117:16 1118:7		<b>water</b> 961:10 973:16,18, 19,21
	<b>VINCE</b> 959:7 963:25			

1316				
974:14	1158:22	1209:22,23	1029:19	1149:18
975:8,15,16,18	1177:13	<b>weight</b>	1030:13,20	1150:13,15
976:7,15	1181:21	1095:18	1031:2,14,23 1034:15	1151:16,19,21,23
977:12,17,24 978:25	1197:25	<b>welcome</b>	1035:23	1152:13
979:21,22	1198:11,13	1038:3	1036:13,24	1159:1,3,8
981:4,11,20,22,24	1201:10,14	<b>we'll</b> 973:14	1039:16	,19 1163:2
982:2,7,10,15,19,22,25	1206:11,12	994:6	1045:18	1164:7
983:2,7,19,20	1209:21	997:23	1046:15	1170:10,15
984:5,6,17	1211:20,23	1006:11	1048:20	1176:7
985:10	1214:11	1009:1	1049:2	1181:24
986:17,19,25	1218:17	1009:1	1052:21	1185:16
987:2,20	1219:18,22	1013:21	1055:23	1190:10
989:10,20	1220:9	1019:4,5	1056:2	1191:10,11,12
990:13	1221:17	1027:6	1059:11	1198:18
993:9	1222:18	1038:11	1069:19	1199:6
1000:4	1223:1	1053:11	1070:24	1202:15,16
1001:7	1231:12	1059:13	1072:5	1203:19
1012:24	<b>waters</b>	1064:4	1073:4,6,14,24	1205:6
1023:2,5,20	1118:13	1100:4	1074:9	1206:24
1024:1,19	<b>ways</b> 1129:12	1106:1,2	1077:6,25	1210:11,18
1034:6,17	1133:15	1107:6	1081:20	1211:6
1035:5,8,25	<b>weakening</b>	1159:3	1082:7	1212:15
1036:3,5,8,16	1150:13	1160:24	1083:13	1221:15,18
1044:17	<b>weather</b>	1171:18	1086:15,16	1222:11
1046:3	1055:24	1180:9	1090:16	1229:16
1048:13,18,25	<b>website</b>	1184:18	1091:21	1230:22,23
1049:3,19	1184:17	1192:3	1092:14,25	1240:6
1051:7	<b>we'd</b> 1039:13	1197:21	1093:10,13,16	1241:11
1058:23	1055:7	1202:18	1095:14	<b>west</b> 1110:23
1059:12	1107:15	1213:14	1097:9	<b>western</b>
1083:3	1176:5	1217:8,9	1102:3,15	989:21
1095:19,21,22 1096:1	1220:8	1241:3,7,10	1105:24	1111:3
1114:8	<b>Wednesday</b>	<b>we're</b>	1109:10	<b>we've</b> 973:3
1118:7,14	1239:14	963:4,12	1110:22	993:9
1119:6,11,24 1120:25	<b>wee</b> 1106:17	964:11	1113:17	1005:10
1121:4	<b>week</b> 963:5,6	971:10	1114:6,24	1010:4
1123:12,13	1025:17	977:15	1117:14	1011:25
1154:15,20,22	1054:12	978:2	1118:10	1012:15
	1060:11	979:25	1125:19	1030:10
	1065:14	980:1	1128:7,13,20 1132:4	1031:12
	1138:2	981:9	1134:5	1037:1
	<b>weekend</b>	983:10	1137:25	1047:15
	1182:9	988:18	1138:15	1050:17
	1239:9	989:15	1141:14,15	1054:17
	1240:4,25	995:22	1143:11	1064:6
	1241:10	1003:23	1144:10	1066:14
	<b>weeks</b> 1055:6	1012:13	1146:15	1070:22
	1060:12	1017:15	1148:8	1071:4
		1020:12		1077:6
		1022:24		
		1025:9		



1316				
1080:13	1082:8	1082:3	1070:8	<b>work</b> 964:19
1082:1	1083:22	<b>wind</b>	1139:21	1080:6
1086:6,12	1086:23	1019:6,7,1	1140:10	1084:25
1103:5	1096:25	1,20,24	1191:6	1105:3
1106:12	1114:25	1020:8,20,	1201:22	1108:21
1118:7,19,	1117:18	24	<b>wintertime</b>	1161:21
24 1119:5	1140:23	1021:5,8	1035:20	1184:11
1133:21	1145:5	1059:25	1193:1,24	1186:17
1161:5	1148:11	1060:1,6,1	1194:3	1193:19
1174:7	1153:12	8	1201:18	1209:23
1180:1	1154:8,22	1199:22,23	1202:4	<b>worked</b>
1193:11,15	1156:11	1221:5	<b>Wisconsin</b>	1078:23
1200:23	1189:4,5	1223:17,23	1072:14,18	1194:12
1201:2	1195:7	,25	1074:5,16,	<b>working</b>
1211:13	1211:11	1226:17	18,22	1003:23
1212:21	1222:4	1227:5,16,	1075:17	1005:4
1214:15	1225:12	17	1076:15	1073:6,15
1240:11	1231:21	1228:6,7,1	1077:7	1074:9
<b>whatever</b>	1235:5	0,19,20	1079:13	1077:25
1106:7	1236:4	1229:17,22	1087:1	1082:12
1159:9	1238:1	1230:5,8,1	<b>wish</b> 1184:25	1086:22
1218:7	<b>white</b> 1193:3	4,16,19,24	<b>withhold</b>	1141:7
<b>wheel</b>	<b>whoever</b>	1231:6,8,2	1162:16	<b>works</b>
1104:14,25	1080:23	2	1167:4	1048:14
<b>wheeling</b>	<b>whole</b> 1092:2	1232:8,11,	<b>withstood</b>	1129:12
1099:9	1107:9,13	12,16	1057:13	1238:19
<b>whenever</b>	1178:7	<b>Winnipeg</b>	1058:1	<b>world</b>
981:10	1234:15	957:22	<b>witnesses</b>	1161:14
1023:18	<b>wholesale</b>	958:16	963:21	<b>worse</b> 977:16
<b>whereas</b>	1103:17	987:10,12,	1037:14	1058:10,21
1105:24	<b>whom</b> 998:12	16 990:18	1093:9	<b>worst</b> 975:2
1123:12	999:6	1056:3	<b>wonder</b>	977:14,15
1131:25	1142:15	1060:3	1119:7	978:1
1137:6	1154:7	1091:22	<b>wondered</b>	1058:19,20
1157:19	<b>who's</b>	<b>winter</b>	1177:5	1154:24
1159:6	1076:20	982:23	1237:25	1198:12,17
1166:3	<b>widespread</b>	983:13	<b>wondering</b>	<b>worst-case</b>
<b>wherever</b>	1055:19	987:14	971:19	978:25
1113:16	<b>William</b>	989:4	1009:22	1044:9
<b>whether</b>	958:9	997:14	1037:8	1127:20
978:1	<b>Williams</b>	998:20,25	1054:14	<b>worst-flow</b>
1036:18	958:7	999:21	1075:8	982:18
1037:15	1239:21	1000:1	1176:20	<b>worth</b> 975:6
1039:5,16	<b>willing</b>	1001:11	1184:22	1233:19
1044:17,18	1107:9	1023:1	1205:20	<b>worthy</b>
1046:17	1235:25	1032:24	<b>wont</b> 1121:8	1227:2
1069:8,12	<b>willingness</b>	1034:7	<b>Woods</b> 990:11	<b>WPS</b> 1005:4
1076:8,19		1035:5,18		1072:23
1077:1		1039:4,6,1		
		3 1047:6		
		1061:23		

1316				
1075:5,9	1195:11	1214:17		
1079:9	1236:14	1219:1		
<b>wrong</b>	<b>yet</b> 1004:25	<hr/>		
967:17,18,	1009:18	<hr/>		
24	1011:20	Z		
<b>wrote</b> 992:17	1070:23	<b>zero</b> 968:9		
1175:15	1071:2	986:11		
<b>Wuskwatim</b>	1075:13	987:7		
984:24	1078:3	1012:5,8		
985:3,9	1081:2	1212:21		
996:6,8,10	1082:15	1224:6		
,15	1084:6	<b>zone</b> 1205:14		
1001:14,17	1088:16			
,20	1089:4,5,6			
1011:13	<b>you'll</b>			
1118:24,25	1004:14			
1227:8	1014:8			
1231:22	1024:3			
1234:13	1030:3,7			
1236:13	1049:6,7			
1237:2,6,8	1062:9			
<hr/>	1082:19			
X	1111:9			
<b>Xcel</b> 1069:14	1124:24			
1146:6,20,	1148:15			
24 1147:2	1168:21			
<hr/>	1171:14			
Y	1179:25			
<b>yea</b> 1050:20	1183:9			
<b>year-by-year</b>	1192:24			
966:2	1214:16			
<b>year-round</b>	<b>you've</b>			
1193:18	968:25			
<b>year's</b>	969:2			
1005:25	976:4			
1120:11	984:21			
<b>yest</b> 1078:8	988:6			
<b>yesterday</b>	1001:12,13			
964:8,14	1006:19			
969:10	1014:25			
971:5	1042:23			
1001:5	1049:18			
1021:23	1085:7			
1108:6,14	1091:13			
1138:9	1103:15			
1143:16	1108:24			
1149:2	1122:8			
1175:7	1145:6			
	1154:5			
	1170:12			
	1208:11			